

THE IMPACTS OF HIGH ENERGY COSTS TO THE AMERICAN CONSUMER

OVERSIGHT HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND
MINERAL RESOURCES

OF THE

COMMITTEE ON RESOURCES
U.S. HOUSE OF REPRESENTATIVES

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OVERSIGHT HEARING ON “THE IMPACTS OF HIGH ENERGY COSTS TO THE AMERICAN CONSUMER”

**Thursday, May 19, 2005
U.S. House of Representatives
Subcommittee on Energy and Mineral Resources
Committee on Resources
Washington, D.C.**

The Subcommittee met, pursuant to notice, at 10:05 a.m., in Room 1324 Longworth House Office Building, Hon. Jim Gibbons [Chairman of the Subcommittee] presiding.

Present: Representatives Grijalva, Peterson, Drake, Ortiz, and Melancon.

Mr. GIBBONS. The oversight hearing of the Subcommittee on Energy and Mineral Resources will come to order.

The Subcommittee is meeting today to hold an oversight hearing on “The Impacts of High Energy Costs to the American Consumer.” Under Committee Rule 4(g), the Chairman and the Ranking Minority Member may make opening statements. If any Members have opening statements that they wish to submit, they can be included in the hearing record under unanimous consent.

STATEMENT OF HON. JIM GIBBONS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEVADA

Mr. GIBBONS. This Subcommittee meets today to hear testimony on the adverse impacts that high energy prices are having on a broad range of Americans, including agriculture, manufacturing, transportation, and low-income consumers. High energy prices are an unlegislated tax on every aspect of daily life in the United States. All American consumers are impacted by the increased costs to produce and deliver goods and services.

Increased energy prices make things like groceries to feed our families, steel to build our schools and roads, and fertilizer to grow stable crops for our food supplies much more expensive. And when it costs more to deliver a product or a service to the consumer, the consumer will inevitably pay the price.

Consumer needs that previously were met by a family’s disposable income are now going unmet, in order to pay excessive heating bills and high-priced gasoline. Seniors on a fixed income and low-income families are particularly hard hit. But the assault of high energy prices on the American people does not stop with increased

costs of consumption. The United States has the unfortunate distinction of having the world's highest natural gas prices. These excessively high prices have persisted for a number of years, and have resulted in the closing or severe downsizing of important segments of our economy.

This downsizing has resulted in the loss of tens of thousands of high-paying jobs in the industrial and commercial sectors; particularly in the chemicals, fertilizer, steel, glass, and paper industries. This trend must, and can, be stopped. And this decline is totally unnecessary, given that natural gas prices are set on a regional market basis, and the North American region is virtually awash in natural gas resources.

Sadly, current domestic energy policies restrict access to geologically prospective areas and discourage investment in the production of larger energy supplies here at home. Consequently, jobs are being sent overseas, while our nation retains high natural gas prices.

Similarly, high oil prices also impact every aspect of our economy. From truckers and airline pilots getting goods to market throughout the country, to mothers and fathers loading up the car for a trip to grandmother's house, the rising cost of oil has increased the economic burden on everyone.

Unlike natural gas prices, oil prices are set on a world market basis. And to the contrary, each nation has a duty to produce as much oil as it can in an environmentally acceptable manner, in order to keep world prices from escalating further. Hopefully, with significantly increased oil production by all capable nations, we will see oil prices lowered, and the adverse impacts to America's consumers lowered as a result.

Lowering the price of energy is one of the reasons it is so important that we produce the vast quantities of oil contained in the Arctic National Wildlife Refuge. The House has developed a sound, realistic, and responsible energy policy that encourages utilization of domestic natural resources for the future that will ensure affordable and reliable supplies of energy for the American consumer.

We need to get this energy bill to the President for his signature, so we can get on the path to lowering energy costs, increasing capital investments and jobs right here at home, and ensuring energy and economic security for the future of all Americans.

I welcome our witnesses here today. I look forward to their testimony. I now would like to recognize my friend, and the Ranking Member of the Committee, Mr. Grijalva, for any opening remarks that he may wish to give at this time.

Mr. Grijalva.

[The prepared statement of Mr. Gibbons follows:]

**Statement of The Honorable Jim Gibbons, a Representative in Congress
from the State of Nevada**

The Subcommittee meets today to hear testimony on the adverse impacts that high energy prices are having on a broad range of Americans, including agricultural, manufacturing, transportation, and low-income consumers. High energy prices are an unlegislated tax on every aspect of daily life in the United States.

All American consumers are impacted by the increased costs to produce and deliver goods and services. Increased energy prices make things like groceries to feed our families, steel to build schools and roads, and fertilizer to grow staple crops for

our food supply more expensive. And when it costs more to deliver a product or a service to the consumer, the consumer will inevitably pay the price.

Consumer needs that previously were met by a family's disposable income are now going unmet in order to pay excessive heating bills and high-priced gasoline. Seniors on fixed incomes and low-income families are particularly hard hit. But the assault of high energy prices on the American people does not stop with increased costs of consumption.

The United States has the unfortunate distinction of having the world's highest natural gas prices. These excessively high prices have persisted for a number of years and have resulted in the closing or severe downsizing of important segments of the economy. This downsizing has resulted in the loss of tens of thousands of high-paying jobs in the industrial and commercial sectors, particularly in the chemicals, fertilizer, steel, glass and paper industries. This trend must and can be stopped. And this decline is totally unnecessary given that natural gas prices are set on a regional market basis, and the North American region is virtually awash in natural gas resources.

Sadly, current domestic energy policies restrict access to geologically prospective areas and discourage investment in the production of larger energy supplies here at home. Consequently, jobs are being sent overseas while our Nation retains high natural gas prices. Similarly high oil prices also impact every aspect of our economy. From truckers and airline pilots getting goods to markets throughout the country to mothers and fathers loading up the car for a trip to grandma's house, the rising cost of oil has increased the economic burden for everyone. Unlike natural gas prices, oil prices are set on a world market basis. To the contrary, each nation has a duty to produce as much oil as it can in an environmentally acceptable manner in order to keep world oil prices from escalating further.

Hopefully, with significantly increased oil production by all capable nations, we will see oil prices lowered and the adverse impacts to America's consumers lowered as a result. Lowering the price of energy is one of the reasons it is so important that we produce the vast quantities of oil contained in the Arctic National Wildlife Refuge.

The House has developed a sound, realistic, and responsible energy policy that encourages utilization of domestic natural resources for the future that will ensure affordable and reliable supplies of energy for the American consumer. We need to get this energy bill to the President for his signature so we can get on the path to lowering energy costs, increasing capital investment and jobs here at home, and ensuring energy and economic security for the future.

I welcome our witnesses today and look forward to their testimony. I now recognize our Ranking member, Mr. Grijalva, for any opening remarks that he may wish to give at this time.

**STATEMENT OF HON. RAUL M. GRIJALVA, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF ARIZONA**

Mr. GRIJALVA. Thank you, Mr. Chairman. And I'm pleased to join with you today in welcoming our witnesses to discuss the impact of high energy costs on the American consumer; something which the American public is keenly aware of and is requiring Congress to begin to do something about.

Clearly, Americans of all economic strata and sectors are feeling the effects of skyrocketing gasoline prices. As President Bush stated on Tuesday, our dependence on foreign oil is like a foreign tax on the American dream, and that tax is growing every year.

The President also repeated his statement that the energy bill before Congress would have little effect on energy prices and demand in the short term. Instead, the President outlined a four-point energy strategy: increasing conservation through better fuel efficiency; expanding U.S. production and refining capacity; helping developing countries to conserve energy; and developing new fuels as alternatives to diesel and gasoline.

Quite frankly, the President's plan bears little resemblance to the energy bill passed by the House last month; a bill he has

nevertheless indicated he would sign if the Senate passes the bill. We can only hope that the Senate, which is marking up its own version in the Energy and Natural Resources Committee this week, will produce a plan that comes closer to meeting the definition of a "comprehensive energy plan," and does not provide costly and unnecessary subsidies to oil and gas industries—I would suggest, a further insult to the American taxpayer and consumer.

Americans deserve an energy plan from Congress that will confront our problems now and not pass them on to future generations. As the President noted, the first step toward making America less dependent on foreign oil is to improve fuel conservation and efficiency. That means research into new technologies that reduce gas consumption while maintaining performance, such as lightweight auto parts and more efficient batteries. It also means raising fuel economy standards for sport utility vehicles, vans, and pickup trucks.

A report released on Tuesday by U.S. Public Interest Research Group shows that Americans will spend upwards of \$5 billion extra on gasoline this year, due to poor automobile fuel economy policies. According to the report, which we will hear more on today from one of our witnesses, if the Bush Administration tightened fuel economy standards four years ago, mandating that cars and light trucks get a minimum of 40 miles to the gallon, the U.S. would be consuming 350,000 fewer barrels of oil per day. And that's more than half of the current U.S. import from Iraq.

As we approach Memorial Day and summer vacations, we in Congress should remember that the American people do not have infinite patience. Indeed, a recent Gallup poll shows that while President Bush claims he can do little to address gas prices in the short run, two in three Americans say there are reasonable steps that should be taken right now that would significantly lower U.S. gas prices.

We need a comprehensive energy plan that actually will reduce our dependency on non-renewable fuel and foreign sources of energy through conservation, innovation, and efficiency. Only in that way will Americans see lower prices at the pump and in their home heating bills.

Those are my comments. Thank you, Mr. Chairman.
[The prepared statement of Mr. Grijalva follows:]

**Statement of The Honorable Raul M. Grijalva, Ranking Democrat,
Subcommittee on Energy and Minerals**

Mr. Chairman, I am pleased to join you today in welcoming our witnesses to discuss the impacts of high energy costs on the American Consumer.

Clearly, Americans of all economic strata and sectors are feeling the effects of skyrocketing gasoline prices. As President Bush stated on Tuesday, "Our dependence on foreign oil is like a foreign tax on the American dream, and that tax is growing every year."

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Americans deserve an energy plan from Congress that will confront our problems now, and not pass them on to future generations. As the President noted, "The first step toward making America less dependent on foreign oil is to improve fuel conservation and efficiency." That means research into new technologies that reduce gas consumption while maintaining performance, such as lightweight auto parts and more efficient batteries. It also means raising fuel economy standards for sport utility vehicles and vans and pickup trucks.

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We need a comprehensive energy plan that actually will reduce our dependence on nonrenewable fuels and foreign sources of energy through conservation, innovation and efficiency. Only in that way will Americans see lower prices at the pump and on their home heating meters.

Mr. GIBBONS. Thank you very much, Mr. Grijalva.

And now, I'd like to introduce our first panel. And may I say that, as a former airline pilot, it's my pleasure to welcome Mr. James C. May here, President and CEO of the Air Transport Association of America. Mr. Paul—is it Cicio [pronounced SEEK-io]?

Mr. CICIO. Cicio [pronounced SIS-io].

Mr. GIBBONS. Cicio [pronounced SIS-io]. My apology. And Mr. Cicio is the Executive Director, Industrial Energy Consumers of America; and Theresa Schmalshof, NCGA Corn Board Member; and Robert Bessette, President, Council of Industrial Boiler Owners of America.

We have a requirement here in the Committee of standing and taking the oath for the testimony. So if you would, all stand and raise your right hand and repeat after me.

[Witnesses sworn.]

Mr. GIBBONS. Let the record reflect that each of the witnesses answered in the affirmative.

And before we turn to the testimony of each of the witnesses before us, I notice we have additional members here. Any opening statements, Mr. Peterson or Mrs. Drake?

[The prepared statement of Mrs. Drake follows:]

Statement of The Honorable Thelma Drake, a Representative in Congress from the State of Virginia

Mr. Chairman, I would like to thank you for holding this oversight hearing. As was presented during the debate of the House comprehensive energy policy, our nation's economic and national security is at stake. The United States' continued dependence on foreign sources of oil will further strain our economy. In addition, we are jeopardizing our nation's security by depending on and doing business with nations that are ruled by dictators and support terrorist actions. American consumers are being hit hard at the pump, but these high energy prices are affecting our nation much deeper than that. Increased energy prices are making it more expensive

to run our nation's military and straining the tourism industry, two very important sectors in the Second District of Virginia.

The Second District is home to 8 military installations and includes the U.S. Navy's Atlantic Fleet, the U.S. Fleet Forces Command, the U.S. Joint Forces Command, the Air Combat Command of the U.S. Air Force, the Training and Doctrine Command of the U.S. Army, and NATO's Allied Command for Transformation. High energy costs are affecting the way the military conducts its missions and places our nation in grave danger.

The Navy Region Mid-Atlantic, headquartered at Naval Station Norfolk, Virginia, spends approximately 29% of the total Base Operating Support Budget on energy and utility costs which include the use of electricity, sewage, water, natural gas, and steam. These costs represent the single largest line item in the Navy's operating budget in Norfolk. Because these costs cannot be neglected, rising energy prices have a direct impact on the quality of life for our military personnel, civilian employees and dependents. While the Department of Defense and the U.S. Navy are constantly pursuing efforts to conserve energy and become more fuel efficient, it is a matter of fact that every dollar spent on energy, especially those not previously budgeted for based on the recent unexpectedly high fuel costs, takes a dollar away from critical training and operational budgets as well as the funds available to promote valuable quality of life programs and critical infrastructure recapitalization. During this time of war, we cannot afford to minimize our training capabilities and our military readiness.

I am equally concerned about the effects of high energy costs on tourism. The Commonwealth of Virginia depends on tourism dollars. In 2003, the tourism industry was the fifth largest private sector employer in Virginia and contributed over \$2 billion in state and local revenues. The Hampton Roads area and Eastern Shore of Virginia, which I represent, are popular destinations for out-of-towners because of the beaches, museums, historical landmarks, amusement parks, bird-watching and wilderness areas. In fact, more than 2.7 million people traveled to Virginia Beach, the largest city in my District, in 2003. During their stay, these visitors stay in local hotels, eat in family-owned restaurants, attend regional festivals, buy souvenirs, charter fishing tours and rent watercraft and bicycles from our small business owners. The Second District has a lot to gain from a vibrant tourism industry.

Since the average distance traveled by tourists of Virginia Beach is 400 miles, I don't anticipate the cost of gasoline to dramatically decrease the number of visitors to our area this year. However, the price of high energy costs will likely change the pattern of these tourists. A recent poll conducted by the Travel Industry Association of America indicated that one-third of Americans expect travel costs to be higher than last summer and two in five of those individuals who have planned a summer vacation say that high energy costs will affect their spending behavior. Many of these people will plan shorter trips, travel shorter distances, eat out and shop less, and visit fewer attractions. Our local economy depends on fully occupied hotels and restaurants, in addition to tourists who are willing to spend extra money on activities and attractions. If visitors to my District curb their spending and elect to see fewer attractions and participate in fewer activities, not only will they miss out on some of the treasures of the Hampton Roads region and the Eastern Shore, but the locals will miss out on their business.

Mr. Chairman, our nation's high energy costs are surely putting a burden on Americans filling up their car at the gas pump. However, important sectors like the U.S. military and the tourism industry are feeling the pressure of these fuel costs as well. Thousands of jobs are tied to these sectors, not to mention the defense of this nation. Mr. Chairman, this nation can no longer afford inaction—we are in grave need for a comprehensive energy policy. I have highlighted how rising energy costs affect just two of the important industries in the Second District. I thank you for your continued advocacy for an energy policy and I look forward to hearing the testimony on how high energy costs are affecting agriculture, manufacturing, and transportation.

Mr. PETERSON. Nobody came here to hear me. I have come to hear the panelists.

Mr. GIBBONS. All right. Let's turn now to those individuals sitting before us. Again, welcome. We will start on your right, our left. Mr. May, welcome. The floor is yours. We look forward to your testimony.

Mr. MAY. Thank you, Mr. Chairman.

Mr. GIBBONS. And Mr. May, may I make an educational statement. We have a little light here that is in front of you. It is in this little box, and it is just a five-minute timer light. We try to have you speak for five minutes. If your testimony is going to be much longer than that, please try to summarize that.

We will, for the record, have your complete written testimony entered into the record. And this will allow us to get to both panels today and get questions from the members of the Committee, if we can stay within a reasonable timeframe. So Mr. May, I again apologize. The floor is yours. Welcome to the Committee.

**STATEMENT OF JAMES C. MAY, PRESIDENT AND CEO,
AIR TRANSPORT ASSOCIATION OF AMERICA, INC.**

Mr. MAY. Thank you, Mr. Chairman, and I will be brief. You have my written statement, and I will ask that that be submitted for purposes of the record.

By way of background, the airline industry began to experience a significant downturn in the economy around the year 2000. We were then hit with the tragedy of 9/11. We had what we have called the perfect storm, which was the Iraq war, and SARS, and then the beginning of the peak of—or the spiking of oil prices, that hit almost simultaneously.

The net result is that this industry has been staggered by all of these unnatural kinds of occurrences, to the point where we have lost some \$32 billion over the past four years—that's 32 "B"-with-a-"boy"-billion dollars, over the past four years.

If we are unfortunate enough to maintain our record of last year—we've already reported \$3.1 billion in losses for the first quarter of this year. We are losing money at a sustained rate of around \$17,000 a minute. And that's for 24-7; and obviously, we don't have all of our carriers running 24-7. So the impact of oil is having an extraordinary effect on our overall business plan.

I would point out to you that in the year 2000, our industry paid roughly \$14.8 billion for jet fuel. In 2005, we project paying \$28 billion for fuel. That's a 91 percent increase. For every penny increase in the price of a gallon of jet fuel, we have to pay an additional \$186 million.

And I think the most direct impact of those high prices of energy for us is on our employees. A \$1 increase in the price of oil puts another 5,500 airline jobs at risk. And I am in a business where we have been aggressively cost cutting for the past number of years. We have eliminated over 137,000 jobs in just the past four years in this business. That's one in every six employees.

Now, we also are doing almost everything we can to counter the impact of high prices of oil. We are replacing less efficient planes. Not far from your district, Mr. Chairman, we've got probably 500 less fuel-efficient planes that have been laid down out in the desert. We're using single-engine taxi, as opposed to dual-engine taxi. We're cruising at lower speeds.

We're doing everything we can to reduce onboard weight. Removing meal service was a function of cost, but it was also a function of weight. And you'll notice that even if you're sitting in the front of the bus these days, it's rare that you see real silverware. You'll see plastic silverware, because that is a weight reduction for that

aircraft and makes a big difference when fuel is trading at 47 to 52 dollars a barrel right now.

We are working hard to press for the modernization of the FAA air traffic control system, because the more we can do to make more efficient routings, the less money it's going to cost us. We want to shorten our taxi times; reduce ground delays.

We are, as I have indicated, eliminating a lot of employees. We've put plans down in the desert. We've cut some \$10 billion in capital expenditures over the last four years, and we're literally trying to economize in every area we can.

But all of the impact of fuel on all of those changes has led Gary Chase, who is with Lehman Brothers and probably one of the top airline analysts in the country, to say, and I quote him, "Unfortunately, high fuel prices are consuming what would otherwise be an up cycle for the industry." And I think that is very much the case.

Let me close with a couple of thoughts. Number one, I think it's important that we have this committee encourage their colleagues to do as much as we can on production. Obviously, it's going to be critical.

Two, I think we need to do what we can in increasing refining capacity.

Three, we have to do a better job working with the FAA, to make sure that we streamline the air traffic control system.

And four, quite frankly, I would hope you would take a very hard look, even though it may not be in your direct jurisdiction, at the impact that speculators are having on the price of oil. My economists tell me it could be anywhere from five to eight dollars a barrel impact, and I think that is driving those prices up to an unconscionable degree.

Thank you for the opportunity to appear. I'll be happy to answer questions.

[The prepared statement of Mr. May follows:]

**Statement of James C. May, President and CEO,
Air Transport Association of America, Inc.**

Thank you, Mr. Chairman for inviting me to talk about the incredibly harmful effect of high oil prices on U.S. air carriers and their employees. Clearly, air carriers are among the sectors of the economy most affected by the soaring price of oil and while our members and the manufactures of their aircraft have made remarkable gains in energy efficiency it has proven impossible for technology to outpace the growth in the price of a barrel of oil. And unlike many industries, we have no alternative fuel source.

The Air Transport Association is the trade association for the leading U.S. airlines. ATA members transport more than 90 percent of all passengers and cargo traffic in the United States.

Anyone who follows the news these days knows that all U.S. airlines are facing an extremely challenging commercial and policy environment, with few signs of material improvement anytime soon. Over the last four years, the industry—in total—has recorded over \$32 billion in losses (including federal reimbursements for the shutdown and a portion of our security costs). We are projecting additional losses of at least \$5 billion in 2005.

These losses have led us to borrow huge sums to survive, with few assets left to pledge as collateral. For the nine largest airlines, including Southwest Airlines, net debt stood at \$81.3 billion at the end of 2004, resulting in a staggering net debt to capital ratio of 110.1%. Compare this to \$64.2 billion and 71.7% at the end of 2000. Eleven of the 12 passenger airlines rated by Standard & Poor's are considered "speculative" investments, also known as "junk bond" quality. Only Southwest Airlines is considered investment grade.

Meanwhile, fares are running at late 1980s levels—a fourth of all domestic passengers now pay \$200 or less including taxes for a roundtrip ticket; two-thirds pay \$300 or less. Airline passenger revenue has plummeted from its historical average of 0.95% to 0.70% of U.S. GDP—a gap of \$29.3 billion based on today's \$11.7 trillion economy.

It couldn't get any worse, could it? Yet it has. In January 2001, the price of jet fuel on the spot markets averaged 85.8 cents per gallon. For the first 2 weeks of May, we faced an average of \$1.60—an 87 percent increase. In 2004, the industry paid \$21.4 billion for jet fuel. That tab would have been \$5.5 billion lower at 2003 jet fuel prices and a whopping \$8.0 billion lower at 2002 jet fuel prices. It is not unreasonable to argue that without the doubling of oil prices over the past three years the industry would not be in the economic crisis we find ourselves. But the future doesn't look any brighter. Our forecast shows that we will pay \$6.8 billion more for fuel in 2005 than in 2004. If these projections prove accurate the industry will have faced a 91 percent increase in its fuel costs from 2001 (\$14.8 billion) to 2005 (\$28.2 billion). When you understand that the industry has been hit with more than \$28 billion in additional fuel costs and \$15 billion in taxes, fees and unfunded mandates for security since 9/11, and compare those uncontrollable costs to the \$32 billion the industry has lost over that period, it easy to see where the problems lie.

Earlier this week, the 12-month forward curve of future prices averaged \$51 a barrel. The corresponding price of Gulf Coast jet fuel—a conservative benchmark “showed \$1.55 per gallon. Now keep in mind that this industry consumed 18.6 billions gallons of jet fuel last year. That means that every penny increase in the price of a gallon increases our annual operating expenses by \$186 million. Viewed from an employee perspective, every \$1 increase in the price of a barrel of crude puts another 5,500 airline jobs at risk. Indeed, the airlines have shed 137,000 jobs from the payrolls since August 2001. That's a loss of 1 out of 6 employees and more cuts are on the way.

When people say to me, “But every time I fly the plane is full.” I respond, “They're full, alright. Full of cheap fares and expensive fuel.” At today's fares and jet fuel prices, the average breakeven load factor for the industry—including all the low-cost carriers, is estimated at 80%. Compare that to 65% in the mid-90s. That means that every single flight on average must be at least 80% full of paying passengers to avoid losing money—not to make a fortune!

So how are we coping? First, we are obviously taking all possible steps to reduce or mitigate fuel consumption. From 2001 to 2004 alone, thanks to newer fleets, single-engine taxi, lower cruise speeds, onboard weight reduction, access to more ATC lanes in the sky, and a host of other measures, our fuel efficiency jumped 18% to 45 passenger miles per gallon.

Meanwhile, we are using our human capital more effectively. Airline productivity has risen 17% since 2000, up to 2.2 million available seat miles per full-time employee. And we are parking airplanes. The “Big 6” passenger airlines have reduced their operating fleets by 502 airplanes from December 2000 to December 2004.

For this same group capital expenditures fell from \$13.1 billion in 2000 to \$3.1 billion in 2004 (up slightly from \$2.7 billion in 2003), while unit operating costs excluding fuel fell 6.2% from 10.36 cents per available seat mile (ASM) in 2002 to 9.72 cents per ASM in 2004.

I think that's pretty impressive. But you don't have to believe me. As Gary Chase of Lehman Brothers observed on March 15:

“The airline industry has moved aggressively to reduce costs in the face of unprecedented challenges.... On a non-fuel basis, operating profitability...is as good as it was in the late 1990s. While these facts are exciting...they may also be totally moot if oil prices do not return to [historical norms].... [W]e see a materially greater chance for oil prices above \$50 than below \$40 over the next several years. Unfortunately, high fuel prices are consuming what would otherwise be an upcycle for the industry.”

I'm often asked, “Why don't your members just raise fares and pass through high oil prices?” Well, it's this simple—if we could we would. To cover the costs of fuel increases from 2003 to 2004 passenger would have to pay, on average, an additional \$21 per ticket. Yet prices during this period continued to fall because of the intensely competitive nature of the industry. Indeed, only recently have carriers had even modest successes in raising fares in certain markets, but this is hardly enough to cover the cost of crude oil rising from \$26 a barrel in 2002 to over \$50 in 2005. And as Standard & Poor's Phil Baggaley testified before the House Aviation Subcommittee this past June:

“Fuel represents a roughly comparable proportion of expenses for railroads and many trucking companies...but they have not been hurt by higher fuel prices to nearly the same degree.... Part of the difference is due to more

active hedging programs by these freight transportation companies, but most is due to the fact that many of their contracts with corporate customers allow them to pass through higher fuel costs in the form of surcharges. Airlines have tried repeatedly to raise fares in response to high fuel costs, but with little success. [T]he problem comes back to a lack of pricing power in a very competitive market.”

The unfortunate truth for most airlines today is that the economic principles of supply and demand still apply. If we could raise prices to cover the soaring cost of jet fuel or the many new taxes and fees that have been placed on the industry in recent years we would. But what many of our customers discovered in the post-9/11 world is that they don't have to fly. Business travelers chose teleconferences or e-mail instead of a face-to-face meeting if they aren't able to find a rock-bottom fare. Families will vacation near home as opposed to flying to Florida's beaches, Colorado's ski slopes or grandma's house. For short-haul flights the addition of the TSA "hassle factor" has made taking the car a more viable option. It's important to remember, airlines don't just compete against each other. They compete against movie theaters, e-mail, video conferencing, automobiles, trains, corporate jets and even the local amusement park—anything that can substitute for a vacation or a face-to-face sales call.

So where does that leave U.S. air carriers? Frankly, we will remain at the mercy of OPEC and the federal government. If oil stays high and our taxes with it I expect more jobs lost, more flights cut and more airlines in crisis. And in the international arena, our global competitiveness will continue to suffer because our airlines are paying disproportionately more than their foreign flag competitors due to the relative weakness of the dollar. My CEO's will continue to find ways to wring costs from those areas they can, and that includes further fuel conservation. But you can only be so efficient. As I said when I started, my industry is one of the most severely hurt by the soaring price of oil. And airplanes will be burning refined oil long after other modes of transportation have moved beyond it. Not because we want to but because the principles of aircraft design rule out our alternatives.

So, will oil stay above \$50? For business planning purposes it is prudent to assume that it will. There appear to be no short term solutions. This is a problem of our own creation that's been some time in the making.

My solution to the problem is to do more—more of everything. And by more I mean more conservation and more production, including here at home. I am proud of the efficiency gains that the aviation sector has made over the past 30 years. If other industries throughout the world had kept pace we would not face nearly the crisis we face today. Yet conservation and efficiency are only half the equation. We must find and produce more oil in the U.S. and overseas. The rapid economic expansion in countries like China and India will demand more and more oil and keep pushing prices higher. The "more of everything" approach can work there, too. The United States should encourage those nations to find and produce more of their own energy as well as help them use it more efficiently by providing them with technologies to reduce waste.

More of everything also means that as a nation we must be willing to produce more of our own energy and be willing to refine it here, too. I know that this issue is outside of this Committee's jurisdiction, but our nation's stagnant refining capacity is creating a bottleneck in the distribution chain that further increases prices. More and more jet fuel, gasoline and other refined products are being imported because of limited production capacity in the U.S. and this is further exacerbating the price run up. Steps must be taken to expand refining capacity so we do not become as dependent on foreign refined oil as we are foreign crude oil.

Also, I encourage Congress and the Administration to ensure that forces are not working within western energy markets to unnaturally inflate prices. There are simply too many unnatural influences in global oil markets to allow market speculators to contribute to the problem. I encourage Congress and the appropriate federal regulatory bodies to exercise their oversight responsibilities to ensure that markets are driven by consumers demand and not speculation. The other day Representatives Walden and Rothman called on the Government Accountability Office (GAO) to examine the CFTC's oversight of domestic petroleum trading. I would echo this call.

Some have attacked the airline industry for not being fast enough to adapt to market changes. I strongly disagree with this view and point the past three years of aggressive cost saving moves taken by all airlines to stay competitive. I also point to the past 30 years of aggressive efforts by the industry to save fuel and improve efficiency. We have been and will continue to be leaders in each of these areas.

To conclude, in order for my "more of everything" approach to have prevented the crisis that the airlines and their employees now face I would have had to have made

this appeal to the 89th or 99th Congress, not the 109th. Since I can't roll back the clock I challenge the world to follow the example of my industry in improving fuel efficiency and I challenge this Congress to avoid the mistakes of the past and recognize that more efficiency must be matched with more production. Let's do more.

Thank you.

Mr. GIBBONS. Thank you very much, Mr. May. It's stunning to hear those sort of figures that you have just testified to before us. We turn now to Mr. Cicio. Again, Mr. Cicio, welcome. The floor is yours. We look forward to your testimony.

**STATEMENT OF PAUL N. CICIO, EXECUTIVE DIRECTOR,
INDUSTRIAL ENERGY CONSUMERS OF AMERICA**

Mr. CICIO. Thank you, Mr. Chairman and committee members. Thank you for the opportunity to provide comment on this very timely subject.

Globally competitive natural gas prices are essential for the manufacturing sector and jobs. We have a serious natural gas crisis, and we urge the Congress to pass comprehensive energy legislation this year. We especially request that Congress and the Administration take action to increase supplies of natural gas by removing areas from moratoria, to allow for greater access to an abundant supply of domestic natural gas.

Eighty-five percent of the Lower 48 states' offshore acreage has been placed under congressional and executive moratoria. We have the most restrictive offshore policies in the world and the most stringent environmental regulations to ensure that production of natural gas can occur without environmental concern.

Mr. Chairman, this June will be the five-year anniversary of the beginning of the natural gas crisis. It was in June of 2000 that natural gas prices averaged about \$4 per million Btu, a price level that immediately began to impact the competitiveness of U.S. manufacturing. One by one, manufacturing plants were permanently shut down; were idled. Production was shifted overseas, and resulted in the loss of three million relatively high-paying jobs.

Unfortunately, this is not—this is not the end of the story. Even though 274,000 new jobs were created across the economy last month, manufacturing lost 6,000 new jobs. Factory jobs have fallen in nine of the past 11 months, and in the last quarter output grew at its slowest pace in nearly two years.

The U.S. natural gas price is the highest and the most volatile in the world. The natural gas crisis has cost consumers nearly \$200 billion more for their natural gas. In November 2004, prices reached levels of just under \$10 per million Btu.

U.S. production has—fell by 4.9 percent from the year 2001 to 2004. This is despite record well completions by the exploration and production industry. U.S. first-quarter production fell by 1.3 percent from a year ago. And Canadian—and the Canadian national energy board reports they will be hard-pressed to maintain its current level of exports to the United States.

Electricity prices rose 5.2 percent between April 2004 and April 2005. And it is likely to increase further, primarily as a result of higher natural gas prices. This year's increase of 5.2 percent is one of the highest recorded for the U.S.

We have—if we have a hot summer, we can expect natural gas fired peaking capacity to turn on, consuming significant amounts of natural gas that is needed to balance supply and demand and all other end uses, including next winter's heating supply.

The point is, the U.S. has a serious, serious natural gas crisis that has the potential to get much worse before it gets better. Our members are not confident that the U.S. is taking actions necessary to create needed domestic supply. In our view, sound energy policy is not praying for a cool summer and a warm winter.

The United States has the most restrictive offshore policies in the world. Starting 23 years ago, when natural gas was plentiful and low cost, Congress and most of our Presidents proceeded to place various areas of the country, both onshore and offshore, in moratoria.

The offshore areas encompass a large part of the Gulf of Mexico, and essentially all of the Atlantic and Pacific Oceans. These areas have enormous amounts of natural gas, and could easily supply our increasing demand through most of this century. But given our supply crisis, we no longer have the luxury of keeping all of these areas in moratoria. Improvements in regulation and technology have negated the original environmental basis for initiating this moratoria.

Mr. Chairman, thank you so much for the opportunity to be here, and I look forward to the questions and answers. Thank you.

[The prepared statement of Mr. Cicio follows:]

**Statement of Paul N. Cicio, on behalf of
Industrial Energy Consumers of America**

Chairman Gibbons and Ranking Member Grijalva, thank you for the opportunity to provide comment on this very timely issue of the impact of high energy costs to consumers.

The Industrial Energy Consumers of America (IECA) is a 501 (C) (6) nonprofit organization created to promote the interests of manufacturing companies for which the availability, use and cost of energy, power or feedstock play a significant role in their ability to compete in domestic and world markets.

We urge the Congress to pass comprehensive energy legislation this year. We especially request that Congress and the Administration take action to increase supplies of natural gas this decade by removing areas from moratoria to allow for greater access to an abundant supply of domestic natural gas.

Eighty five percent of the lower 48 states offshore acreage has been placed under congressional and executive moratoria. We have the most restrictive offshore policies in the world and the most stringent environmental regulations to ensure that production of natural gas can occur without environmental concern.

This June will be the five year anniversary of the beginning of the natural gas crisis. It was in June of 2000 that natural gas prices averaged above \$4.00 per million Btu, a price level that immediately began to impact the competitiveness of U.S. manufacturing. One by one manufacturing plants were permanently shut down or idled, production was shifted overseas and resulted in a loss of 3.0 million relatively high paying jobs. Today, with a brisk economic recovery manufacturing is still down 2.5 million jobs.

Natural gas prices continue to remain very high. Prices on the New York Mercantile Exchange (NYMEX) for the natural gas futures contract is currently at the \$6.00 per million Btu level. In November, 2004 prices reached levels of just under \$10.00 per million Btu.

Had it not been for industrial "demand destruction" as a result of high natural gas prices, and the resulting decline in consumption by the manufacturing sector, together with a cool summer and a mild winter, we would potentially be facing rationing of natural gas.

It is important to elaborate on that point. Since the natural gas crisis began in 2000, industrial natural gas demand, according to the Energy Information Administration, fell by 9 percent because of high natural gas prices, freeing up about .8 TCF

of natural gas. This “demand destruction” increased the availability of natural gas for all other consumers by 3.5 percent of total U.S. consumption.

At the same time, U.S. production fell by 4.92 percent from year 2001 to 2004 or .97 TCF. This is despite record well completions by the exploration and production industry.

EIA’s 2005 Annual Energy Outlook shows U.S. demand for natural gas of 25.4 TCF in 2010. This is an increase of 3.3 TCF over 2004 levels. Supply of this increment is dependent on increased domestic production (+1.5 TCF) and a quadrupling of LNG imports (+1.87 TCF) and imports from Canada decline. Our members are not confident that the U.S. is taking the actions necessary to create this supply and anticipate that continued industrial demand destruction will result. Industrial natural gas usage in 2004 was just over 7 TCF so a shortfall of this scale will be very significant and manufacturers will not be able to wait another 5 years for supplies to catch up.

The point is the U.S. has a serious natural gas crisis that has the potential to get much worse before it gets better. And, sound energy policy is not “praying for a cool summer and a warm winter.” In the mean time, we will continue to witness the “dismantling of U.S. manufacturing” that built facilities based on globally competitive natural gas prices for fuel and feedstock.

Five Years After the Natural Gas Crisis Started

- The wholesale price of natural gas that manufacturers pay has increased from \$2.11 per million Btu in 1998 to \$6.05 per million Btu in year 2004, a nearly 300 percent increase.
- The U.S. is the only country in the world that does not fully utilize its natural resources. A significant amount of natural gas resources remain in moratoria and cannot be touched. Meanwhile, countries like the UK, Norway and Australia continue to expand offshore drilling.
- The NYMEX natural gas futures contract has the distinction as the most volatile commodity in the world.
- The U.S. has the highest sustained price of any industrialized country in the world.
- The natural gas crisis has cost consumers nearly \$200 billion. The amount does not include the cost of lost jobs or the increased cost of electricity.
- As U.S. manufacturing shut down facilities, imports of energy intensive products that had been produced here have increased exponentially, increasing the trade deficit.
- The “supply gap,” the amount of natural gas that the United States depends upon from Canada and LNG imports has increased 42 % from 2.6 TCF in 2001 to 3.7 TCF in 2004, a increase of 1.1 TCF. This is significant given total U.S. demand in 2004 was 22.2 TCF. Canadian exports to the U.S. have decreased and LNG has shown only modest increases.
- As a result, manufacturing is not spending their “growth capital” in the U.S. in large part because of the high and volatile price of natural gas and energy in general relative to other places in the world.

The U.S. has the most restrictive offshore policies in the world

Every major country that has natural gas reserves is increasing its production. While countries like the United Kingdom, Norway and Australia are actively increasing their offshore production, the United States has the most restrictive offshore policies in the world. The U.S. Department of the Interior reports approximately 85 percent of the lower 48 state offshore acreage has been placed under congressional and executive moratoria.

Starting in 1982, 23 years ago, when natural gas was plentiful and low cost, Congress and most of our Presidents proceeded to place various areas of the country both on-shore and off-shore in moratoria. The offshore areas encompass a large part of the Gulf of Mexico and essentially all of the Atlantic and Pacific Oceans. These areas have enormous amounts of natural gas that could easily supply our increasing demand for this environmentally friendly clean fuel source through most of this century. But given our supply crisis, we no longer have the luxury of keeping “all” of these areas in moratoria. Improvements in technology have negated the original environmental basis for initiating the moratoria.

Producing more natural gas helps the environment

It is difficult to continue to make environmental progress without greater amounts of natural gas until newer commercially available alternatives are created. Technologies like that are decades away. Natural gas is our cleanest burning and less polluting fuel. The only commercial energy sources that are cleaner are renewable energy which cannot be produced in significant quantities and is not reliable

or cost competitive and nuclear energy which has its own set of issues. For that reason, increasing natural gas supply is imperative for environmental improvement.

For example, natural gas is being used in homes and buildings to replace using heating oil. It is used to displace coal in electricity generation. It is used to make hydrogen that is then used as a fuel and/or used to produce low-sulfur gasoline for cars and trucks. Low sulfur gasoline cleans the air. In each case, natural gas replaces a fuel with higher emissions.

While both are needed, domestic supply is preferred over imported LNG

In the next five years, which will be critical to many manufacturers, significant expansion of both domestic production and imported LNG is essential. As consumers, we welcome all supply alternatives but increasing our dependence on imported LNG has major disadvantages.

Almost all LNG supply will come from the same countries that we are dependent upon for crude oil. These are the same countries that formed the OPEC oil cartel that is controlling the supply of oil to the world and thus the price. A news story dated April 27, 2005 reports that these same countries are meeting to form a LNG cartel. Beyond the immediate crisis, we need to determine our domestic production capabilities and then balance our needs with imported LNG.

Producing offshore natural gas has a tremendous environmental record

Producing offshore natural gas has a tremendous environmental record. There are over 4000 offshore production platforms. Annually this production equals approximately 4.7 trillion cubic feet per year or about 23 percent of U.S. domestic consumption. As a result of a well blow-out 36 years ago, the environmental regulations they operate under are the most stringent in the world. And, as a testament to regulation and improved technology, there was no environmental damage this past summer when two hurricanes hit the Gulf of Mexico production platforms with full force.

A government report dated April 19, 2005 by the Mineral Management Service (MMS) of the U.S. Department of Interior "estimates that from 1985–2001, offshore facilities and pipelines accounted for two percent of the volume of oil released into U.S. waters. Furthermore, according to the MMS, ninety-seven percent of offshore spills are one barrel or less in volume. A much larger amount of oil enters American waters through either land-based human activity or natural seepage emanating from the seafloor." In conclusion, producing offshore natural gas can and has been done with environmental safeguards.

Thank you.

Mr. GIBBONS. Mr. Cicio, thank you very much for your enlightening testimony. It helps us to better understand what the real problems are in your part of the world. And certainly, we appreciate the fact that you've testified the way you have.

Ms. Schmalshof, welcome. The floor is yours. We look forward to your testimony.

**STATEMENT OF THERESA SCHMALSHOF,
NCGA CORN BOARD MEMBER**

Ms. SCHMALSHOF. Thank you. Good morning, Chairman Gibbons and members of the Subcommittee. Thank you for the opportunity to testify on the impact of high natural gas on farmers.

My name is Theresa Schmalshof, and I am a member of the National Corn Growers Association's Corn Board. I am from Adair, Illinois, where my husband Gary and I and our two sons grow corn and soybeans.

NCGA was founded in 1957, and represents more than 33,000 dues-paying members from 48 states. NCGA also represents the interests of more than 300,000 farmers who contribute to corn check-off programs in 19 states. NCGA's mission is to create and increase opportunities for corn growers, and to enhance corn's profitability and use.

My purpose today is to provide insight to the Subcommittee on how high natural gas prices affect the cost of producing important fertilizers that farmers rely on for their crops. Growers rely on affordable natural gas as feedstock for fertilizer; but also, energy for irrigation, powering farm equipment, and drying grain and producing ethanol.

Whether used directly as a feedstock or for heat and power generation, reasonably priced natural gas is essential to grower profitability. Increased natural gas prices are having an adverse effect on farmers.

Today's high natural gas prices translate into a huge 40 to 50 dollar cost increase per acre for a typical farmer. According to the recent—to a recent University of Illinois study, across the State of Illinois, the total costs per acre to produce corn in 2004 increased 6 to 9 percent, due to increased prices for fertilizer, seed, and fuel. And there is no relief in sight.

Fertilizers account for more than 40 percent of the total energy input per acre of corn harvested. Most of that energy is consumed in the production of nitrogen fertilizer. Retail prices for fertilizer—the prices paid by the farmers—rise sharply when natural gas prices increase. According to the U.S. Department of Agriculture, farm gate prices for fertilizer have jumped to near record high levels. The largest cost component of making all basic fertilizer products is natural gas, according for more—accounting for more than 90 percent of the cash cost of production.

Nitrogen fertilizer is a key input for the bountiful crops achieved by the U.S. corn farmers. Rising natural gas prices in the U.S. have caused domestic nitrogen fertilizer producers to severely curtail production, as Mr. Cicio mentioned.

Of the 16 and a half million tons of nitrogen capacity that existed in the U.S. prior to 2000, almost 20 percent has been closed permanently. Another 25 percent is at risk of closing within the next two years. Farmers face higher nitrogen fertilizer prices and the prospect that there might be inadequate supply of nitrogen fertilizer to satisfy the farmers' demands at any price.

Nitrogen fertilizer producers have no way of curtailing or reducing their demand for natural gas, other than shutting down the production process itself. This not only destroys their businesses, but it drives up fertilizer prices to the American farmer and food prices to the American consumer.

Natural gas accounts for 70 to 90 percent of the cost of producing anhydrous ammonia, a key source of nitrogen fertilizer. In the Midwest, at the beginning of 2000, anhydrous ammonia was selling at 160 to 170 dollars per ton. By the end of that year, the price had climbed to \$210 per ton. Last year, anhydrous ammonia was selling at \$360 per ton. And this year, we paid over \$400 per ton. Unfortunately, these high and volatile prices are expected to continue into the foreseeable future.

High natural gas prices will also negatively impact this country's growing ethanol industry. The second biggest cost in ethanol production is the cost of energy; generally, natural gas. Energy costs typically make up about 15 percent of a dry mill plant's total costs. The corn industry becomes more energy efficient every year, but we

still must have adequate, reliable, and affordable natural gas to fuel the industry.

Government policy is creating a supply squeeze for natural gas. On one hand, electric utilities and other industries are moving away from using our plentiful supplies of coal and toward use of natural gas. Natural gas has been the fuel of choice for more than 90 percent of the new electric generation to come on line in the last decade. In addition, as that happens, our access to natural gas is limited, due to the environmental policy. Clearly, we can't have it both ways.

Our ability to be efficient and environmentally friendly corn producers will face huge obstacles if our nation cannot come to grips with its desire to have limitless resources like natural gas for production, and not realize that these resources have to come from somewhere. I am sure that the members of the Subcommittee, as individuals, know this well; however, Congress seems unaware of this fact. We can produce corn, but we need you to produce the kind of policy that enables us to use the needed resources to do the job.

Our nation's current natural gas crisis has two solutions: increase supply, and reduce demand. The 109th Congress is facing a daunting task of finding ways to balance our nation's dwindling supply and rising demand for natural gas. Additional supply is available from three primary sources: onshore and offshore production; liquefied natural gas. While there is considerable activity underway in each of these areas, Congress can do more to facilitate the timely development of these critical supply sources.

Congress must also adopt measures to ensure the new coal facilities are constructed. Congress should provide Federal loan guarantees and other incentives for the retrofitting of existing natural gas-fired facilities with the new integrated gasification combined-cycle technologies.

It is vitally important that these forms of power generation be developed and deployed. Without them, the demand for gas-fired power plants will continue to grow and place an ever increasing burden on the nation's supply base. Support through long-term extension of tax credits and other incentives for other emerging technologies, including wind and biomass, is also an important element to diversify our nation's energy resource portfolio.

Converting agricultural and industrial plants to environmentally friendly coal gasification technology can significantly reduce demand for natural gas. This is of particular interest for coal-rich states like Illinois.

The conversion of an East Dubuque, Illinois, fertilizer plant, substituting coal gasification technology for natural gas, will displace 11.6 billion cubic feet of natural gas for residential use each year; enough to supply over 157,000 homes. This project also will produce 1,800 barrels per day of ultra clean, low-sulfur diesel fuel that will help reduce vehicle emissions and improve Illinois' air quality.

By reducing [sic] coal gasification technology, fertilizer costs will be reduced and, at the same time, more natural gas will be available to the electric generation industry. Without enactment of the incentives package to jumpstart the deployment of coal gasification

technologies, damage to American industries will continue, and farmers will be left paying skyrocketing prices for fertilizer.

We urge Congress to act expeditiously to promote the development of domestic energy resources to help secure future economic growth for our nation. Congress needs to enact a comprehensive energy policy now that provides an enhanced role for renewable energy sources, further development of all energy sources for a more diverse portfolio, and environmentally sensitive production of adequate domestic supplies for natural gas.

Mr. GIBBONS. Ms. Schmalshof, could you wrap up?

Ms. SCHMALSHOF. I have one—

Mr. GIBBONS. We're at the nine-minute point.

Ms. SCHMALSHOF. Oh, I'm sorry.

Mr. GIBBONS. And I just want to give fair and equal opportunity to everybody.

Ms. SCHMALSHOF. Thank you. I have one paragraph left.

Mr. GIBBONS. Please, go ahead.

Ms. SCHMALSHOF. I encourage the Subcommittee to continue to address energy and natural gas issues and make it a—make it a national priority. Simply, farmers need access to reliable sources of energy and raw materials, so that they can use the fertilizers necessary to produce an abundant, affordable, and healthy food supply.

Your decisions directly impact my farming operations. Thank you for this opportunity to relate my farm experiences to you.

[The prepared statement of Ms. Schmalshof follows:]

**Statement of Theresa Schmalshof,
National Corn Growers Association**

Good morning, Chairman Gibbons and members of the subcommittee. Thank you for the opportunity to testify on the impact of high natural gas prices on farmers.

My name is Theresa Schmalshof. I am a member of the National Corn Growers Association's (NCGA) Corn Board. I am from Adair, Illinois where my husband, Gary, and I—along with our sons—grow corn and soybeans.

NCGA was founded in 1957 and represents more than 33,000 dues-paying members from 48 states. NCGA also represents the interests of the more than 300,000 farmers who contribute to corn checkoff programs in 19 states. NCGA's mission is to create and increase opportunities for corn growers and to enhance corn's profitability and use.

My purpose today is to provide insight to the subcommittee on how high natural gas prices affect the cost of producing important fertilizers that farmers rely on for their crops. Growers rely on affordable natural gas as feedstock for fertilizer, but also energy for irrigation, powering farm equipment, drying grain and producing ethanol. Increased natural gas prices have already had an adverse effect on farmers due to higher production costs, and will continue to do so in the future. Whether used directly as a feedstock or for heat and power generation, reasonably priced natural gas is essential to grower profitability. Today's high natural gas prices translate into a huge cost increase per acre for a typical farmer. According to a recent University of Illinois study, across the State of Illinois, the total costs per acre to produce corn in 2004 increased 6 to 9 percent due to increased prices for fertilizer, seed and fuel. And there is no relief in sight.

Role of Fertilizer

Fertilizers account for more than 40 percent of the total energy input per acre of corn harvested. Most of that energy is consumed in the production of nitrogen fertilizer. Retail prices for fertilizer—the prices paid by farmers—rise sharply when natural gas prices increase. According to the U.S. Department of Agriculture (USDA), farm gate prices for fertilizer have jumped to near record-high levels. The largest cost component of making all basic fertilizer products is natural gas, accounting for more than 90 percent of the cash cost of production.

Nitrogen Fertilizer

Nitrogen fertilizer is a key input for the bountiful yields achieved by U.S. corn farmers. Rising natural gas prices in the U.S. have caused domestic nitrogen fertilizer producers to severely curtail production. Of the 16.5 million tons of nitrogen capacity that existed in the U.S. prior to 2000, almost 20 percent has been closed permanently. Another 25 percent is at risk of closing within the next two years. Farmers face higher nitrogen fertilizer prices and the prospect that there might not be an adequate supply of nitrogen fertilizer to satisfy farmers' demands at any price.

Nitrogen fertilizer producers have no way of curtailing or reducing their demand for natural gas other than shutting down the production process itself. This not only destroys their businesses, but it drives up fertilizer prices to the American farmer and food prices to the American consumer. These production curtailments and higher nitrogen prices are largely the cause of the current surge in nitrogen imports. Imports currently account for approximately 40 percent of the total U.S. nitrogen fertilizer supply. Lower natural gas prices in the Middle East, Asia and South America make it difficult for U.S. nitrogen fertilizer producers to compete with these countries with much lower natural gas prices to take their excess natural gas, turn it into fertilizer and undersell U.S. producers, a practice that will only become more common in the future. Supplies of nitrogen fertilizer have been adequate during periods of high natural gas prices in the past primarily because of increased imports.

Anhydrous Ammonia

Natural gas accounts for 70 to 90 percent of the cost of producing anhydrous ammonia, a key source of nitrogen fertilizer. In the Midwest at the beginning of 2000, anhydrous ammonia was selling for \$160 to \$170 per ton. By the end of that year, the price had climbed to \$210 per ton. Last spring, anhydrous ammonia was selling for \$360 per ton. The price of anhydrous ammonia this spring is now over \$400 per ton. Unfortunately, these high and volatile prices are expected to continue into the foreseeable future. Tight supplies and increasing demand will continue to pressure producers' margins and profitability, as farmers do not have the ability to pass on these increased costs.

Ethanol Production

Higher natural gas prices will also negatively impact this country's growing ethanol industry. The second biggest cost in ethanol production—second to feedstock—is the cost of energy, generally natural gas. Energy costs typically make up about 15 percent of a dry-mill plant's total costs. The corn industry becomes more energy efficient every year, but we still must have adequate, reliable and affordable natural gas to fuel the industry.

Market Watch and Impact

Government policy is creating a supply squeeze for natural gas. On one hand, electric utilities and other industries are moving away from using our plentiful supplies of coal and towards use of natural gas. Natural gas has been the fuel of choice for more than 90 percent of the new electric generation to come online in the last decade. In addition, as that happens, our access to natural gas is limited due to environmental policy. Clearly, we can't have it both ways.

Our ability to be efficient and environmentally friendly corn producers will face huge obstacles if our nation cannot come to grips with its desire to have limitless resources, like natural gas, for production and not realize that these resources have to come from somewhere. I am sure the members of the subcommittee as individuals know this well. However, Congress seems unaware of this fact. We can produce corn, but we need you to produce the kind of policy that enables us to use the needed resources to do so.

Congressional Action Needed

Our nation's current natural gas crisis has two solutions: increase supply and reduce demand. The 109th Congress is facing the daunting task of finding ways to balance our nation's dwindling supply of and rising demand for natural gas. Additional supply is available from three primary sources: onshore and offshore production, and liquefied natural gas. While there is considerable activity underway in each of these areas, Congress can do more to facilitate the timely development of these critical supply sources. To promote additional production, for example, Congress can adopt measures to ensure that potential federal lands and Outer Continental Shelf areas are open for leasing, that leases and permits are issued promptly, that the appropriate tax and royalty policies are in place, and that the necessary pipeline infrastructure is available to bring supplies to market, while leaving behind as small an environmental footprint as possible.

Alaska's North Slope is one area with significant potential reserves that can be unlocked in this way. Alaska's North Slope is believed to hold as much as 100 trillion cubic feet of natural gas, making it the largest reserve in North America. The natural gas industry anticipates the need for more than \$60 billion of infrastructure investment over the next fifteen years just to keep pace with demand, including liquefied natural gas terminals, pipelines and storage facilities. The construction of new pipelines, such as a pipeline to bring Alaska's North Slope natural gas to domestic markets, cannot be further delayed.

Congress must also adopt measures to ensure that new coal and nuclear facilities are constructed. Congress should provide federal loan guarantees and other incentives for the retrofitting of existing natural gas-fired facilities with the new integrated gasification combined-cycle and next-generation nuclear technologies. It is vitally important that these forms of power generation be developed and deployed. Without them, the demand for gas-fired power plants will continue to grow and place an ever-increasing burden on the nation's supply base. Support, through long-term extension of tax credits and other incentives, for other emerging technologies, including wind and biomass, is also an important element to diversifying our nation's energy resource portfolio.

Converting agricultural and industrial plants to environmentally friendly coal gasification technology can significantly reduce demand for natural gas. This is of particular interest for coal-rich states like Illinois. The conversion of an East Dubuque, Illinois fertilizer plant, substituting coal gasification technology for natural gas, will displace 11.6 billion cubic feet of natural gas for residential use each year, enough to supply over 157,000 homes. This project also will produce 1,800 barrels per day of ultra clean low-sulfur diesel fuel that will help reduce vehicle emissions and improve Illinois' air quality. By utilizing coal gasification technology, fertilizer costs will be reduced, and—at the same time—more natural gas will be available to the electric generation industry. Without enactment of an incentives package to jumpstart the deployment of coal gasification technologies for polygeneration of products, damage to American industries will continue and farmers will be left paying skyrocketing prices for fertilizer.

We urge Congress to act expeditiously to promote the development of domestic energy resources to help secure future economic growth for our nation. Congress needs to enact a comprehensive energy policy now that provides an enhanced role for renewable energy sources, further development of all energy resources for a more diverse portfolio, and environmentally sensitive production of adequate domestic supplies of natural gas.

Conclusion

There are many indications that our nation's economy and energy security will be seriously impacted should we not take action to expand all sources of domestic energy to feed our country's growing demand. A renewable fuels standard as part of a comprehensive energy policy would result in the expansion of ethanol production—directly contributing to domestic fuel supply and reduction in our dependence on imported oil. Our ability to produce food and fuel for our nation and the world depends on a sound energy policy.

I encourage this subcommittee to continue to address energy and natural gas issues. Your decisions impact my farming operation. Simply, farmers need access to reliable sources of energy and raw materials so they can use the fertilizers necessary to produce an abundant, affordable and healthy food supply.

Mr. GIBBONS. Thank you very much, Ms. Schmalshof. And I would agree with you, as with many people, that the use of natural gas for electrical generation is probably not the wisest use for that resource. And we do have a lot of coal in this country, and perhaps we need to advance clean coal technology.

But with that said, let me also turn now to Mr. Bessette.

Ms. SCHMALSHOF. Thank you.

Mr. GIBBONS. Thank you for your patience. Thank you for waiting. And the floor is yours. We look forward to your testimony.

**STATEMENT OF ROBERT D. BESSETTE, PRESIDENT,
COUNCIL OF INDUSTRIAL BOILER OWNERS**

Mr. BESSETTE. Mr. Chairman and members of the Subcommittee, thank you for the opportunity to appear before you today to discuss the concerns over rising energy costs. My name is Robert Bessette, and I'm President of the Council of Industrial Boiler Owners, better known as CIBO, representing the energy and environmental interests of the industrial energy users and producers since 1978.

CIBO members include industrial boiler owners, architect-engineers, related equipment suppliers and manufacturers, service suppliers, university affiliates, consisting of over 80 members representing 20 different major industrial sectors. And I've provided a written statement, but I'll try to summarize here.

America has been blessed with abundant, readily available, and inexpensive energy; so much so, it has spurred our ingenuity and imagination, to make us the greatest country in the world today. The increased product diversity and profitability generated by inexpensive energy has [sic] fueled this accomplishment. Without energy, there are no products, there are no jobs, and there is no country as we know it.

The United States has led global development. However, over the last ten to 15 years, we have seen a change. Developing countries are producing products we want, and they also want, with inexpensive labor and benefits, at prices they can afford. As the cycle progresses, they become global suppliers, and the U.S. becomes a prime marketplace.

Today, product competition is global. The cost of energy versus inexpensive foreign labor and benefits has helped shift the U.S. from the supplier of the world to the prime consumer of the world.

For the last ten years or so, American corporations have been building plants in developing countries, to be able to take advantage of the growth in the developing markets. These plants were designed for future growth, with excess capacity; designed with the state-of-the-art, high-efficiency energy and production equipment, to produce products that those local markets could afford.

As energy costs increase in the U.S., due to availability constraints, demand, or other factors, the capital spending decisions must be based in part on the cost of producing products by using the excess capacity in new plants around the world.

In the era when our environmental policies have promoted a shift to high-cost natural gas or unaffordable environmental controls, we are seeing companies move production capacity to countries where the balance of energy costs and costs of labor and benefits is better.

With these new plants, the marginal cost of production from excess capacity allows for the production and selling of those products competitively here in the United States. When this happens, we lose jobs. If they do anything other than that, it may not be in the best interests of the global corporation.

We are at a critical time, when the environmental policy has favored natural gas as a solution of choice, at the expense of our other energy resources, and without the commensurate expansion of domestic supplies.

A national energy policy is absolutely needed, one, to increase the supplies of natural gas; two, to promote the cost-competitive use of our diverse energy resources, including renewable energy, with a broad definition of “renewable” to include biomass, waste fuel, and other potential energy resources—wood was our original forefathers’ energy resource—three, to promote the increase of all domestic coal reserves and other potential fuels, through research and development and demonstration at the industrial scale; four, to promote energy efficiency, especially through combined heat and power, at our industrial facilities.

All of these will improve the efficient and effective use of our valuable energy resources, while improving the global competitiveness of our U.S. facilities. We need a national energy policy that addresses the concerns of industrial, commercial, and institutional sectors.

The national energy base of our country and the powerhouses at our industrial, commercial, and institutional facilities are lumped with the utility sector in many cases; so that there’s only one energy source. That seems to be electricity. We are more than just electricity. We use steam for heating, cooling, and manufacturing processes. We are different. Our boilers are smaller and different. Our fuel range application is different. And because we must compete in a global marketplace with our products, increasing energy costs directly impact where products are produced.

For those entities like universities and others that cannot relocate, the cost is passed on to the consumer, or services are cut, or the company closes its doors. Americans feel the direct impact of rising energy costs in the products they buy, the tuition they pay and, sadly, even whether they continue to have a job.

Thank you. I look forward to your questions.

[The prepared statement of Mr. Bessette follows:]

**Statement of Robert D. Bessette, President,
Council of Industrial Boiler Owners**

INTRODUCTION

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to appear before you today to discuss the concern over rising energy costs. My name is Robert Bessette, and I am the President of the Council of Industrial Boiler Owners, better known as CIBO.

CIBO is a broad-based association of industrial boiler owners, architect-engineers, related equipment manufacturers, and university affiliates consisting of over 80 members representing 20 major industrial sectors. CIBO members have facilities located in every region and state of the country and have a representative distribution of almost every type boiler and fuel combination currently in operation. CIBO was formed in 1978 to promote the exchange of information within industry and between industry and government relating to energy and environmental equipment, technology, operations, policies, laws and regulations affecting industrial boilers. Since its formation, CIBO has taken an active interest and been very successful in the development of technically sound, reasonable, cost-effective energy and environmental regulations for industrial boilers.

RISING ENERGY COSTS

The cost of energy continues to make headlines, as the rising cost continues to negatively affect the U.S. economy and the American public. Recent economic data show that rising energy prices have slowed U.S. economic growth to a two-year low and there are signs that this will continue in the coming months.¹

¹ Wall Street Journal, “Energy Costs are Taking Their Toll” (April 29, 2005).

Most of the public's attention is focused on the most direct impacts to the downstream consumer, such as the price of gasoline at the pump, home-heating costs and the cost of electricity. Less apparent—but equally as important—is the impact of rising energy costs on the industrial sector, which powers the nation's manufacturing plants. Some segments of industry such as chemicals and fertilizer suffer disproportionately because they rely on natural gas as both a feedstock and fuel. The industrial sector consumes 29% of natural gas consumed in the U.S. The cost of natural gas, measured in cost per million British thermal units (MMBtu), has increased to levels that are testing the economic capacity of industry to absorb and continue to do business in the U.S.

In the early to mid-1990's the average price of natural gas in the U.S. was \$2/MMBtu. In 2000, with new gas-fired utilities online, demand and cost grew. Today the average price hovers around \$7/MMBtu, the highest in the world. Prices in Europe are near \$5.50; in Japan and China near \$4.50; in Indonesia less than \$3.00; and in North Africa, Russia and the Middle East less than \$1.00, making it increasingly difficult for U.S. businesses to compete in the global marketplace. Once short-term cost factors are accounted for, CIBO companies report costs of \$10-12 MMBtu, or as high as \$27 MMBtu. For industrial sources the cost of energy has increased dramatically as a percentage of overall costs of production. For one CIBO member company, energy costs in 2002 were 29% of its total production costs. By 2004, its energy costs had risen to 43% of production costs.

Other fuels are showing the same cost trend. The cost of coal has more than doubled in the last two years. Oil prices are around \$50.00 a barrel and are expected to remain at that level for the near future.² As U.S. Treasury Secretary John Snow noted a couple of weeks ago, the high cost of energy is "taking some wind out of the sails of the American economy."³

In addition to companies with boilers serving industrial processes or generating steam for electricity production, CIBO members include public and private universities, which operate boilers to run campus facilities. The boiler on a college campus is what heats the dorm rooms and keeps the lights on in the classrooms. Universities are also directly impacted by rising energy costs, with students (or their parents) bearing the ultimate burden of the increase in the form of either program cuts or increased tuition. The experience of CIBO members reflects similar budget shortfalls at colleges across the nation.

Data from CIBO university members tell a more precise story. One coal-burning member that has recently bid its coal contract for FY 05/06 will experience an 86% increase in fuel costs—an additional \$3.3 million—over FY 04/05, due to increased cost of coal.

Similarly, another university member burning coal and natural gas had a 60% increase in coal costs between April 2004 and April 2005. The school's older, cheaper pricing coal contracts expired in January 2005, resulting in a \$3 million increase in FY 04/05 costs and a \$6 million increase in the FY 05/06 cost of coal. Natural gas price increases have also affected this member. When its current natural gas contract expires on June 30, it expects a 33% increase with a \$1 million dollar impact.

Yet another university member is currently finishing re-negotiations on a new coal contract that indicates an increase of nearly 25% in coal costs. The school is also moving towards indexed pricing in case of market changes either up or down, which could be much less favorable to the school as compared to its earlier fixed priced contracts. In addition to the fuel cost, it also faces higher transportation costs in the form of fuel surcharges from the railroad and the trucking firms. At this campus, natural gas and fuel oil are being avoided as long as possible, due to an increased cost for #2 fuel oil of 30% over last year and for natural gas an increased cost of 20% over last year. In aggregate, fuel expenses increased nearly 20% year-to-date over last fiscal year, amounting to over \$1.1M in additional expense. Overall, its energy costs (fuel and purchased electricity) typically run about two thirds of the entire budget of just over \$18M. Administrators at this university decided to forego a tuition increase and turned instead to program cuts to meet budget.

This same hardship is experienced by yet another university member, whose overall purchased utilities budget expenses increased by 12% from FY03/04 to FY04/05, and will increase by another projected 26% for FY05/06. This is a 41% increase in two years.

Double-digit energy price increases and significant budget shortfalls are the norm for CIBO university members, and is indicative of what is happening around the

²Id.

³Wall Street Journal, "U.S. Snow: Higher Energy Prices Slowing U.S. Economy" (May 2, 2005).

country. Coupled with rising demand growth on many campuses, many colleges and universities are faced with the unfortunate decision to cut student programs or raise tuition.

Analysts attribute the cause of rising energy costs to many long-term and short-term factors. Often overlooked as a significant contributing factor to rising demand and costs is the failure of our national energy policy to account for environmental initiatives. This lack of coordination of policies directly affects the decisions of manufacturers regarding where to expand capacity and where to produce goods.

NEED FOR A COORDINATED ENERGY/ENVIRONMENTAL POLICY

The lack of an effective national energy policy that is coordinated with environmental policy results in environmental decisions that exacerbate the energy supply/demand imbalance. For example, a good national energy policy would promote the use of diverse energy sources, which would moderate interruptions and spikes in individual fuel supply availability and price. Such a policy would also provide a framework and incentives to promote the use of diverse energy sources and the full use of intrinsic U.S. energy resources, including our large reserves of coal. Because we do not have an effective national energy policy, individual fuel decisions are necessarily based on local short-term economics that exacerbate long-term problems.

In the Clean Air Act (CAA), Congress provided ways to ensure environmental protection and at the same time to meet energy demand by allowing dependence on the full range of the nation's diverse energy sources. And for the first 25 years of its implementation, the Clean Air Act was interpreted, as intended, to allow industry to rely on all energy resources. However, beginning in the mid-to-late 1990's, environmental policy makers began to favor natural gas over other fossil fuels for its cleaner burning properties. All new power generation was built for natural gas. This policy of favoring natural gas over other fuels was incorporated into Clean Air Act rules applicable to the industrial sector as well. These rules are framed in terms of "fuel neutrality," meaning that all sources would have to meet the same Clean Air Act emission standards regardless of the type of fuel they burn.

At first blush, this "fuel-neutral" approach looks appealing, because it accomplishes an environmental benefit and appears to level the playing field for all fuel sources. In reality, however, the approach is not at all neutral, because it severely punishes the use of energy sources other than natural gas. Under this approach, standards are set at a point that makes emissions reductions cost-effective for sources burning natural gas, but cost-prohibitive, or even in some cases, technically infeasible for sources burning other fuels. Under those circumstances, sources under pressure to comply with Clean Air Act standards will (if they can) switch to natural gas. Through these strong incentives for sources to switch fuel, environmental standard-setting has contributed to the increasing dependence on natural gas and the abandonment of coal and other fuels as reliable alternatives.

CIBO has raised these concerns often, before Congress, during various environmental rulemakings and through the courts. But because EPA has broad discretionary authority under the Clean Air Act, CIBO's concerns for the most part had gone unaddressed. More recently, in light of soaring energy prices and an effort to address the need for a diverse energy supply, CIBO can report that policy makers appear to be taking into account the negative energy implications of this "fuel-neutral" approach.

Yet, our environmental policies still do not ensure that we can meet the growing energy demand. Some programs outright prohibit expanding the domestic supply of natural gas. Others more subtly discourage use of fuels other than natural gas. To the extent that any environmental program or policy undermines the nation's parallel goal of using a variety of energy resources, this creates an unsustainable situation for the energy-dependent manufacturing base in an era of global competition.

Congress is asking the industrial base to increase production without additional energy. Industry has met this challenge to a large extent, by increasing efficiency. One of our members improved energy efficiency from 1994-2004 by 21%, and plans to achieve an additional 25% efficiency over the next 10 years. Similar efficiencies are being achieved and planned for the future by all our members.

But Congress must know that there is a limit to the ability of U.S. industry to absorb the energy price shock and still remain competitive. Once energy costs can no longer be absorbed through energy intensity adjustments, companies will seek to meet production demand in parts of the world where energy is cheaper. In a word, our inability to address this issue translates into jobs.

To take one example, in the plastics industry, the cost of natural gas tripled from 2000-2002, 130,000 jobs were eliminated and plastic product shipments declined by \$14.7 billion. Similarly in the chemicals industry, the global chemical industry is expected to grow annually by 4% but the U.S. will not see any of that growth under

present energy cost projections.⁴ Rather, U.S. companies now plan to meet export demand by developing capacity overseas. One CIBO member has already closed down non-competitive production facilities in 11 U.S. cities in NY, NJ, NH, MI, WV and TX. Overall, chemical companies closed 70 U.S. facilities in 2004 and plan closure of another 40. Over 120,000 jobs in the industry have been eliminated since 2002.⁵ For 80 years the U.S. maintained a trade surplus in chemicals, with a \$20 billion surplus in 1997. Today the U.S. has a trade deficit in chemicals. As demonstrated by just these two sectors, the crash course our policies are now on is eroding the manufacturing base in the U.S.

It should be noted that CIBO is not suggesting that we sacrifice environmental protection for energy security. Rather, these can and should be parallel goals, building on the remarkable environmental improvements over the last three decades. In the last 30 years since the adoption in 1972 of the Clean Air Act, emissions of the six criteria pollutants declined by 54%, even though there was a 187% increase in the gross domestic product, a 40% increase in the population and a 171% increase in miles traveled by vehicles. Air toxic emissions declined 30% from the years 1990 to 1999 alone.⁶

As Congress considers options for addressing the impact of rising energy costs, environmental policies should be closely examined for opportunities to ensure that these policies support rather than hinder efforts to address energy cost concerns.

ENERGY EFFICIENCY & INDUSTRIAL BOILER EFFICIENCY

The average industrial boiler produces 100,000 pounds of steam per hour, with most boilers ranging in size from 10,000 to 1,200,000 pounds of steam per hour. Industrial boilers are tailored to meet the unique needs and constraints of widely varying industrial processes. The 70,000 industrial boilers in use today are as varied as the products and processes they serve.⁷

Overall process or operational efficiency of a boiler is determined by the needs of the operation and the design of the powerhouse used to meet those needs. Likewise, energy efficiency for industrial boilers is a highly boiler-specific characteristic. Four factors are critical for assessing energy efficiency in the industrial powerhouse supplying energy to make products: (1) fuel type, (2) combustion system limitations, (3) equipment design, and (4) steam system operation requirements. The industrial facility's complexity, location, and objective are additional complicating factors.

Fuel characteristics determine the design of a particular unit. When fuels are switched, the interaction of the new fuel and the boiler often produces negative impacts on either the load or the boiler efficiency. These effects often are amplified because of limitations encountered in specific areas of the boiler where these adverse interactions occur. Changes in fuel, load, and operation can easily impact overall efficiency.

Unlike utility boilers, which operate solely to produce electricity, industrial boilers are more complex and designed for diverse facilities dedicated to a variety of different objectives. A boiler that serves a pulp and paper facility is very different from one that serves a university campus. Even at a single installation, application of steam from an industrial boiler can change dramatically with the seasons, when steam or hot water is used for heating, as well as from day-to-day and hour-to-hour, depending upon industrial activities and processes underway at a given moment and their demand for steam. The possibility of such widely fluctuating demand for steam in most industrial processes means that the industrial boiler in the great majority of cases, does not operate steadily at maximum capacity. In general, the industrial boiler will have a much lower annual operating load or capacity factor than a typical utility boiler. This results in a lower efficiency.

In addition, because industrial boilers are smaller, operate at low capacity factors, and operate with a widely fluctuating load, environmental controls are less efficient, and less cost-effective than the same controls used on utility boilers. Further, some controls that can be applied effectively to utility units, which operate at steady state, cannot be readily applied to industrial boilers, which operate at a wide variety of loads.⁸ Importantly, combustion and add-on control technologies often negatively impact boiler system efficiency as well as system reliability.

⁴By contrast, 120 new chemical plants are under construction or planned around the world, with only one of these being built in the U.S. "No Longer the Lab of the World, U.S. Chemical Plants Closing in Doves as Production Heads Abroad,—Business Week (May 2, 2005).

⁵Id.

⁶EPA, Air Emissions Trends, <http://www.epa.gov/airtrends/econ-emissions.html>.

⁷For further explanation, see Attachment, "Energy Efficiency and Industrial Boiler Efficiency."

⁸For example, the control technology Selective Catalytic Reduction (SCR) requires placement of a catalyst grid and injection of ammonia at a specific operating temperature for effective

These different requirements naturally create optimal efficiencies that vary widely from industry to industry and from facility to facility. The "one size fits all" approach often used by regulators to encourage increased energy efficiency and to maximize emission reductions of a given pollutant simply does not work because this approach does not consider the many specific factors that affect emissions reduction and energy efficiency at a given industrial facility. Nevertheless, consideration of energy efficiency for industrial boilers often is simplified and categorized to a one-size-fits-all approach.

A sound energy/environmental policy would account for this wide variation in industrial boilers while encouraging these sources to utilize all available fuel sources and develop potential efficiencies. Two opportunities to achieve these goals are discussed below.

COMBINED HEAT AND POWER EFFICIENCY

Starting with fuels, industry accomplishes conversion by burning the fuel and releasing heat. An engine then converts heat energy into mechanical or electrical energy. If combustion occurs inside an engine, it converts heat energy to mechanical energy that can be used to drive a pump, fan, compressor, or electrical generator. Exhaust leaving the engine is hot. This exhaust contains over half of the BTUs released during initial combustion of the fuel and it can exceed 1000 degrees F. If none of the exhaust heat is used, the device is known as a simple cycle. If heat is recovered from the exhaust for the additional utilization, the combination of the engine and other devices is known as a cogeneration system or a combined cycle system.

The concept of combined heat and power provides further efficiency improvements over producing only electricity by using exhaust heat directly in the manufacturing process. Many manufacturing processes require heat at temperatures between 250oF and 700oF. The BTUs provided by the exhaust are at temperatures that match these temperature requirements well. Hence, by converting high temperature, high quality BTUs to mechanical or electrical energy and taking the lower temperature, lower quality BTUs to meet process temperature needs, the energy in fuel can be used most effectively and efficiently. With this combination, from 60% to 85% of the BTUs in the fuel can be recovered and used effectively.⁹

Given that the use of CHP routinely achieves twice the efficiency of conventional boiler steam and electric utility generation, our national policies should encourage its use. Unfortunately, the diversity and complexity of industrial CHP facilities is not understood, and environmental regulation can discourage its use. For example, how the useful energy value of process steam is calculated will either encourage or discourage an industrial source to make the capital investment to use CHP. If the value of the steam is calculated at less than the cost to produce it, few sources would invest in the technology. In the past, EPA has assigned sources a uniform useful value of steam thermal energy due to difficulty in measuring output of thermal energy at an industrial source. This uniform valuation may not represent the true value to an industrial facility of the thermal energy produced. More recently EPA has indicated it is considering allowing a more precise calculation of the value of thermal energy facility-by-facility.

CIBO strongly advocates a more accurate measure of thermal output because it will provide a significant incentive for investment in CHP units that use a very high percentage of their steam for useful thermal purposes. If Congress is truly committed to the investment in high-quality CHP installations, our environmental regulations should allow facilities that make that capital investment to accurately account, whenever possible, for the full value of the thermal energy they produce.

USE OF ALTERNATIVE FUELS SUCH AS BIOMASS AND WASTE COAL

Other environmental policies that can undermine energy policy involve criteria pollutant standards. Under the Clean Air Act, industrial sources must meet emissions standards for particulate matter. Depending on the emission reduction required by the standard, but also on the type of boiler, fuel, available control technology and other complex factors discussed above, a given unit may or may not be able to achieve the emission reduction cost-effectively. Some industrial boilers, particularly smaller units, may be able to fire non-fossil fuels such as biomass and other opportunity fuels, which tend to have higher particulate matter concentrations than other fuels. Those non-traditional fuels will likely provide an opportunity for marginal industrial facilities to remain in operation when compared to the current

reduction of nitrogen oxides (NOx). This design requirement cannot be met in industrial applications where load and temperature at a fixed point in the system varies.

⁹For further explanation, see Attachment, "Combined Heat and Power."

extremely high fossil fuel costs. In addition, use of non-traditional fuels can help alleviate the current energy supply/demand imbalance and help lower fuel costs.

Clean Air Act particulate matter standards should not be set without accounting for the potential economic impact on smaller industrial units using opportunity fuels. Standards should not foreclose the continued operation of these small sources that provide economic stability for communities, assist in balancing the energy demand/supply imbalance, and provide other environmental benefits by fully utilizing waste products for energy production.

Another example involves the Clean Air Act standard for sulfur dioxide (SO₂). In some geographic regions of the country, some units have found it possible to extract the valuable energy from waste coal from abandoned refuse piles. This provides a significant net benefit to the environment. Burning coal refuse not only prevents potential acid mine drainage and reclaims abandoned mine land for productive use, it also makes beneficial use of the remaining energy value of the refuse through the production of electricity. These environmental benefits contribute to achieving national environmental goals set forth in the Resource Conservation and Recovery Act and other federal and state laws. Nevertheless, because of the complexities of the units having this capability, the units have a limited ability to reduce SO₂ emissions beyond their inherent SO₂ reduction capabilities compared to units burning traditional fuels.

CIBO believes that the environmental and energy supply benefits from burning coal refuse far outweigh the slight incremental SO₂ emission reduction that would be achieved by imposing an infeasible SO₂ standard on these sources. In fact, under these circumstances, the net environmental impact would be harm, because units that cannot feasibly meet a standard will switch fuels or close down rather than recovering the coal refuse resources, once again abandoning the coal refuse piles to create an environmental hazard.

SUMMARY AND CONCLUSION

To fully address the issue of rising fuel costs, Congress must take into account the impacts on the industrial sector. A substantial portion of the total energy budget in the nation is produced and consumed by industrial users. Operators of industrial boilers are major users of utility-generated power and are extremely vulnerable to energy price spikes and differentials against our global competitors. If our facilities become less efficient and less productive, then our ability to compete in the domestic and international arenas sharply declines.

Congress has the ability to adopt a course of action to address the energy supply/demand imbalance and devastating energy prices. Broad efforts including energy efficiency, fuel diversity, infrastructure improvements, and improved supply need to all be included in a comprehensive approach. As part of that effort, Congress should include measures to ensure that environmental policy coincides with energy policy. Clean Air Act standards, for example, should encourage industrial sources to invest in technologies that maximize energy efficiency and to use alternative energy resources including biomass and waste coal.

CIBO recommends that Congress adopt coordinated energy/environmental legislation that (1) addresses energy supply concerns by increasing the domestic supply of natural gas, facilitating the permitting of energy-related facilities within the U.S., and ensuring continued reliance on nuclear, renewables, coal and all other energy resources; (2) maintains and preserves fuel diversity including not only coal, but diversity within coal types; (3) supports the use of all alternate fuels including biomass, waste coal and other similar energy resources; (4) abandons "fuel neutrality" as a basis for setting environmental standards, which pushes sources to use natural gas to the exclusion of other available fuels; and (5) insists on consistency in energy and environmental policy, recognizing the distinctions between utility and industrial boilers and ensuring industrial sources are able to maximize energy efficiency and use the full range of energy resources.

Mr. GIBBONS. Very nice, Mr. Bessette. And I apologize for pronouncing the "E" part of your name. It is not pronounced, and I apologize for mispronouncing your name. And thank you very much for your testimony and for the summary you provided, as well.

We are going to turn now, ladies and gentlemen, to questions from the panel here. And they are under the same time restriction that I gave you. Each one will have five minutes within which to

ask a question. And I will turn now to Mr. Peterson of Pennsylvania for his five minutes. Mr. Peterson.

Mr. PETERSON. Thank you very much. And I appreciate the testimony today. I found it interesting three of you talked about natural gas, which anybody knows is my issue; an issue that I have been concerned about for five or six years, and at times here in Congress felt like I was a lonely, sole voice arguing with leaders of the energy committees that gas was going to be a problem, and they were saying, "Oh, no, it's just cyclical. It will be back down."

But they are connected. The first gentleman we heard from talked about the airline industry; which is petroleum directly. But I just want to share something that has not been spoken and, I don't think, often thought about. All of my school districts, all of my hospitals, and all those kinds of institutions, have dual use. They have dual fuel capacity. They have to have.

And unfortunately, with natural gas prices the last two years, many of them have been burning fuel oil; which competes with the airline industry. And I mean, none of this is being thought about. Because it was cheaper to burn fuel oil than it was to burn natural gas with these spiking prices.

So it is all related. And in my view, I have a transit system in State College, Pennsylvania, that is now all natural gas. That was a winner in the beginning. It is not a winner today. It actually costs them more. So the unnatural natural gas prices.

The question I want to ask you in a minute is, I guess, what have you done to alert the public. I spoke this morning to CEOs of steel companies. I had a man who said he spends \$10 million a year for natural gas. He did not know it wasn't a world price. And I found that a little hard to believe.

Most of the CEOs of those companies were not aware of world gas prices; that they are as low as 80 and 90 cents in countries like Russia; that right in South America it's just a little over a buck; Europe, we are \$7, they're \$5; China is \$4—giving them another 65 to 70 percent advantage on everything they make that uses natural gas.

And I have spoken to just scores of groups. I haven't talked to any group of leaders that had any idea that natural gas is an island to itself in this country, and that we pay the world's premium prices.

I guess all of you, have any of you spoken out on this issue about natural gas until recently? I mean, it has sort of been like nobody knows it. Most Members of Congress don't know it.

Mr. MAY. Congressman, not specific, obviously, to natural gas; which is your direct issue. We haven't figured out how to fly a plane on natural gas yet.

Mr. PETERSON. Yes.

Mr. MAY. I recall testifying before the Senate Energy Committee, making public statements on the overall price of energy, broadly. And we understand that in the pricing scheme there is a fungible nature of natural gas and fuel. And that was two and a half years ago. It was one of the first things I did when I assumed my new position.

I think you could come to any meeting of any airline anywhere, annual meeting or group of—my board meeting, which consists of,

exclusively, CEOs, and fuel prices are the principal topic of conversation for part of that meeting, at least.

It is critical. I think we ought to be looking at policies relative to the Strategic Petroleum Reserve. I think we ought to not necessarily release from that, but we're looking at record high reserves today; you know, 690-some million barrels of oil in the ground right now. I think we can't be filling that at extraordinarily high prices, and then down the road releasing it at low price.

So I think there are a lot of things that need to be done. But I think, also, it's a delight to see members of your committee take a visible position on it because, quite frankly, too few in the Congress have.

Mr. CICIO. Representative Peterson, thank you so much. And I want to thank you, personally, for all your leadership, consistently, in hammering home this issue of the challenges of natural gas. Quite frankly, I am surprised, and shocked, as you are, that the steel company executives didn't get it.

I will assure you that the CEOs of the member companies of the Industrial Energy Consumers of America do understand, and they are actively engaged. But at the same time, I have to acknowledge to you that across the country, in general, CEOs do know what impact costs of energy—not just gas, but also coal has doubled, crude oil prices, electricity prices have gone—they do know what that has had.

And it has become in many cases their largest variable cost, and has had a significant impact of CEOs making decisions not to invest their growth capital here in this country. It's a very serious problem.

Yes, they are spending their capital associated with maintaining these existing plants, but the growth is not here. Because when they look at the price of natural gas, for example, on the New York Mercantile, and they see high, high, high sustained natural gas prices as far as you can see, they say, "The U.S. is no longer a place that has a competitive advantage that it once had through energy costs."

Communications and education have been a real challenge for us. We're an organization that was formed three years ago as a result of the natural gas crisis. And there is just simply not enough dollars to communicate as sufficiently as we need to.

Mr. PETERSON. Any other type of comment?

Ms. SCHMALSHOF. Mr. Peterson, I know that NCGA and our members have been aware of the natural gas crisis, as you know because of my comments. It does hit our bottom line. And we have been working in that endeavor. However, as Mr. Cicio said, monies are tight, and we don't have an expeditious amount of dollars. But we certainly would be glad to work with you.

I think it's certainly a need for all of us to get the other congressional people onboard and let them certainly understand what this is about. It's not a farmer issue, alone. It's also across all sectors, as you said. And that's hard for us to get into some doors, when they see that we are a farm—a farm group. So we'll do what we can, and certainly keep working toward that entity.

Mr. BESSETTE. Thank you, Congressman Peterson. We've been working for years, because environmental policy has been going at

a different direction than national energy policy. We haven't had a linked energy and environmental policy.

Fifteen years ago, the industrial sector was probably burning 60 percent of its energy for process use using coal. Today, we're burning 60 percent natural gas, because the environmental constraints have forced us into that direction. It's either that, shut down, or move. The costs of controls are inextricably high. We can't get them to those levels.

That process is extremely important. We've put all of our resource eggs in the natural gas basket to solve our environmental problems. We need an energy policy that promotes fuel diversity, that promotes fuel flexibility.

Thanks for the question. You're doing a remarkably good job. Thank you.

Mr. GIBBONS. Thank you, Mr. Peterson.

We'll turn now to Mr. Grijalva. Mr. Grijalva, you have five minutes.

Mr. GRIJALVA. Mr. Chairman, just a couple of questions. Let me begin with Mr. Cicio. In your testimony, you seem to be saying that the members that you represent are almost entirely reliant, or over-reliant, on one source of energy, which is natural gas—some of the members, like Bayer Corporation, Coors Brewing Company, Dow Chemical, Tysons Foods. Yet most industry and consumer groups are strongly in favor of a diversified portfolio.

The Institute for Analysis of Global Security, a Washington-based think tank whose members include a spectrum of conservative, liberal, centrist, they've been advocating the transitioning away from traditional energy sources; having a diversified portfolio. Former Secretary James Baker is making similar proposals.

So while opening up the moratorium areas seems a quick fix and an easy solution, I would suggest it's probably short-term at best. And that's assuming you overcome what will be the political objections to opening up those areas.

Therefore, my question is, why would you focus so heavily on one energy source, and not look to the future with new technologies and alternative fuels?

Mr. CICIO. Congressman, I couldn't agree more with you. The fact is, our organization in its many reports and communications supports a broad diversity—as we call it, a robust, diverse supply of energy. We know as a country we need all of the energy alternatives in the mix. We need nuclear, we need coal, we need gas, we need renewable energy, we need—and we agree, technology is the real solution to all of these challenges long-term. So we agree 100 percent.

The reason that I am here today is—and why my testimony is focused as it is, is that there has been insufficient focus on the real way forward in increasing supply of natural gas. We cannot conserve ourselves out of this major dilemma.

And oil and gas producers, the exploration and production industry, are drilling three wells to get the same amount of gas that they used to get out of one. Today, one of those wells will be produced out in a period of three years or so. They used to produce a well, and it would provide production for eight to ten years. This

is a—we're putting special emphasis on solving the natural gas crisis.

Mr. GRIJALVA. Thank you. And just to follow up on that, the movement toward natural gas—and my colleague is much more an expert on that than I am—the movement was also because the commodity was priced so low at the time.

And I think also, as we try to mesh environmental policy and energy policy, as Mr. Bessette said, we are also in a position as you strike a balance to realize that we need to be looking to the future, as well.

Mr. Bessette, the question I have for you is, in both your oral and written statement you advocate a good national energy policy that would promote the use of diverse energy sources, which would moderate those interruptions and spikes in individual fuel supply and price. And you made the point that there has not been that linkage between environmental policy and energy policy.

Speaking to that linkage, what is your opinion, then, of an energy bill passed by the House last month that provides \$3.2 billion in new tax breaks for oil and gas industry, while dropping more than \$3 billion for incentives for renewable energy and efficiency? There is a linkage question if I ever saw one.

Mr. BESSETTE. When you start looking at the linkage of energy policy and environmental policy, when it comes down to where is the crux, the crux is in the dollars per million Btu.

When we start looking at natural gas prices that have gone from, five years ago, two dollars a million Btu or less, and we're now up, for some of our industrial facilities, to seven to ten dollars and twelve dollars, and spot prices as high as 27—

Mr. GRIJALVA. I think the contradiction I'm pointing to, the producers right now are enjoying record profit years, in terms of oil and energy pricing in this country. And we are also, consumers, painfully aware of the price of gas. And the folks that all of you represent, your industries are painfully aware of the energy cost. And so the contradiction I'm pointing out is that, while that is occurring, the investment that we have to make in renewable alternatives research, that even Greenspan and others have been advocating, that isn't being done in conjunction.

Mr. BESSETTE. A lot of the research and the renewable sides of what's been talked about have been aiming at wind, solar, photovoltaics—very, very high cost. Anything that's high cost is very, very difficult to apply in the industrial setting, because our costs are based on low-cost, inexpensive, available energy.

If we raised the cost of energy, it's not solving my problem of where is that final product going to be produced. So we have to look at inexpensive energy. The renewables that are being—

Mr. GRIJALVA. Well, as we subsidize traditional—oil, gas—all I'm suggesting is that that same philosophy of providing that kind of assistance to alternatives would be a wise investment at this point.

Mr. BESSETTE. Absolutely.

Mr. GRIJALVA. OK. Thank you. No more questions.

Mr. GIBBONS. Thank you, Mr. Grijalva.

Mrs. Drake.

Mrs. DRAKE. Thank you, Mr. Chairman. I would like to thank you for calling this panel together. And I would like to thank our

panelists for being here. I know you have come from all across America to deal with such a critical issue for us.

I would like to ask one more thing of you, though, if you would do it for us. From your own perspective, if you don't mind sending us a letter back that just details what you think we do right, and what you think we can do much better. And I just think that would be very helpful for us as we deliberate.

I represent the Second District of Virginia, which is the southeast corner—Norfolk, Virginia Beach area. And two of our real economic drivers, of course, are the military and tourism. Largest naval base in the world: 29 percent of their budget is spent on energy and utility costs. And I don't think we think about that when we talk about the war on terror.

Mr. Bessette, you represent educational institutions. And one thing we're struggling with in another committee I am on is reauthorization of the Higher Education Act. And we talk all the time about costs, but never have we talked about the cost of energy. Have you seen with your members that that alone is enough to drive some of the tuition costs that we are dealing with?

Mr. BESSETTE. One of our—one of our affiliated universities had a 5 percent tuition increase that they directly allocated from energy and environmental impacts, having to meet the boiler max standards that are coming up, and increasing coal costs.

One of the—another one of our universities, they had coal prices last year at \$60 a ton. This year, they're paying \$123 a ton for coal, in the central part of the country. Primarily because it's not available; the utilities are burning more; the price has gone up for low sulfur.

Industrial facilities need very special quality fuels. They just can't burn anything. So because they have a very tight quality requirement, sizing, it's not readily available. Price goes up and they're being struggled [sic]. Of course, the alternative is natural gas, at seven to ten dollars a million Btu's, so I'm going to spend \$5 a million, \$7—\$6 a million for coal at my facility. It's hurting our universities. They can't pack up and move out.

Mrs. DRAKE. Right. Well, and what I have heard from all of you is, I think, within your industries you are trying very diligently to reduce demand yourself; to be much more efficient. And I think you would agree with me that we have absolutely got to increase supply within our country, or within the North American continent, working with Mexico and Canada.

Mr. Cicio, I don't know if you heard, but Virginia has had a very interesting debate about offshore drilling, because of a bill in the General Assembly this year. So I wondered within your industry if you are working with local governments. Because interestingly, in the Second District, part of the district is all for it, the other part of the district is very concerned about it. So, whether you are working in your industry to explain to local governments what this would really mean to them. Or have they started that kind of effort? Because we need that.

Mr. CICIO. Yes. And in fact, we're working with a broad coalition of trade associations who are exclusively consumers, working together to work on a state-by-state basis. At this time, we're not working on all states. But it's an effort to provide education and

talk about these desperate—the desperate need for sound energy policy and increased supply, particularly of natural gas domestically. We don't have, in our view, a very good solution to that educational process, but we are starting

Mrs. DRAKE. Thank you very much for that, because I think that will be very helpful.

So Mr. Chairman, I am going to yield back my time. But thank you for being here. I look forward to getting your response.

Mr. GIBBONS. Thank you very much.

Mr. Melancon.

Mr. MELANCON. Thank you, Mr. Chairman. I appreciate the opportunity to visit with these people. I'm sorry I was running late.

Mr Cicio, I am on the Mississippi River corridor, which is high industrial, petrochemical. And the life blood is natural gas. I guess what I would ask you, just as Mrs. Drake asked, is tell us what we are doing right; tell us what we are doing wrong; and if you have got suggestions of things that we can do.

I am concerned with the job loss as they shut these plants down because of the price of natural gas. And it is happening. I am losing people weekly, I guess, if you want to go that way. But do you have any thoughts on that?

Mr. CICIO. Yes, sir, I do. Thank you for that question. It is, in our view, almost shameful that we have so much natural gas in this country, yet we do not let the energy companies have access to produce that gas. We don't need—we should not have prices of natural gas as we have today, and the resulting loss of jobs. We have plenty of gas.

As I pointed out earlier, the energy companies are drilling three wells just to get the same amount of gas that they used to get out of one. And that is because they are drilling in areas that have less gas in the ground, rather than larger amounts of gas. We need to give them access to those areas that have abundant reservoirs of gas, rather than small pockets. And that's what we've relegated this to.

There are a lot of companies who used to spend billions of dollars of increased monies to drill for gas and oil in this country, that no longer do that. This has happened over time. And they have moved away from the United States because the United States is no longer an attractive place to invest their dollars. There's other places around the world.

Well, to us, this doesn't make sense. We have a country with a very stable and growing demand. We have a country that desperately needs clean fuels like natural gas. And the demand is increasing. We can't really continue to improve our environment as easily as we can without increased supplies of natural gas.

We have all these things going for us, yet we still just don't take that extra step to deal with this issue of, for example, the moratoria. You know, we're not asking, in fact, that we need everything, but we do need to address this issue; establish a process to open up and deal with this moratoria.

States, for example, have little incentive to allow for drilling of natural gas. That needs to change. States should have greater control of their coast lines so that they have—they can control whether

there's drilling, you know, three miles, ten miles, 50 miles. They should have a say in that, and that's not the law of the land.

These are basic principles that need to change the dynamics of producing energy in this country, so that we can have an attractive place for these companies to invest their dollars. So states need incentives. States need more control over their coastal waters. And that would make a huge, huge difference, we think, in these dynamics.

Mr. MELANCON. Thank you on that. Mr. May, if you could, I had a conversation with a friend of mine that is, I guess, in the airport business. And he was telling me that the problem for commercial airlines these days is they had good strategies and plans for getting themselves out of the problems they faced after 9/11; but now with the fuel costs, that is probably the most crippling portion, or the largest portion of what their costs are. Is that so?

Mr. MAY. Yes, sir, it is. Next to labor, it is our most expensive component of our cost structure. We've dropped our cost for available seat-mile down significantly since 9/11, but we've nearly doubled the amount of money we're spending on fuel. We're now projecting in 2005 to spend somewhere in the range of \$28 billion just on fuel; which will be about 91 percent higher than we did back in 2001.

Mr. MELANCON. Thank you, sir. I apologize; he was just telling me I had another meeting.

Mrs. Drake and Mr. Chairman, because I have to run, I would like to offer, as I did back in the 1970s, we had a group from the Delmarva Peninsula. So that you know how far back that was, Governor DuPont was still your Governor in Delaware. But to bring this Subcommittee, or the entire whole Committee if it is possible, to south Louisiana. Now, in the early part of this century, a lot was done wrong in exploration. But we have learned. The technology is there. The ability to get to these natural resources is phenomenal.

And I think from a standpoint of whether it is you who had those questions and want to understand it, to even those of us that think we understand it, I would like to offer, Mr. Chairman, that we would be happy to try and set that up, because I think it would be an eye-opener for anybody that wants to understand.

And I totally agree, we need to find out what is right and what is wrong with what is going on, so that we can try and direct it. Mr. Chairman, I yield back my time, and I apologize for having to leave.

Mr. GIBBONS. Thank you,

Mr. Melancon. And let me assure you that this committee is indeed interested in visiting that area of our nation's energy production in the region. And we have been talking about it, and would certainly take great pride in the fact that Louisiana is one of the centers of the oil and gas industry for this country, and all the great work that you do for a lot of people. But we will certainly be in touch with you with regard to any plans in that regard.

I am the final questioner here today, so that we can get to our next panel. Let me begin my time by saying that in our economy in this world in the United States, the mineral industry is the foundation of our economy. The energy industry, oil and gas, is the

keystone that keeps the door of our economy able to open when we need to be able to open that arch. So the two are critically tied.

Now, Mr. May, you paint a rather dire picture for one of the very, very significant parts of our economy; which is the transportation industry. And we in the 21st century have become so dependent on air travel, air transportation, whether it is for our own personal transportation or for goods and services that we move about this country. We are a high-speed society, and of course the airline industry is critically dependent on that keystone oil and gas energy supply. And you have, literally, a captive audience. We have nowhere to go, unless we want to revert back to the horse-and-buggy days in that.

But let me ask, do you believe that with the price both of labor and oil and gas today, that your industry can meet the demands for rapid air transportation for tomorrow?

Mr. MAY. Mr. Chairman, we're going to have a very difficult time doing that if oil stays in the \$50 range or north of \$50. This industry, airlines—not transportation broadly, but airlines—used to contribute just under 1 percent of the overall GDP of this country. Last year, we contributed 0.7 percent of GDP. To translate that into real money, what it says is that there's somewhere on the order of \$30 billion less being spent on air transportation today than there was just a few short years ago.

That is principally a function—good news for the consumer—of lower prices on tickets; bad news for the industry, because price competition is so tough, so severe. And that competition prevents us from passing through. You talked about the cargo side of our business. Just-in-time economy depends on cargo. We've been able to price through the increase in oil on the cargo side; not on the passenger side.

Regrettably, I can fly to Florida today for less money than it takes me to fill my SUV out in Bethesda, Maryland. That's a sad commentary, I think, on what's going on in this business.

We've got a number of carriers that are in Chapter 11 today. We have a number of other carriers that are on the precipice. We are at 110 percent of borrowing ratio right now. In other words, our asset-to-debt ratio is 110 percent; which is awful. And if oil prices stay where they are today, I think we can come very close to guaranteeing you that there are going to be other carriers that go into Chapter 11.

Mr. GIBBONS. Well, it seems unique to our economy, I think, that we are so disinterested, I think, right now in trying to find short answers—in other words, increasing supply for some of these critical resources—to stabilize the economy and actually reverse the increase in cost that you are experiencing. In the end, does the airline transportation industry care where their oil comes from?

Mr. MAY. The one answer is "No," because we recognize that the price of oil is a function of a world economy. We understand that the value of the dollar is having an impact. We understand that demand in China and India is having a dramatic impact. We understand, I think it was referenced here today, about dual fuel.

A big part of the demand in both China and India has nothing to do with anything other than a lack of ability to rely upon the infrastructure. There is no electricity, so small business after small

business after small business are buying generators and running generators on fossil fuel, because they can't rely on their own country's infrastructure for energy. And that is creating a big part of that demand.

So it's a world market. It doesn't make any difference to us where it comes from, in the abstract. As a practical matter, we're as supportive of increasing domestic supply as anyone is. And the better job you do on natural gas, the less pressure you put on fossil fuels. And we can have a greater supply, and the price ought to come down on that.

But remember, also, Mr. Chairman and other members of the Committee, we need some short-term relief. Most of the projects that are being talked about today are significantly longer-term, ten-year horizons. And I've got to keep my guys in business, you know, this year and next; or ten years from now it's not going to make a difference.

Mr. GIBBONS. Well, I hear what you say; but I also believe that your industry, like all industries in this country who are an integral part of the economy, should care, should care mightily, about where the source of their oil comes from.

It wasn't long ago that you and I can actively remember 1976 and a crisis caused by OPEC: foreign countries controlling 30 percent of the oil supply that we used in this country. Today, it is over 60. If we increase that dependence on foreign sources of oil, rather than our own domestic sources, then we are actually asking for a greater economic impact, if OPEC decides to do what it did in 1976.

And so, like you say, we should be concerned about where we are getting our oil. Yes, in the short term you want lower prices and it doesn't matter as long as you get lower prices, obviously, because you have got to answer to your shareholders; you have got to answer to the traveling public; you have got to make sure your companies stay in business.

We are here to do policy decisions that help you make those decisions and help you—all industries, all small farmers, everyone—stay in business. We have got long-term and short-term decisions to make. The energy policy that we passed in this committee, I think, helps address short-term by going after those supplies.

And you are right, Mr. Cicio. We do need to address the moratorium areas. Today, Cuba is drilling for gas closer to Florida than we are allowed to drill in the area; which makes no sense to us.

And we have so many issues here that we are trying to get to. We need to do research and technology, greater investment, environmentally sound energy production, clean coal technology, coal gasification, exploration in areas that heretofore were off limits because of their expensive cost in breaking that—a lot of things. And those are decisions that we have to make. Your testimony has been very, very helpful, very, very insightful, in allowing us to make better decisions for that.

Mr. PETERSON. Just one thing?

Mr. GIBBONS. And Mr. Peterson, yes, real quickly.

Mr. PETERSON. Just real quick. I was a retailer for 26 years, local government, state government, Federal Government, business, for 26. Let me tell you what we haven't talked about today. I appreciate everything you have come here to say, but I will be looking

forward to the day when I get on the airline—and I fly all the time—and the stewardess has a button on that says, “When are we going to have an energy policy in this country?” I mean, I am serious.

If the four of you would get back to your associations and get back to your employers and you engage your employees and say, “Your job is on the line because of energy prices in America,” you will help us change this here.

When CEOs of steel companies don’t understand it, what do you think the general public knows about this issue? And so you need to go back to your employers with a simple message that says, “Your job is in jeopardy if we don’t get fair energy prices and have an energy policy in this country.” I think you can really help us.

Mr. GIBBONS. Thank you, Mr. Peterson. Let me summarize by saying, had we been able to pass and get to the President an energy policy in 2001, which this committee and the House of Representatives passed four years ago, today we would be four years closer to a permanent solution than we are right now. Because some of the provisions we passed in that Act then are the same provisions we have today.

So each year we find some excuse, some way to make the energy policies of this country not applicable to our problems, is a delay which causes the economic burdens of this country and the American worker to go right out the ceiling.

And it is intolerable, and I am one that is definitely committed to finding answers to the problems that each of you have raised here today. Because I live in this country like everyone else. I love this country; I love clean air; I love clean water. And I also want to live in this country in the future with a job that I can depend upon.

Thank you very much. We are going to excuse this panel and call up our second panel. And our second panel is going to consist of Robbie Hyde, President and CEO of Mill Hall Clay Product, Incorporated; Carol Clements, Chairperson, National Fuel Funds Network; and Katherine Morrison, staff attorney for U.S. PIRG.

It might be better if you, before you sit, would continue to stand, because I do have to swear you in.

[Witnesses sworn.]

Mr. GIBBONS. Let the record reflect that each of the witnesses answered in the affirmative to the oath.

We would like to welcome now our second panel to our hearing. And I will turn to Mr. Peterson to introduce Mr. Hyde.

Mr. PETERSON. We want to thank all of you and welcome all of you today. I want to especially welcome Robbie Hyde.

When was it you contacted me on this issue? How many years ago?

Mr. HYDE. Probably, in the latter part of 2000, or 2001.

Mr. PETERSON. Yes. If every user of natural gas had done what he did—he was one of the ones that got me involved in this issue. Now, there were some other issues that I was working on, that I was aware of the potential future problem with natural gas. But Robbie Hyde of Mill Hall Clay Products, a company who has been there for all this century, and he has been there 35 years, making clay products which use a huge amount of energy, natural gas—

and suddenly finding that prices were making it unprofitable for him and he had to close his plant from time to time when prices reached certain peaks.

Robbie, you helped me really get engaged in this issue, and I want to thank you and welcome you for coming here today and sharing. Hopefully, you can inspire Congress. Thank you.

**STATEMENT OF ROBBIE M. HYDE, PRESIDENT AND CEO,
MILL HALL CLAY PRODUCTS, INC.**

Mr. HYDE. Thank you, Mr. Peterson. It's been a pleasure working with you on this, and I appreciate all you've done for us.

Mr. Chairman, we're a very small manufacturer, compared to my fellow witnesses that have spoken here today. But as you'll see in our testimony, even though we're small, we're enjoying the same economic problems that they all seem to be.

We manufacture clay chimney flue liners and decorative chimney tops that are tied into home building. And as Congressman Peterson says, we've been at our plant since it was built in 1890. It's continuously produced the masonry products. In 1947, it was incorporated under the laws of the Commonwealth of Pennsylvania. And it's still represented by family members of the original shareholders.

We bought our company in 1947 from a company called the Mill Hall Brick Works. The Mill Hall Brick Works was one of 32 brick yards located in Clinton County, Pennsylvania, at that time. Presently, we're the only one left manufacturing clay. We're the only flue liner manufacturer in the State of Pennsylvania, and there's only, I think, seven of us in the United States.

We operate our plant on what we call beehive kilns, which we bake our product in, and it's baked with natural gas. We changed over to natural gas in 1965. Prior to that, we fired our kilns manually with coal. Our kilns are fired 24 hours a day, seven days a week.

We have 31 employees, manufacturing employees, and seven management and clerical personnel. And we're represented by the United Steelworkers of America. And our plant has 38 manufacturing slots recognized by our contract; but over the last few years, we've not replaced seven men that have left our company, due to the decline in demand for our product. So we're presently meeting all of our production needs with 31 men instead of 38.

Our products are sold all throughout the New England States. And at the present time, our largest expense, after plant labor, is the cost of natural gas. We are presently paying gas bills that are three to four times greater than we've paid in the past. And to compensate for this, we've passed on fluctuating surcharges to our consumers, price increases. And it seems that we're just pricing ourselves right out of the market with our competitors in the chimney business, as far as steel chimneys, ventless stoves. There's a lot of things working against us. Outside burners, as our Congressman has at his home. We have a lot of things working against us, and we just can't keep pace with them.

And I'm sure that there's no one out there that uses natural gas that enjoys these high prices we're experiencing, and I feel that we must do something. And I feel that every day I hear excuses for

the cost, the increases for the price of natural gas. But I feel two of the main reasons are the regulations and the environmental issues that we spoke here about this morning.

We have tons and tons of gas out there. I have some charts attached to my testimony—I thought we were going to have some in here—but as we spoke, of all the gas available in the United States. And we can't drill it, due to the environmental people and their regulations.

And I know that we as American people are smart enough to drill this gas and do it right, and not disturb the environment. I believe, you know, strongly in a productive environment for my grandchildren to grow up in and enjoy like I've been able to. I believe strongly in a safe workplace for my employees.

But it's got to the point where we just can't continue to do business with the regulations and the environmental issues at hand. It's really—as far as production of natural gas, it's holding back. Like Mr. Cicio said, they're drilling three wells to get what they used to get out of one well.

Congressman Peterson talked about some of the things I was going to talk about, all the gas available in the United States. His chart states that there's—with the natural gas we have in the United States we could supply 100 million homes for 157 years, but you know—there it is; I'm sorry—it's all locked out of production.

Somebody spoke about gas being drilled—but anyway, if I'm correct, Congressman Peterson, in the State of Michigan there's a gas field that's off limits to us, due to environmental issues. And across the lake, Canada is drilling under it and getting that gas, and then selling it to the United States. There's something wrong there.

At our little plant, again, I looked at the numbers, if we go down, which is a possibility. We have 38 employees; their families, they total 90; 11 retirees. It's going to affect a lot of lives.

And two other charts that I've had on here that you can look over. In the past, we paid \$3.58—that's an average—per decatherm for our natural gas to bake our product. In 2004, it was \$7.68.

It cost us \$25.11 to manufacture one ton of natural gas in the past. In 2004, it cost us \$72 for natural gas to manufacture that same ton of goods.

And finally—the chart is not up there, but if I had a manufacturing company in the United States, and I was spending \$500 million a year for my natural gas, I would definitely consider moving my plant to Bolivia, where they would be paying \$118 million; saving \$382 million in natural gas cost, alone. And that's noted on one of the charts there, also, that Congressman Peterson has.

That's all I have. I thank you for your time. And I'll look forward to your questions later. Thank you.

[The prepared statement of Mr. Hyde follows:]

**Statement of Robbie M. Hyde, President and CEO,
Mill Hall Clay Products, Inc., Mill Hall, Pennsylvania**

Mill Hall Clay Products, Inc. is a manufacturer of clay chimney flue liners and decorative clay chimney tops located in Mill Hall, PA at a plant site that has continuously produced clay products since 1890 when the manufacturing plant was built. In 1947 a small group of individuals purchased what was then the Mill Hall Brick Works Company, incorporated the business under the laws of the Commonwealth of Pennsylvania and continued production. All ownership of the corporation is still represented by family members of the original shareholders.

The Mill Hall Brick Works Company was one of thirty-two brick yards located in Clinton County, Pennsylvania at one time. The present day facility, Mill Hall Clay Products, Inc. is the only clay manufacturing company still in operation in the county. It is the only manufacturer of clay chimney flue liners in the state and one of about only seven manufacturers of clay chimney flue liners in the United States.

The plant operates with thirteen bee-hive kilns to bake its product, some of which have been standing and in use since the plant started in 1890. The kilns have been fired with natural gas since 1965. Before the transition to natural gas, the kilns were manually fired with coal. The plant works one daylight shift, 8 hours per shift, while the kilns are fired continuously, 24 hours a day, seven days a week.

There are presently 31 manufacturing employees and 7 management and clerical personnel. We are a union shop represented by the United Steelworkers of America. We have 38 manufacturing slots recognized by our union contract, but, due to the decline in demand for our product, we have not replaced the last seven employees who have left us. Presently these 31 employees have been able to meet all of our manufacturing needs.

Our products are sold all along the East Coast with our heaviest market in the New England states.

At the present time, our largest expense, after plant labor, is the cost of natural gas. We are presently paying gas bills that are three to four times greater than we were paying in the past. We have been passing these extra costs on to our customers in the form of fluctuating sur-charges as well as price increases. It is getting to the point where many alternative chimney methods are much cheaper to put into new homes, when in the past they were much more costly than the old fashion masonry chimney. Our sales for the last three years have been the lowest sales years in the history of the company.

I am sure there is not a person out there that uses natural gas that enjoys these high prices we are experiencing for the cost of natural gas. We must do something to correct this problem or our country will continue to ride this economic downturn we are experiencing and we will continue to lose our manufacturing jobs. Along with all the excuses I hear every day as to why the natural gas prices are staying high, I feel the two main reasons we are in the situation we are in is due to regulations and environmental issues. How can we continue to meet the ever increasing supply and demand for natural gas when regulations and environmental issues stand in the way of production.

We have tons and tons of natural gas all over this United States and we cannot drill for it due to regulations and environment issues. We Americans are smart enough people that we can drill for this gas anywhere in the United States and do it according to regulations and not ruin the environment. I believe strongly in a protected environment for my grandchildren to enjoy all their lives. I believe strongly in operating a safe work place for my employees. But we must consider opening up some of these regulations and environmental issues so this country can get along with business and make sure our grandchildren can enjoy their freedom in this country for years to come and enjoy all the country has to offer them. We must do this to get back all of the manufacturing jobs we have lost in the last three years due to plant closings.

We fear for our jobs at Mill Hall Clay Products, Inc. and these regulations and environmental issues are governing our fate. I have been at Mill Hall Clay Products, Inc. for 35 years. I was hired seven months after my honorable discharge from the United States Army. This is the only job I have ever had. In my 35 years I have negotiated eleven labor contracts with our local union. We have never experienced a labor strike since I have been there. Our labor negotiations always took six, eight, ten weeks with maybe two meetings a week lasting on the average of four to six hours per meeting. We settled our latest three year contract in June 2003. We met one time for two and one half hours and the contract was settled. Two and one half hours, our men are scared to death for their jobs.

Look at the numbers if our plant goes down, 38 employees total whose families total 90 lives, 11 retirees that would be affected, 20 shareholders with families. One hundred thirty-one lives plus retirees and shareholders families. Also, all the businesses and their employees and families that depend on our product. Now consider this same situation with a plant that employs 1000 people, a plant with 3000 employees. Think about the numbers and the consequences. How many manufacturing jobs have been lost in the past three years in this United States? We cannot sit still and let this continue to happen.

Please look over my attached charts and notice where we paid \$3.58 average per Dth for natural gas in the past and \$7.68 average per Dth this past year. Also, on these charts, please notice in the past where we paid \$25.11 for natural gas to

manufacture one ton of goods and this past year we paid \$72.00 for that same natural gas to manufacture that ton of goods.

And finally, if I were spending \$500,000,000 per year for natural gas to run my plant here in the United States that employees 5,000 people, I would definitely consider moving my plant to Bolivia where the same amount of natural gas would cost me \$117,857,142, saving me \$382,142,858 in natural gas costs alone. This information is also noted on one of the attached charts.

Mr. GIBBONS. Thank you very much, Mr. Hyde. We appreciate your testimony and the stark realization you have brought to this committee from your experience with all of this.

We turn now to Carol Clements, the Chairperson for the National Fuel Funds Network. Carol, welcome. We look forward to your testimony. And again, the clock there indicates the five minutes to sum it up. Your full and written complete testimony will be admitted for the record. Carol, welcome.

**STATEMENT OF CAROL CLEMENTS, CHAIRPERSON,
NATIONAL FUEL FUNDS NETWORK**

Ms. CLEMENTS. Thank you. Mr. Chairman and other Subcommittee members, I'm Carol Clements, Chairperson of the Board of Directors of the National Fuel Funds Network, and Executive Director of the Victorine Q. Adams Fuel Fund in Baltimore. On behalf of NFFN, I thank you for the opportunity to testify in today's hearing on the impacts of high energy costs for the American consumer.

The national organization I chair and the local agency that I direct are well qualified to speak on the impacts of high home energy costs on consumers with low income. Last year, the Victorine Q. Adams Fuel Fund in Baltimore provided direct assistance to 1,108 households. The assistance totaled \$320,595. Our average grant was \$289.

The National Fuel Funds Network consists of 290 members, called fuel funds or charitable energy assistance programs. They raise and distribute about \$100 million annually in private charitable contributions from their local communities or states, to assist people with low incomes pay their home heating bills. Our members include not only non-profit organizations, but also utility companies, local and state and tribal government agencies who administer these programs.

The fuel funds often supplement LIHEAP, and they are the providers of last resort. Some of our members also manage the Low Income Home Energy Assistance Program, or LIHEAP. Since we operate at the boundary of Federal and private energy assistance, NFFN members inevitably discover the sum of the charitable resources they manage and the resources provided by LIHEAP is inadequate. Therefore, the National Fuel Funds Network supports increasing the appropriation of LIHEAP from the current \$2.2 billion to \$3.4 billion for Fiscal Year 2006.

These are very dramatic times for those of us involved in energy assistance. Today's Subcommittee hearing is in the wake of continuing volatility and the steady rise in the cost of home energy over the last five years.

Home energy burdens likewise continue to rise. And while more families receive LIHEAP assistance, the percentage of eligible

families is declining. LIHEAP and its fuel fund partners are effective programs, but the national home energy assistance system is severely stressed, due to the lack of funds.

We are now six to eight weeks into a compounding crisis that occurs every spring. In mid-March or early April, moratoria on utilities cutoffs end, and in many states, despite the warmer weather, thousands of households face the prospect of losing utilities, due to several months accrued bills. Moreover, the human impacts of the gap between affordable home energy and the home energy bills of people with low income are persistent, and very troubling.

In my home State of Maryland, the study showed that households with incomes of below 50 percent of the Federal poverty level pay 47 percent or more of their annual income simply for their home energy bills. More than 85,000 Maryland households live with an income at or below 50 percent of the poverty level. The study breaks down each state, and I recommend you look at Roger Colton's analysis of the affordability gap for every state in the United States.

More important than stressed social service agencies is the impact of affordable home energy on people's health and personal choices. The National Energy Assistance Directors Association also did a study on the choice of heating or eating.

The National Fuel Funds Network also strongly supports including advanced appropriations for LIHEAP for 2007 at the level of 3.4 billion, plus 300 million emergency funds.

An important question before the Subcommittee today is what other measures, besides augmenting LIHEAP funding, can be taken to help people with low income deal with increasing home energy costs. NFFN recognizes how important it is to keep energy costs reasonable. The increase in demand for LIHEAP can be directly related to the rise in energy prices for the last few years. Natural gas prices, in particular, have a direct impact on energy affordability for low-income customers.

NFFN recognizes there must be adequate supplies of natural gas and home heating oil to meet the demand and keep prices reasonable and avoid price volatility. While it is not NFFN's mission to determine where natural gas and oil supplies come from, the network does recognize that steps must be taken to increase natural gas supplies. This may come in the form of energy legislation, or regulatory and administrative actions.

We commend the Resources Committee for exploring alternative ways to supplement the LIHEAP program as part of national energy legislation. The provision allowing the Secretary of Interior to provide a preference to low-income individuals under the Royalty-in-Kind program also has merit, sir.

We thank you for the opportunity.

[The prepared statement of Ms. Clements follows:]

**Statement of Carol Clements, Chairperson of the Board of Directors,
The National Fuel Funds Network**

Mr. Chairman and other Subcommittee members, I am Carol Clements, Chairperson of the Board of Directors of the National Fuel Funds Network (NFFN) and Executive Director of the Victorine Q. Adams Fuel Fund in Baltimore. On behalf of the NFFN, I thank you for the opportunity to testify in today's hearing on "The Impacts of High Energy Costs on the American Consumer."

The national organization that I chair and the local agency that I direct are well-qualified to speak on the impacts of high home energy costs on consumers with low income. Last year, the Victorine Q. Adams Fuel Fund provided direct assistance to 1,108 households in Baltimore City. This assistance totaled \$320,595. Our average grant was \$289. The National Fuel Funds Network consist of 290 members—called fuel funds, charitable energy assistance programs, fuel or energy banks—that raise and distribute about \$100 million annually in private, charitable contributions from their local communities or states to assist people with low incomes pay home energy bills. Our members include not only nonprofit organizations, but also utility companies and local, state and Tribal government agencies, who administer charitable energy assistance programs.

The fuel funds often supplement LIHEAP assistance, and often they are providers of last resort. Some of our members also manage federal Low Income Home Energy Assistance Program (LIHEAP) funds. Since they operate at the boundary of federal and private energy assistance, NFFN members inevitably, discover that the sum of the charitable resources they manage and the resources provided by LIHEAP is inadequate. Therefore, the National Fuel Funds Network supports increasing the appropriation for LIHEAP from the current \$2.2 billion to \$3.4 billion for FY 2006.

These are very dramatic times for those of us involved in energy assistance. Today's Subcommittee hearing is in the wake of continuing volatility and steady rise in the cost of home energy over the last five years. Home energy burdens likewise continue to rise, and, while more families receive LIHEAP assistance, the percentage of eligible families served is declining. LIHEAP and its fuel fund partners are effective programs, but the national home energy assistance system is severely stressed, due to lack of funds. We are now six to eight weeks into a compounding crisis that occurs every spring. In mid-March or early April, moratoria on utility service cut-offs end in many states, and despite the warmer weather, thousand of households face the prospect of losing their utilities due to several months accrued bills. Moreover, the human impacts of the gap between affordable home energy and the home energy bills of people with low income are persistent and very troubling.

Let me address each of these factors in turn.

Home energy costs continue to rise

In April 1, 2005 testimony to the House Labor, Health and Human Services, Education and Related Agencies Appropriations Subcommittees, the National Energy Assistance Directors Association (NEADA) said:

"According to the Energy Information Administration, between the 2002 and 2005 winter heating seasons, average home heating expenditures for natural gas increased by 55 percent, from \$602 to \$935, while home heating costs rose by 93 percent, from \$635 to \$1226 and propane increased by 52 percent from \$888 to \$1345."

The Energy Information Agency just released its short-term outlook for May, which predicts that natural gas spot market prices are likely to remain in the range of \$6.50 to \$7.00 per mcf through the summer. EIA also projects that average natural gas spot market prices will rise above \$7.00 per mcf through the rest of 2005 and 2006.

High energy burdens are persistent; the home energy affordability gap is increasing

Families receiving LIHEAP assistance, reflecting families with low income, in general, spend about 15% of their income on home energy, compared with about 3% for all other families, according to the National Energy Assistance Directors Association.

Exemplifying high energy burdens in the extreme is emergence of several Baltimore families to whom I have provided energy assistance recently. These families have home energy bills that rival or exceed their rent or mortgage bills.

A recent analysis by Roger Colton of Fisher, Sheehan & Colton (<http://www.fsconline.com/work/heag/heag.htm>, 2004) found that "the annual [national] 'affordability gap' for 2002 reached roughly \$18.2 billion" for households with income at 185 % of the federal poverty level. The study defines affordable home energy as an allocation of 6% of household costs for home energy. In addition to LIHEAP funds, the gap is partially covered by \$100 million from fuel funds, some \$225 million from the federal Weatherization Assistance Program, and probably several billion dollars in state public benefit funds and in discounts, arrearage forgiveness and other utility programs for customers with low income.

In my home State of Maryland, the study showed that households with incomes of below 50 percent of the federal poverty level pay 47 percent or more of their annual income simply for their home energy bills. More than 85,000 Maryland

households live with income at or below 50 percent of the poverty level. The study breaks down data for each state, and I commend it to your attention.

While the cost of adequate home energy plagues people with the least income the most, it is also touches the working poor and the middle class. For example, 13% of the clients helped by the Victorine Q. Adams Fuel Fund in the past year have incomes of more than 200% of the federal poverty level.

More people are applying for LIHEAP, but the percentage of eligible families served is declining

The above-cited NEADA testimony noted that the number of households receiving LIHEAP assistance has been steadily increasing over the past few years to a projected total of 5 million in the current fiscal year. Yet, LIHEAP serves only about 15% of eligible families, a percentage that has declined over the past few years, due to more families being eligible.

Home energy assistance system stressed; cannot meet demand

The weather is now warmer than the winter, and summer's heat waves have yet to hit. LIHEAP remains a very effective program, serving five million households with a very small administrative cost. Charitable energy assistance programs are increasing the amount of funds they raise to supplement LIHEAP, and many utilities are innovating new programs to serve payment "challenged customers better. Nevertheless, the home energy assistance system across the nation is highly stressed. Low-income consumers need more assistance.

Examples recently provided to NFFN by members and in the news portray our strained energy assistance system, where families in need are turned away daily.

Let me start with our own experience in Baltimore. Completed applications for LIHEAP assistance in Baltimore City have risen from 24,900 last year to 26,777, as of May 17, 2005, the day before the program closed. According to 2000 Census data, over 84,000 households in Baltimore are eligible for LIHEAP. For charitable assistance to supplement LIHEAP in Baltimore City, there is a five week waiting list to be seen by a staff worker. This week, we are seeing 30-40 new appointments daily and 100-150 telephone calls daily to apply for assistance.

In Michigan, Kim Nystrom, Administrative Services Manager for the Inter-Tribal Council, said "I find that this year we have been hit the hardest. Usually our program runs all year long. This year, to date, we are almost out of funds because of the increase in heating bills this past winter.... Although this winter has been more mild than most, the increase in costs to heat homes has not been so mild."

In Wisconsin, where the moratorium on utility cut-offs expires on April 15, LIHEAP agencies reported in the first week of April "an increase of 800 households over the previous week" and said "the case load is expected to continue larger than average through the end of May." The May 1 Oshkosh Northwestern reports that "about 20,000 of the utility's estimated half a million residential customers in a 20 county area in Northeastern Wisconsin owed at least four months on their utility bills when the moratorium was lifted on April 15."

Western Arizona Council of Governments (WACOG), the Arizona Region IV Community Action Agency reports "turning away thousands of clients in any given year as a result of limited LIHEAP resources. From July 1, 2004 to February 28, 2005, WACOG assisted 1, 633 Families (5,625 people) in La Paz, Mohave and Yuma Counties from having their utilities disconnected or needing their utilities re-connected. The LIHEAP funds WACOG does have are stretched to help as many families as possible but the sad truth is that our agency is only able to assist a portion of the people walking in our door. In Region IV, housing stock for low-income people could be classified as 'Poor,' at best. Thus an average monthly utility payment in warm weather areas is \$297 in the summer months and in cold weather areas an average monthly utility payment is \$265 in the winter months."

WACOG offers that "...these are very high fuel costs for families living at the poverty level. For a family of three the cost of utilities is approximately 22% of the families' gross income and for a single person those costs are equivalent to 37% of the person's gross income."

The Pima County Community Action Agency in Arizona similarly reports to NFFN that from July 2004—May 16, 2005, it provided LIHEAP assistance to 4,223 individuals in 1,365 households, but that "We were unable to serve more clients with LIHEAP as the funds ran out in mid-February, 2005." Fortunately, the agency was able to serve another 1,003 households with 3155 individuals by packaging various state and local funds during the same period. Still, Norma Gallegos of the Agency comments that "...we would use additional LIHEAP funds if we had them."

In Washington, the Multi-Service Center in South King County reported receiving 18,392 calls for assistance in January, far above their monthly average. The Pierce

County Community Action Agency is seeing about 30 households a week whose service has been discontinued and receiving 3,000 calls a month for aid.

In Garrett County, Maryland, Linda Green, the administrator of three public and charitable energy assistance programs for the local community action agency told NFFN that there has recently been a “32 percent increase over last year of requests from low income households needing assistance.”

In Florida, where many areas were devastated by hurricanes, our members report the demand for assistance remained high over the winter. In many cases agencies have run out of funds but are still receiving calls for aid.

The Scranton-Lackawanna Human Development Agency in Pennsylvania reports how a local LIHEAP program has had no choice but to turn away thousand of eligible parties in one community as of April 8, 2005, when LIHEAP Crisis Component funds ran out.

“The problem is the number of applicants who are ineligible due to having received the allowable maximum benefit and yet are still in need. We have a large number of ineligible households because of this. We turn away approximately 60 households per day (300 per week) who are in need and meet eligibility requirements. We have nowhere to refer them at this time since all local private fuel funds are exhausted

At the rate we [have been] turning people away since the end of December, it is probable that as many as 4,000 additional grants were needed by otherwise eligible households who did not receive them due to lack of funds.”

The home energy affordability crisis has a demonstrable human impact.

More important than stressed social service agencies is the impact of affordable home energy on people’s health and personal choices. There are many studies documenting the lack of home energy decreasing educational achievement, leading to homelessness and compromising health. One example is the April 2004 National Energy Assistance Director Association study (www.neada.org/comm/surveys/NEADA—Survey—2004.pdf) of LIHEAP recipients, which found that:

“over 25% of families in the survey sacrificed medical care, failed to make a rent or mortgage payment—and 22% went without food for at least a day.”

The report illustrates that LIHEAP works: “the number of recipients spending over 25% of their income on energy declined by 2/3 with LIHEAP help.” But the report noted that LIHEAP serves only 13% of those eligible for it.

Increased Funding for LIHEAP Needed

The National Fuel Funds Network recently requested the House Labor, Health and Human Services, Education and Related Agencies Appropriations Subcommittees Subcommittee add more funds to LIHEAP appropriations. Specifically, the Network believes that an FY 2006 appropriation of \$3.4 billion in regular funds, plus \$300 million in emergency funds, is necessary. We asked for this level of funding for this vital program because the current LIHEAP funding level is virtually the same as it was when the program began in 1981, while the Consumer Price Index inflation calculator shows that the cost of living went up 107 percent over the same time period. The Network also supports the recent reauthorization of LIHEAP in the House Energy bill at the level of \$5.1 Billion. I ask that each Subcommittee member support these higher LIHEAP levels, which truly relieve the negative impact of high energy costs on American families of limited means.

Advance Appropriations Need to be Restored

The National Fuel Funds Network also strongly supports including advance appropriations for LIHEAP for FY 2007, at the level of \$3.4 billion, plus \$300 million emergency funds. The concept of advanced appropriations helps programs to better plan for the impending winter and summer months. Due to the uncertainty of the weather, advanced appropriations would allow programs to disseminate assistance to those in need in case of unforeseen harsh weather conditions. Advanced appropriations would also help public and private energy assistance programs work together more efficiently to assist those in need. Advance knowledge of a state’s LIHEAP funding also facilitates charitable energy assistance fundraising campaigns in the state.

Other measures to address the home energy needs of families with low income

An important question before the Subcommittee today is what other measures besides augmenting LIHEAP funding can be taken to help people with low income deal with increasing home energy costs.

NFFN recognizes how important it is to keep energy costs reasonable. The increase in demand for LIHEAP can be directly related to the rise in energy prices over the last few years. Natural gas prices, in particular, have a direct impact on energy affordability for low-income consumers.

NFFN recognizes that there must be adequate supplies of natural gas and home heating oil to meet demand and keep prices reasonable and avoid price volatility. While it is not NFFN's mission to determine where natural gas and oil supplies should come from, the Network does recognize that steps must be taken to increase natural gas supplies. This may come in the form of energy legislation or regulatory and administrative actions.

We commend the Resources Committee for exploring alternative ways to supplement the LIHEAP program as part of national energy legislation. The provision allowing the Secretary of Interior to provide a "preference" to low-income individuals under the Royalty-In-Kind program has merit.

Other measures that the Network recommends include:

- The formation of a joint working group among the Departments of Energy, Housing and Urban Development and the Department of Health and Human Services to increase energy efficiency and conservation in public and Section 8 housing.
- Strengthening the federal Weatherization Assistance Program, with special attention to the summer repair or replacement of gas furnaces. In addition there should be more emphasis on education in energy efficiency and conservation for those receiving aid through the weatherization program.
- A more concerted public-private effort to promote energy conservation and efficiency. For example, the National Fuel Funds Network, Alliance to Save Energy, Energy Outreach Colorado and other partners, with funding from the Department of Energy, is engaged in a three-year Ad Council home energy efficiency campaign targeted at children (www.energyhog.org). Another example is the partnership of NFFN, the National Endowment for Financial Education and the Department of Housing and Urban Development that has distributed 90,000 copies of *Owning is Just the Beginning: Learning to Budget the Utility Costs of Your New Home*. Both partnerships have proven very successful and serve as models for other public-private educational projects.

Other steps that should be taken include increased employment of energy efficiency and conservation measures by city and state governments; establishment of fuel blind public benefit funds in states which have undergone utility restructuring; and creative use of the Earned Income Tax Credit to reduce utility arrearages.

I again thank the Subcommittee for the invitation to appear before you and am pleased to discuss any of the testimony with you.

Mr. GIBBONS. Thank you very much Ms. Clements. And we appreciate, certainly, the information you have brought to this community about the Low Income Home Energy Assistance Program for people that need that help and that assistance, low-income families in this country who are also suffering dramatically from the high cost of fuel today because of short supplies.

We turn now to Katherine Morrison, staff attorney for U.S. Public Information [sic] Research Group. Ms. Morrison.

**STATEMENT OF KATHERINE MORRISON, STAFF ATTORNEY,
U.S. PUBLIC INTEREST RESEARCH GROUP**

Ms. MORRISON. Good morning. My name is Katherine Morrison, and I'm a staff attorney working on energy and global warming issues for the U.S. Public Interest Research Group, or U.S. PIRG.

U.S. PIRG is the national lobbying office for the state PIRGs, which are environmental, good government, and consumer advocacy groups active around the country. Thank you, Mr. Chairman and members of the Subcommittee, for the opportunity to speak today.

The state PIRGs have a long history of working for a clean, affordable energy future. Our goal is to shift from polluting and

dangerous sources of energy, such as nuclear and fossil energy, to increased energy efficiency and renewable energy sources.

Today, I will be addressing the issue of our dependence on oil and the impact of high gasoline prices, especially focusing on policies that should and shouldn't be included in energy legislation. Overall, we are dismayed that the energy bill, H.R. 6, passed by the House, takes us in the wrong direction.

Retail gasoline prices have hit over \$2 a gallon across the country, and yet the U.S. remains dangerously dependent on oil. The United States has only 3 percent of the world's oil reserves, and uses 25 percent of the world's produced oil. As a result, consumers pay prices at the pump that reflect the instability of overseas oil supplies, as well as the often dubious market behavior of domestic oil corporations.

Congress and the Bush Administration proposals will not solve these problems. In May 2001, the Bush Administration released its national energy policy, which outlined a plan that continues to rely heavily on oil, other fossil fuels, and nuclear power to meet the country's needs.

Just this past April, the House passed an energy bill that does nothing to make cars go farther on a gallon of gas. The bill also does nothing to protect consumers from price manipulations by large oil and gas corporations, and in fact provides these corporations with new tax breaks and subsidies.

The Energy Information Administration concluded that the policies outlined in last year's virtually identical bill would actually increase U.S. imports of foreign oil by 85 percent by 2025, and do nothing to lower gasoline prices. In fact, the President recently acknowledged that the bill wouldn't change the price at the pump today.

Similarly, the proposal to drill in the Arctic National Wildlife Refuge would do nothing to solve our energy problems. EIA has reported that drilling in the Arctic Refuge would not have any impact on world oil prices. The U.S. Geological Survey estimates that the oil found in the Arctic Refuge would meet the energy needs of the U.S. for less than one year.

Increasing the fuel economy of our cars to 40 miles per gallon, in contrast, would save at least four times as much oil each day by 2020 as the Arctic Refuge would produce each day at its peak. The best way to reduce our dependence on oil and save consumers money at the pump is to make cars go farther on a gallon of gasoline. Today, fuel economy is at a 24-year low of 20.8 miles per gallon.

The National Academy of Sciences has stated that we already have the technology to make our cars get 40 miles per gallon. In May 2001, if instead of pushing for the President's energy policy and the House energy bill, we had instead taken the bold step forward and increased the fuel economy of our cars and SUVs to 40 miles per gallon, over ten years consumers and the U.S. economy would already be reaping the benefits.

In 2005, just this year alone, the U.S. would be consuming 350,000 barrels of oil less per day. This is more than half of our current imports from Iraq. Consumers would be saving more than \$5 billion at the gas pump this year, or about \$300 per new vehicle

on the road. And the U.S. would be offsetting about 23.9 million tons of carbon dioxide, the primary global warming gas. This is the equivalent of removing more than four million average vehicles from the road. After 2005, as more cars meeting the new standards replaced older, less efficient cars, the benefits would have grown even larger.

Over the last decade, with little resistance by Federal regulators, the oil companies have merged into mega corporations with the ability to manipulate supply. These mega corporations are the first to benefit from high gas prices, and are reaping huge profits while consumers pay more at the pump. In 2004, the top ten oil companies enjoyed net profits of \$100 billion, an increase of more than 30 percent from 2003.

Congress has wasted four years on an energy policy that won't help consumers or reduce our dependence on oil. We should reject this energy bill, and instead focus on increasing corporate average fuel economy standards to 40 miles per gallon.

In addition, we should be focusing on strengthening Federal anti-trust laws, to give the Federal Trade Commission greater market enforcement capabilities and to specifically prohibit companies from intentionally withholding supplies to drive up prices. The FTC should block mergers that make it easier for oil companies to manipulate gasoline supplies, and take steps, such as forcing companies to sell assets, to remedy the situation.

Finally, the Administration and Congress should conduct a study of the reasons for the closure of more than 50 refineries in the past ten years, and assess how to expand refinery capacity.

Thank you again for the opportunity to testify.

[The prepared statement of Ms. Morrison follows:]

**Statement of Katherine Morrison, Staff Attorney,
U.S. Public Interest Research Group**

Introduction

Good morning, my name is Katherine Morrison and I'm Staff Attorney working on energy and global warming issues for the U.S. Public Interest Research Group, or U.S. PIRG. U.S. PIRG is the national office for the State PIRGs, which are environmental, good government and consumer advocacy groups active around the country. Thank you for the opportunity to speak today.

The state PIRGs have a long history of working for a clean affordable energy future. Our goal is shift from polluting and dangerous sources of energy such as nuclear and fossil energy to increased energy efficiency and clean renewable energy sources.

Today I will be addressing the issue of our dependence on oil and gasoline prices, especially focusing on policies that should and shouldn't be included in energy legislation. Overall we are dismayed that the energy bill, H.R. 6, passed by the House takes us in the wrong direction.

Summary

Retail gasoline prices have hit over \$2.00 a gallon across the country, and the U.S. remains dangerously dependent on oil. The United States holds only 3 percent of the world's oil reserves and uses 25 percent of the world's produced oil. As a result, consumers pay prices at the pump that reflect the stability of overseas oil supplies as well as the often-dubious market behavior of domestic oil corporations.

Congress and the Bush Administration proposals will not solve these problems. In May 2001, the Bush Administration released its national energy policy, the product of Vice President Cheney's energy task force, which outlined a plan that continues to rely heavily on oil, other fossil fuels, and nuclear power to meet the country's energy needs. In April 2005, the House passed an energy bill does nothing to make cars go farther on a gallon of gas. The bill also does nothing to protect consumers from price manipulations by large oil and gas corporations and, in fact,

provides these corporations with new tax breaks and subsidies. The Energy Information Administration (EIA) concluded that the policies outlined in last year's virtually identical bill would increase U.S. imports of foreign oil by 85 percent by 2025 and do nothing to lower gasoline prices in the short or long-term. In fact, the president recently acknowledged that the bill "wouldn't change the price at the pump today."

Similarly, the Bush Administration's proposal to drill in the Arctic National Wildlife Refuge would do nothing to solve our energy problems. EIA has reported that drilling in the Arctic Refuge would not have any impact on world oil prices; the U.S. Geological Survey estimates that the oil found in the Arctic Refuge would meet the energy needs of the U.S. for less than one year. Increasing the fuel economy of our cars to 40 mpg, however, would save at least four times as much oil each day by 2020 as the Arctic Refuge would produce each day at its peak.

The best way to reduce our dependence on oil and save consumers money at the pump is to make cars go farther on a gallon of gas. Today, fuel economy is at a 24-year low of 20.8 miles per gallon (mpg). The National Academy of Sciences has stated that we already have the technology to make cars get 40 mpg. In May 2001, when announcing his national energy strategy, President Bush had the opportunity to take a bold step forward and increase the fuel economy of cars and SUVs to 40 mpg by 2012. If he had, consumers and the U.S. economy already would be reaping the benefits as more efficient cars entered the market. In 2005 alone:

- The U.S. would be consuming 350,000 barrels of oil less per day. This is more than half of our current imports from Iraq.
- Consumers would be saving more than \$5 billion at the gas pump, about \$300 per new vehicle on the road.
- The U.S. would be offsetting 23.9 million tons of carbon dioxide, the primary global warming gas. This is the equivalent of removing four million average vehicles from the road.

After 2005, as more cars meeting the new standards replaced older, less efficient cars, the benefits would have grown even larger. The big oil companies and automakers continue to fight this progress; in fact, while consumers are paying more at the pump, oil companies are recording huge profits. Over the last decade, with little resistance by federal regulators, oil companies have merged into mega corporations with the ability to manipulate supply. These mega corporations, the first to benefit from high gas prices, are reaping huge profits while consumers pay more at the pump. In 2004, the top ten oil companies enjoyed net profits of \$100 billion, an increase of more than 30 percent from 2003.

Congress has wasted four years on an energy policy that won't help consumers or reduce our dependence on oil. Congress should reject the energy bill. Instead, the Bush Administration should ask the Secretary of Transportation to use his authority to increase Corporate Average Fuel Economy standards to 40 miles per gallon. His authority enables any increase that represents the "maximum feasible" standard consistent with technological feasibility, economic practicability, the effect of other government regulations on fuel economy, and the nation's need to conserve energy. A 40 mpg fleet wide standard is consistent with the criteria. In addition, policy-makers should strengthen federal anti-trust laws to give the Federal Trade Commission (FTC) greater market enforcement capabilities and to specifically prohibit companies from intentionally withholding supplies to drive up prices. The FTC should block mergers that make it easier for oil companies to manipulate gasoline supplies and take steps, such as forcing companies to sell assets, to remedy the situation. Finally, the Bush Administration should conduct a study of the reasons for the closure of more than 50 refineries in the past ten years and assess how to expand refinery capacity.

The Problem

The United States is simply too dependent on oil. The United States holds only two percent of the world's oil reserves. It produces 10.4 percent of the world's petroleum but consumes 25.5 percent of the world's total petroleum production.¹ Our heavy reliance on oil products to fuel transportation vehicles takes a heavy toll on the environment. Oil pollutes the environment from the point of extraction to combustion, leaving a trail of oil spills, smog-forming air pollution, and global warming in its wake.

Consumers pay a price too in the form of unpredictably high gasoline prices at the pump. Gasoline prices are sensitive to crude oil supply disruptions; moreover, as oil demand increases, so does the price of a gallon of gasoline. Gasoline averaged more than \$2.00 per gallon during the first four months of 2005.² Rising gas prices

¹Light truck fuel economy standards have since been increased to 21 mpg.

are cutting into consumer and business confidence, as well as spending power, which helped slow the U.S. economy in the first quarter of 2005.³

The Solution

The best way to reduce our dependence on oil and save consumers money at the pump is to make cars go farther on a gallon of gas. In response to the Arab oil embargo of the early 1970s, Congress implemented the first miles per gallon (mpg) standards in 1975 to protect consumers from high gasoline prices and supply vulnerability resulting from U.S. dependence on foreign oil. The drafters of the successful oil savings law recognized that the only way to reduce dependence on foreign oil was to reduce oil demand, requiring cars and light trucks to nearly double miles per gallon averages to 27.5 and 20.7 miles, respectively.¹ As a result, consumers were able to go farther on a gallon of gas; these standards also had the benefit of reducing tailpipe emissions, including emissions of global warming gases. Cars today use 2.8 million barrels of oil per day less than they would have under the old fuel economy standards.⁴

The 1975 oil savings law also requires that the National Highway Traffic Safety Administration (NHTSA) continuously review and increase miles per gallon standards as technologically feasible.⁵

A 1996 Department of Transportation appropriations bill rider prevented NHTSA from even studying the need and the technological feasibility of new fuel economy standards. In 2001, the Senate retracted this rider and agreed to study fuel economy standards. Congress ordered the National Academy of Sciences (NAS) to determine the effectiveness of the Corporate Average Fuel Economy (CAFE) program and make recommendations for moving forward with new standards.

In 2001, NAS identified ranges of fuel economy improvements for both cars and trucks while holding acceleration, performance, size, accessories, amenities, mix of vehicle types, makes, and models sold constant. The result was a 2002 NAS report, *Effectiveness and Impact of Corporate Average Fuel Economy (CAFE) Standards*, which concluded that automakers could use existing technology to increase the fuel economy of their fleets to 40 mpg over the next decade while improving safety and maintaining performance.⁶

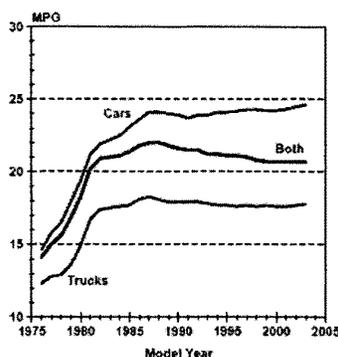
The technology is available today to make cars and light trucks go farther on a gallon of gas. The Toyota Prius, which gets an estimated 60 mpg in the city, and the Ford SUV Escape, which gets about 35 mpg in the city, demonstrate that foreign and domestic manufacturers can produce smarter engines, more efficient transmissions, and other design improvements to make substantial gains in fuel economy.

Despite the advances in technology, average fuel economy is at a 24-year low of 20.8 mpg for model year 2004 cars and light trucks—six percent lower than the peak value of 22.1 mpg achieved in 1987 and 1988 (Figure A).⁷

The overall declining trend in new light-vehicle fuel economy is due to the recent light truck and SUV boom. “Light trucks” (minivans, pickups, and SUVs) are defined as weighing less than 8,500 pounds. Because fuel economy standards separate light trucks as a class and subject them to different fuel economy standards, automakers often add weight to their trucks to exempt them from the miles per gallon standards altogether. The number of SUVs registered in the U.S. during 2002 increased 56 percent from 1997.⁸

High gas prices, however, have slowed SUV sales. General Motors’ sales fell almost eight percent in April 2005 from the same month a year earlier, primarily because of weak demand for SUVs. This drop in demand also hurt Ford, which sold five percent fewer vehicles in April compared with a year ago. At the same time, demand for hybrids and other more fuel-efficient foreign sedans is surging.⁹

Figure A. Fuel Economy Average, by Model Year, 1975-2004



U.S. EPA, "Light-Duty Automotive Technology and Fuel Economy Trends: 1975 Through 2004, at <http://www.epa.gov/otaq/fetrends.htm>.

The Current Proposals

In May 2001, the Bush Administration released its national energy policy, the product of Vice President Cheney's energy task force, which outlined a plan heavily focused on oil, other fossil fuels, and nuclear power to meet our energy needs. Moreover, the Bush-Cheney energy policy offered no plan for increasing the fuel economy of America's cars and trucks to reduce oil demand. For four years, the Bush Administration has tried to push its energy plan through Congress while actively opposing proposals to significantly increase the fuel economy of cars and light trucks.¹⁰

In April 2005, the House once again passed an energy bill, H.R. 6, which does not include any provisions to increase fuel economy or otherwise reduce oil demand. Instead, the 2005 House energy bill provides the oil and gas industry with \$3.2 billion in new tax breaks, or more than 40 percent of the total package. Meanwhile, the House dropped more than \$3 billion in incentives for renewable energy and energy efficiency in this version of the bill.¹¹ According to a recent analysis by the Energy Information Administration (EIA), by 2025, U.S. imports of petroleum would increase by 85 percent under the Bush Administration's preferred energy policy, encapsulated in the 2003 federal energy bill, which is nearly identical to the version passed by the House in April. EIA also found that the energy bill would actually slightly increase gas prices by 2010 compared with business as usual.¹² The president himself admitted that the bill "wouldn't change the price at the pump today."¹³ Regardless, the president continues to push Congress to pass this energy bill.¹⁴

Similarly, the Bush Administration's proposal to drill in the Arctic National Wildlife Refuge would do nothing to lower gas prices or reduce our dependence on foreign oil. The U.S. Geological Survey assessment of the coastal plain estimates that the oil found in the Arctic Refuge would meet the energy needs of the United States for less than a year. Even if we started drilling today, that oil would not reach American consumers for at least 10 years.¹⁵ EIA recently reported that drilling in the Arctic National Wildlife Refuge would not have any impact on world oil prices, noting that "[a]ssuming that world oil markets continue to work as they do today, the Organization of Petroleum Exporting Countries could countermand any potential price impact of ANWR coastal plain production by reducing its exports by an equal amount."¹⁶ Opening up the coastal plain of the Arctic Refuge would not solve our energy problems. Increasing the fuel economy of our cars to 40 mpg, however, would save at least four times as much oil each day by 2020 as the Arctic Refuge would produce each day at its peak.¹⁷

Our Recent Findings

The Bush Administration has failed to apply our technological know-how to improve the fuel economy of America's cars and SUVs, which has led to higher prices at the pump, increased dependence on foreign oil, and a host of environmental problems stemming from oil exploration and combustion.

On Tuesday, on the anniversary of the release of the Bush-Cheney plan, we are releasing a new report, *America Idles: President Bush's Inaction Costs Americans \$5 Billion at the Pump in 2005*. We examined what would be happening if four years ago, the President had picked up a pen and taken a bold step forward by increasing

the fuel economy of cars and SUVs to 40 miles per gallon by 2012. Even though we would still be phasing in the fuel economy standards, more efficient cars would already be entering the market. By 2005, new fleets of cars and light trucks would have averaged almost 30 mpg, or nearly 10 mpg more than they average today.¹⁸

If President Bush had raised fuel economy standards in May 2001 to 40 mpg by 2012, in 2005 alone we would see the following benefits:

- The U.S. would be consuming 350,000 barrels of oil less per day. This is more than half of our current imports from Iraq.¹⁹
- Consumers would be saving more than \$5 billion at the gas pump, or about \$300 per new vehicle.²⁰
- The U.S. would be offsetting 23.9 million tons of carbon dioxide, the primary gas responsible for global warming. This is the equivalent of removing four million average vehicles from the roads.

After 2005, as more cars meeting the new standards replaced older, less efficient cars, the benefits would have grown even larger.

The Oil Companies

Politicians at the federal level and oil industry representatives are putting the blame for rising gas prices on everything from the Organization of Petroleum Exporting Countries (OPEC) to fuel additive requirements. While OPEC plays a role in determining gas prices, this finger pointing overlooks the fundamental problem: America is too dependent on oil. As long as demand for oil continues to climb, consumers will remain vulnerable to price spikes at the gas pump—whatever their cause.

It is instructive, however, to examine some of the other market factors that drive gasoline price spikes, in addition to growing demand. Over the last decade, with little resistance by federal regulators, oil companies have merged into mega corporations with the ability to manipulate supply. These mega corporations, the first to benefit from high gas prices, are reaping huge profits while consumers pay more at the pump.

Although consumers continue to suffer at the pump, oil companies are enjoying huge profits. In 2004, the top ten oil companies enjoyed net profits of \$100 billion, an increase of more than 30 percent from 2003.²¹ According to its 2004 annual report, ExxonMobil earned a record-breaking \$25.3 billion in net income in 2004, a \$3.8 billion increase over 2003 and a \$13.9 billion increase over 2002. Cash flow from operations and asset sales was \$43.3 billion, also a record. In addition, the company handed out nearly \$15 billion to shareholders in dividends and share buybacks.²² During the year ending December 31, 2003, CEO Lee Raymond earned \$27.8 million in salary and bonuses and exercised \$15.9 million in options. In 2004, Raymond received a 37 percent pay increase to \$38 million—about half a day's profits at the company.²³

The world's four largest oil companies, Shell, BP, ExxonMobil and ChevronTexaco, have earned a combined \$23.8 billion during the first three months of 2005 alone.²⁴

Federal regulators have allowed multiple large, vertically integrated oil companies to merge into even larger entities, enabling them to exploit supply and demand to increase profits. Because people use gasoline to get to work, the grocery store, and school, the demand for gasoline is inelastic, meaning that demand does not change despite increases in price. Americans' reliance on oil products in their daily lives places them in the hands of the small number of multinational corporations that now control the bulk of the refineries and market for oil and gas in the United States.

In 1981, 189 companies operating in the United States owned 324 refineries; by 2001, 65 firms owned 155 refineries. The market share of the top ten largest refineries grew from 55 percent to 62 percent over the same period of time.²⁵ Today, the top ten refineries control 78.5 percent of domestic refinery capacity while the five largest oil companies (ExxonMobil, ChevronTexaco, ConocoPhillips, BP and Royal Dutch Shell) control half of all domestic refinery capacity.²⁶ In addition, together they own 48 percent of domestic oil production and 61.8 percent of the retail gasoline market.²⁷

The mergers in the oil industry have forced the closing of many refineries, creating highly concentrated or "tight" markets in many states. The Federal Trade Commission (FTC) and the Department of Justice (DOJ) guidelines state that "mergers should not be able to enhance market power or facilitate its exercise. Market power to a seller is the ability to profitably maintain prices above competitive levels for a significant period of time." Sellers may also lessen competition on dimensions other than price, such as product. "The result of the exercise of market power is a transfer of wealth from buyers to sellers or a misallocation of resources."²⁸

The government gains its authority to review mergers and acquisitions under Section 7 of the Clayton Act.²⁹ Section 7 prohibits mergers and acquisitions that may substantially lessen competition or tend to create a monopoly (ownership of one). The FTC and DOJ measure market concentration with the Herfindahl-Hirschman Index (HHI).

Under the HHI, market concentration is equal to the sum of the squares of the individual market shares of every firm in the market. For example, if there were only four firms in a particular market, each with 25% of the market, the HHI would be 2,500 (25² x 4). Any market with an HHI over 1,800 is considered highly concentrated by the enforcement agencies and viewed with some suspicion; between 1,800 and 1,000 the market is considered moderately concentrated; and below 1,000, the enforcement agencies consider such markets to be unconcentrated.³⁰

Where products are relatively undifferentiated, the FTC and DOJ guidelines also find that a merged firm may lessen competition through unilaterally raising prices and suppressing output where the merged firm owns a combined market share of at least 35 percent. The merger provides the merged firm a larger base of sales on which to enjoy the resulting price rise and also eliminates a competitor to which customers otherwise would have diverted their sales.³¹

If a merger does not pose a serious threat to competition, it is unlikely to be challenged. If a substantial threat is present, however, the enforcement agencies may exercise discretion to prosecute.³²

A recent investigation by the FTC into 2000 Midwest price spikes disclosed unilateral actions by firms to manipulate the market to increase prices. An executive of one of the companies made clear that he "would rather sell less gasoline and earn a higher margin on each gallon sold than sell more gasoline and earn a lower margin."³³ This evidences the business practice of lessening competition through the suppression of a product to increase price. But despite the oil executive's blatant admission that he was responsible for withholding supply to drive up price, the FTC found that "a decision to limit supply does not violate antitrust laws...Firms that withheld or delayed shipping additional supply in the face of a price spike did not violate antitrust laws."³⁴

In 2000, 28 states were considered moderately concentrated, and nine states had an index above 1800 and were thus considered "highly concentrated."³⁵ As a point of comparison, in 1994, as measured by the HHI, the gasoline wholesale market was "moderately concentrated" in 22 states (see Appendix B).

A few mega firms are gaining an exceedingly larger market share, enabling them to control the flow of gasoline in the U.S. This provides the opportunity to manipulate the market to turn a quick profit, because no standards govern selective pricing or withholding of supply. These firms individually own such a large percentage of the industry as a whole that collusion is not needed to manipulate the market. If they so chose, individual actions would be sufficient to upset the supply in any given sector. As long as there is no collusion involved, firms are free to set prices and withhold supply to increase gasoline prices and turn higher profits.

Conclusion

Congress has wasted four years on an energy policy that won't help consumers or reduce our dependence on oil. Congress should reject the energy bill. Instead, the Bush Administration should ask the Secretary of Transportation to use his authority to increase Corporate Average Fuel Economy standards to 40 miles per gallon. His authority enables any increase that represents the "maximum feasible" standard consistent with technological feasibility, economic practicability, the effect of other government regulations on fuel economy, and the nation's need to conserve energy. A 40 mpg fleet wide standard is consistent with the criteria.³⁶ In addition, policy-makers should strengthen federal anti-trust laws to give the FTC greater market enforcement capabilities and to specifically prohibit companies from intentionally withholding supplies to drive up prices. The FTC should block mergers that make it easier for oil companies to manipulate gasoline supplies and take steps, such as forcing companies to sell assets, to remedy the situation. Finally, the Bush Administration should conduct a study of the reasons for the closure of more than 50 refineries in the past ten years and assess how to expand refinery capacity.

BIOGRAPHY—Katherine Morrison

Katherine Morrison is a staff attorney working on energy and global warming issues with the U.S. Public Interest Research Group (U.S. PIRG). She is responsible for policy development, research and advocacy on energy issues ranging from electric utility restructuring to gasoline prices and renewable energy. She is on the Steering Committee of the U.S. Climate Action Network.

Before joining the U.S. PIRG staff in 2001, she worked with the Natural Resources Defense Council as the Communications Coordinator for the Clean Air Network and with the Center for International Environmental Law. She is 1994 graduate of American University, and a 2001 graduate of the William and Mary School of Law, where she won the Thurgood Marshall Award for distinguished public service.

ENDNOTES

- ¹ Stacey C. Davis, *Transportation Energy Data Book: Edition 23*, Oak Ridge National Laboratory, October 2003, citing U.S. Department of Energy, Energy Information Administration, *Annual Energy Review 2002*, Washington, DC, July 2003, Table 11.9 and updates from the *International Petroleum Monthly*, July 2003.
- ² Energy Information Administration, "Retail Gasoline Historical Prices," available at <http://tonto.eia.doe.gov/oog/ftparea/wogirs/xls/pswrgvwnus.xls>. Average for regular gasoline for January 3, 2005 through May 2, 2005.
- ³ Jeannine Aversa, "Experts keep close eye on energy prices," Associated Press, May 2, 2005; Michael J. Martinez, "Wall St. uncertainty outweighs good news," Associated Press, May 9, 2005; "Crude Oil Prices Rise Above \$51 Mark," Associated Press, May 9, 2005; Alexandra Marks and Robert Tuttle, "Oil prices spread to grapes, TVs, pizza," *Christian Science Monitor*, March 29, 2005; "High gas prices make consumers gloomy," Reuters, April 26, 2005, available at <http://money.cnn.com/2005/04/26/news/economy/consumer-confidence.reut/>.
- ⁴ National Research Council, *Effectiveness and Impact of Corporate Average Fuel Economy (CAFE) Standards*, 2002.
- ⁵ The CAFE law recognizes that the only way to reduce our dependence on foreign oil is to reduce oil demand. Thus it mandates that NHTSA continually review and increase CAFE standards to the maximum level technologically feasible:

At least 18 months before the beginning of each model year, the Secretary shall prescribe by regulation average fuel economy standards for automobiles (except passenger automobiles) manufactured by a manufacturer in the model year (emphasis added). Each standard shall be the maximum feasible average fuel economy level that the Secretary decides the manufacturers can achieve in that model year (emphasis added). (49 U.S.C. 32902)

The statute also permits the Secretary to increase CAFE standards for passenger automobiles above 27.5 miles per gallon subject to disapproval by either House of Congress (49 U.S.C. 32902(2)). The United States Supreme Court has since held that legislative action by one House is invalid. (*Immigration and Naturalization Service v. Chadha*, 103 S.Ct. 2764 (1983)). Any legislative action must be passed by both Houses of Congress and presented to the President for signature in order to be legitimate (*Immigration and Naturalization Service v. Chadha*, 103 S.Ct. 2764 (1983)). Therefore, the section of the statute subjecting an increase in passenger automobile CAFE standards to approval by one House of Congress is invalid. Because the remaining portions of the statute are fully operative, NHTSA can honor the intent and purpose of the law by increasing CAFE to 40 mpg.
- ⁶ National Research Council, *Effectiveness and Impact of Corporate Average Fuel Economy (CAFE) Standards*, 2002.
- ⁷ Karl H. Hellman and Robert M. Heavenrich, U.S. Environmental Protection Agency, "Light-Duty Automotive Technology and Fuel Economy Trends: 1975 Through 2004," Executive Summary at 2, April 2004.
- ⁸ U.S. Census Bureau, "2002 Fast Facts for the United States." Available at www.census.gov/prod/ec02/viusff/ec02tvff-us.pdf.
- ⁹ Jeremy W. Peters, "Ford and G.M. Suffer as Buyers Shun S.U.V.s," *New York Times*, May 4, 2005; Amey Stone, "Detroit's Woe, America's Worry," *Business Week*, April 26, 2005.
- ¹⁰ Statement of Administration Policy, Energy Policy Act of 2002 (S. 517), March 5, 2002, <http://www.whitehouse.gov/omb/legislative/sap/107-2/S517-s.html>.
- ¹¹ Based on Joint Committee On Taxation's April 12, 2005 estimates.
- ¹² Energy Information Administration, *Summary Impacts of Modeled Provisions of the 2003 Conference Energy Bill, SR/OIAF/2004-02*, February 2004. (See Table B3, Energy Prices by Sector and Source.) Available at [www.eia.doe.gov/oiaf/servicerpt/pceb/pdf/sroiaf\(2004\)02.pdf](http://www.eia.doe.gov/oiaf/servicerpt/pceb/pdf/sroiaf(2004)02.pdf).
- ¹³ "Bush Concedes Energy Bill Offers No Help on Gas Prices," *New York Times*, April 21, 2005.
- ¹⁴ "I applaud the House for passing a good energy bill. Now the Senate needs to act on this urgent priority. American consumers have waited long enough. To help

- reduce our dependence on foreign sources of energy, Congress needs to get an energy bill to my desk by this summer so I can sign it into law." Transcript of April 28, 2005 White House Press Conference, available at <http://www.whitehouse.gov/news/releases/2005/04/20050428-9.html>.
- ¹⁵ U.S. Geological Survey, Arctic National Wildlife Refuge, 1002 Area, Petroleum Assessment, 1998, Fact Sheet 0028-01, available at <http://pubs.usgs.gov/fs/fs-0028-01/>.
- ¹⁶ Energy Information Administration, Analysis of Oil and Gas Production in the Arctic National Wildlife Refuge, March 2004.
- ¹⁷ Estimates of the peak yield of the Arctic Refuge (between 639,000 to 1,595,000 barrels per day, with a mean estimate of 876,000 barrels per day) found in Energy Information Administration, Analysis of Oil and Gas Production in the Arctic National Wildlife Refuge, March 2004. Available at <http://www.eia.doe.gov/oiaf/servicrpt/ogp/index.html>. Estimates of savings from a phased-in 40 mpg standard over ten years (5.4 million barrels per day by 2020) found in Union of Concerned Scientists, Drilling in Detroit, June 2001. Available at <http://www.ucsusa.org/publication.cfm?publicationID=99>.
- ¹⁸ Based on estimates by Therese Langer from the American Council for and Energy Efficient Economy. The calculations are based on a 40 miles per gallon fleet average by 2012 with 2002 as the first year the standards begin to take effect.
- ¹⁹ EIA states we imported 651,000 barrels per day on average from Iraq in 2004. Available at <http://www.eia.doe.gov/emeu/mer/pdf/pages/sec3-8.pdf>
- ²⁰ The Bureau of National Transportation Statistics estimates that there were 16,865,000 new vehicles sold or leased in 2004. Bureau of National Transportation Statistics, National Transportation Statistics 2004, January 2005. Available at <http://www.bts.gov/publications/national-transportation-statistics/2004/html/table-01-17.html>. Assuming sales in 2005 are about the same, this translates into \$306 per new vehicle.
- ²¹ Jad Mouawad, "Big Oil's Burden of Too Much Cash," New York Times, February 12, 2005.
- ²² ExxonMobil, 2004 Annual Report, available at <http://www.exxonmobil.com/corporate/files/corporate/AR-2004.pdf>.
- ²³ Dan Roberts, "ExxonMobil chief's pay hits \$38m," Financial Times, April 13, 2005.
- ²⁴ Michael Liedtke, "Oil Industry Boom Likely to Continue," Associated Press, April 29, 2005.
- ²⁵ United States Senate, Committee on Government Affairs, Gas Prices, How Are They Really Set?, April 30, 2002, p. 28.
- ²⁶ Public Citizen, Mergers, Manipulation and Mirages: How Oil Companies Keep Gasoline Prices High, and Why the Energy Bill Doesn't Help, March 2004.
- ²⁷ Public Citizen, Mergers, Manipulation and Mirages: How Oil Companies Keep Gasoline Prices High, and Why the Energy Bill Doesn't Help, March 2004.
- ²⁸ DOJ and FTC 1992 Horizontal Merger Guidelines, p. 3; See <http://www.ftc.gov/bc/docs/horizmer.htm>.
- ²⁹ 15 U.S.C. § 18.
- ³⁰ Findlaw, Mergers and Acquisitions Primer, by Robert W. Doyle, Jr., Powell, Goldstein, Frazer & Murphy LLP; See <http://profs.lp.findlaw.com/mergers/mergers-6.html>.
- ³¹ DOJ and FTC 1992 Horizontal Merger Guidelines, p. 18; See <http://www.ftc.gov/bc/docs/horizmer.htm>.
- ³² Findlaw, Mergers and Acquisitions Primer, by Robert W. Doyle, Jr., Powell, Goldstein, Frazer & Murphy LLP; See <http://profs.lp.findlaw.com/mergers/mergers-6.html>.
- ³³ Public Citizen, Mergers, Manipulation and Mirages: How Oil Companies Keep Gasoline Prices High and Why the Energy Bill Doesn't Help, March 2004, Citing Midwest Gasoline Price Investigation, www.ftc.gov/os/2001/03/mwgasrpt.htm.
- ³⁴ Federal Trade Commission, Midwest Gasoline Prices Investigation, March 2001, p. 21.
- ³⁵ Gas Prices: How Are They Really Set? Report prepared by the Majority Staff of the Permanent Subcommittee on Investigations, Released in Conjunction with the Permanent Subcommittee on Investigations' Hearings on April 30 and May 2, 2002.
- ³⁶ 49 CFR § 32902.

Mr. GIBBONS. Thank you very much, Ms. Morrison. We appreciate your testimony that you brought here before the Committee

today. And let me say, from someone from the Second District of Nevada whose district contains Yucca Mountain, we have worked with you in the past with regard to the transportation and storage of nuclear waste at Yucca Mountain, and you have been very helpful to us.

We will turn now to the questions from our panel here. And I will begin with Mrs. Drake, for five minutes. Mrs. Drake.

Mrs. DRAKE. Thank you, Mr. Chairman. I would certainly like to thank each and every one of you for being here. And I do have several questions, but I would like to start with Ms. Clements because you talked very eloquently about the people that you are serving. And I think all of us experience that in our districts, that there are groups that are helping with energy costs for families.

One question that I have is, you mentioned a decline in funds. Is it really a decline in available funds, or is it an increase in the amount of funds that is given to each family because of the dramatic increase in their fuel costs in the last five years?

Ms. CLEMENTS. With LIHEAP, the buying power of LIHEAP is still at 1982 prices. With the increase in the amount of people we're seeing right now, the numbers just don't jibe. So we really need LIHEAP increased. As far as Fuel Fund, Fuel Fund does not have enough money to meet the demand of the people who need more above the LIHEAP program.

Mrs. DRAKE. Well, I am also thinking, after hearing Mr. Hyde speak, that there is probably a number of people you are serving today who have been pushed out of their jobs, just as we heard in the last panel and we have heard from Mr. Hyde. He personally has lost seven employees, and so those are seven more people. Hopefully, they have found other jobs.

But I also wondered, is there an educational component to what your group does, to educate people on things like keeping the thermostat lower, or how much the cost of energy is impacting on what they are doing, just for a more educational component, that type of education to them, so they understand? They should be wearing those buttons, too, "We need a national energy policy," because they are dramatically impacted by it.

Ms. CLEMENTS. We did bring a LIHEAP recipient over here in January, when we had our LIHEAP advocacy day. So the customers are aware of the prices. The consumers know about energy conservation. We do talk to them about that. But when you're dealing with a housing stock that in Baltimore City is very old in most areas—and the weatherization program, which is federally funded, does not do a full rehab of a house to keep it energy conserving. So there are gaps in a lot of the programs, and they all mesh together.

And when you're dealing with a low-income consumer with energy, it's education, it's LIHEAP, it's WAP, it's fuel funds, it's a massive situation. And in the last three or four weeks, we've seen the number of telephone calls for our service jump from 100 to 150 a day. And we have a five-week waiting time to see a customer, and they could be turned off before we even get to see them.

Mrs. DRAKE. Thank you. Ms. Morrison, you started early in your remarks talking about nuclear energy and your group's opposition to it. Even in light of where we are today with the energy crisis

and the fact that we have not built a nuclear power plant in probably over 20 years, your group would adamantly oppose an increase in nuclear power plants today to deal with this crisis?

Ms. MORRISON. We believe that we should be focusing instead on efficiency and diversifying into clean, renewable resources. We're very concerned about nuclear power, that we still don't have a solution as to how to deal with the waste, and that we still have a lot of questions about the security and risks posed by nuclear power plants.

Mrs. DRAKE. And your information is you could provide that type of energy for us in a timely manner to deal with the crisis that we are in?

Ms. MORRISON. Energy efficiency is the quickest, cleanest, cheapest way to start getting our way out of this energy crisis. And we think that with you increasing energy efficiency and adding in a diversified, clean, renewable energy, that we could indeed help—start helping this problem.

Mrs. DRAKE. But I think we would hear from Mr. Hyde, and we heard from the last panel, that they were doing everything they could do to increase energy efficiency; and that reduction in demand would certainly not come anywhere near close to meeting their supply needs.

Ms. MORRISON. Well, certainly, energy efficiency alone isn't going to do it right at this moment. But energy efficiency can certainly put us on the path to where we should be. Increasing energy efficiency is—there are improvements available in the electricity system of up to a third, easily, and those are conservative estimates of increasing efficiency in our electricity system.

In terms of cars and automobiles, as I said, we've been stagnated for the past 24 years on fuel economy in this country. Seventy-seven percent of oil is used in the transportation sector, and we need to start addressing that problem.

Mrs. DRAKE. And don't you think part of the issue—because I was going to ask about the car issue and the 40-mile-a-gallon—there, again, is personal choice. I was a realtor before I came into Congress. And one of the most important things to me is that if I was driving people and their children, that I wanted to be sure they were as safe as possible. And I bought a car that I think is pretty good—certainly not 40 miles a gallon, but that would be very safe to drive other people around; and now, of course, to go up and down the road to go home from Congress.

And I have just come back from a trip to Europe. And in Italy, they have these little, tiny smart cars. I guess I need to stop. OK. So I don't even want you to answer me, but I think that is a key factor in the 40-mile-a-gallon thing; that it is just not something Americans would want to drive, for various reasons.

Mr. GIBBONS. Thank you very much, Mrs. Drake. The reason I am trying to get everybody to expedite their questions here is because we do have a series of votes that has just been called. We are down to about the ten-minute level.

So what I am going to ask, for those that have questions, Mr. Grijalva and Mr. Peterson and myself, to certainly expedite it into the minimum fashion, because the series of votes will take us

beyond the time of the end of this hearing, and we would like to excuse the panel before we go vote. Mr. Grijalva.

Mr. GRIJALVA. Thank you, Mr. Chairman. And Ms. Clements, I had questions, but let me just thank you. I am very impressed with what your organization does. I am familiar with the work of Pima County Community Action, the Western Arizona Council of Governments. And in the information from them that you pointed out, they are turning people away.

And I think your point about it as a policy issue is worked out in the long term. In the short term, for the people that you serve and the consumers that you take care of, that \$3.4 billion threshold is absolutely necessary. And thank you very much for that testimony.

Ms. CLEMENTS. Thank you, sir.

Mr. GRIJALVA. Ms. Morrison, in part of your testimony you made a point, I think, that doesn't get discussed enough. I had other questions, but let me just concentrate on that one—the issue of transparency, as we talk about an energy policy and we talk about how to craft it and the tough choices that are going to have to be made, etcetera.

There seems to be almost no discussion on the corporate side of the responsibility in this issue, as well: the transparency issues in terms of mergers, the speculation that occurs, the variations in prices that occur. I just want you to maybe just elaborate for a minute or so on that transparency point that you were making.

Ms. MORRISON. Certainly. There's a couple of different things going on. There's a—natural gas and oil both are suffering from some lack of transparency. In fact, when we had seen all the high prices in the California price spike, they did an investigation of the natural gas companies, the Federal Energy Regulatory Commission, and found that there was such an engagement of false reporting that they called it an epidemic of false reporting of prices at that time.

And certainly, there needs to be more investigation, to make sure that what we are charging in this country, and what people are reporting as the price of natural gas, and what these companies are saying, is in fact a reality.

And in addition, the General Accounting Office also acknowledged that gas prices that cannot be independently validated and incorrect reporting of the information could impact on the volatility of the natural gas market.

The oil companies, in addition, have been consolidating over time and have, as they have consolidated, merged into larger and larger corporations that have controlled a larger proportion of the market. It used to be you had to have more companies in play in order to affect the price of gasoline; but when you have so few companies controlling such a large proportion of the market share, the temptation is there to start having problems.

Mr. GRIJALVA. Just in closing, I think, as part of your point, with the two top CEOs of some of these merged corporations, the bonus, I think, this year for one was 38 million, and the other one was 10 million. And so, I think transparency as part of this energy policy discussion is critical.

Mr. GIBBONS. Thank you, Mr. Grijalva. And don't you get a \$10 million bonus for being on this committee? Oh, you don't?

Mr. GRIJALVA. I don't even get a free car.

Mr. GIBBONS. Oh, no.

[Laughter.]

Mr. GIBBONS. Unfortunately, some of these issues are outside the jurisdiction of this committee. So we are going to turn to Mr. Peterson for his questions.

Mr. PETERSON. Yes. I want to thank all the panelists; especially you, Robbie, for coming down from my district, and your good testimony, and for involving me a long time ago in this issue.

Ms. Morrison, you have heard a lot about natural gas today and the problems it is causing. Does your organization in any way support the interim expansion of availability of natural gas, which is our cleanest-burning—no SOX, no NOX, a fourth of the CO₂; it is the cleanest-burning fossil fuel we have—does your organization support any expanded use of it to get us to the future?

Ms. MORRISON. We feel that it's unnecessary, since the majority of gas reserves on public lands are in fact actually already open to exploration and drilling. According to the MMS, or the Minerals Management Services, more than 88 percent of the natural gas resources on public lands in the West are already available for development, and more than 80 percent of the nation's undiscovered economically recoverable Outer Continental Shelf gas is located in the central and western Gulf of Mexico, which is not currently subject to the moratorium.

Mr. PETERSON. The facts given to us this morning: 85 percent of the natural gas reserves in America are on moratorium on public land—85 percent of the natural gas reserves. So I think your data is very well thought.

Let me ask a question. You talk about electric efficiency. What kind of electric light bulbs do you use?

Ms. MORRISON. In my home?

Mr. PETERSON. Yes.

Ms. MORRISON. I use compact fluorescent light bulbs.

Mr. PETERSON. Good. I commend you. I do, too, and I think it is 23 percent of the normal usage. My wife laughed at me when I started putting them in, but she likes them because they don't burn out so quick. But I commend you for that. You are living proof that you are doing it, too.

But I would urge your organization to take a very hard look at their natural gas policy because, I want to tell you, we are shipping the chemical business, the polymer business, all melting and smelting businesses, out of this country who use natural gas as heat. And we can't conserve our way out of that. With natural gas, we are an entity to ourselves. When we buy \$50 oil, which is damaging, the whole world buys it. But when we buy \$7 gas, we are an island to ourselves, and we cannot compete.

And the person who is going to take it in the neck is the person who is trying to heat their home next winter, because they are going to be looking at another 30-percent increase in home heating. And Robbie's people may lose a job, but you are going to find millions of Americans not maintaining their homes if we don't solve this crisis.

And conservation cannot get us through this problem. I just think you folks need to understand that. As much as I support conservation and better use, it is an appropriate thing; but it doesn't get us where we need to be.

And when you look at the renewables, here is the energy used today: 39 percent is petroleum; 23 percent is coal; 23 percent is natural gas—these are two years old; gas is bigger than that now—nuclear, 8; wood alcohol waste, 3; hydroelectric, 3. Not even a percentage: geothermal, solar, and wind, and combination.

And I do note, last year that data was, 80 percent of those three was geothermal. So wind and solar, as much as we see a lot about them, are not even a percentage. So if we double them and we triple them—and we may try, and we should try—it does not make an immediate impact.

In the interim, if we don't deal with natural gas prices, I think we're kissing our economy goodbye. And I mean that sincerely.

Mr. GIBBONS. Thank you very much, Mr. Peterson. And unfortunately, the time of the clock is not controlled by me today. It is now controlled by the people down on the Floor who are scheduling us for a vote.

I want to thank each of you as witnesses, both panel one and panel two, for your testimony today. We will be submitting written questions to you, to supplement what we didn't get to ask. And of course, we would ask that you would return those questions and answers to us within, say, about ten days, so that we can get them into the record.

Let me submit for the record, just to add information that the Committee can find useful, five documents. One is a Department of Defense document dealing with clean fuels initiatives; Alberta Energy and Utilities Board, number two document, regarding oil sand production; document number three, Department of Energy report for increased oil production through enhanced oil recovery techniques; document number four, Department of Energy report for strategic significance of the American oil shale resource; and number five, finally, Energy Information's annual energy outlook for 2005.

NOTE: The following information was submitted for the record and has been retained in the Committee's official files:

- Alberta Energy and Utilities Board document regarding oil sands production and potential;
- Department of Defense presentation on the Office of the Secretary of Defense's Clean Fuel Initiative to promote domestic liquid fuels production from oil shale, oil sands, and heavy oils;
- Department of Energy Report of the potential for increased American oil production through enhanced oil recovery techniques;
- Department of Energy Report on the "Strategic Significance of America's Oil Shale Resource"; and
- Energy Information Administration's Annual Energy Outlook 2005.

Mr. GIBBONS. Ladies and gentlemen, again, thank you so much for your time, your patience, and your testimony here today. The information is very helpful.

With that, we will excuse our second panel. And this hearing is adjourned.

[Whereupon, at 11:54 a.m., the Subcommittee was adjourned.]

[Additional material submitted for the record follows:]

[A statement submitted for the record by the American Chemistry Council, follows:]

Statement submitted for the record by The American Chemistry Council

The American Chemistry Council is pleased to submit this testimony on the impact of high energy costs—especially natural gas—on consumers and the public. ACC represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. ACC members are committed to improved environmental, health and safety performance through Responsible Care, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is a \$504 billion enterprise and a key element of the nation's economy. It is one of the nation's largest exporters, accounting for ten cents out of every dollar in U.S. exports. Chemistry companies are among the biggest investors in research and development. Safety and security have always been primary concerns of ACC members, and they have intensified their efforts, working closely with government agencies to improve security and to defend against any threat to the nation's critical infrastructure.

The unbalanced and volatile U.S. natural gas market has had a severe impact on the chemical industry. Today, U.S. natural gas prices are the highest in the world—over \$7 per million BTUs, versus \$5.25 in Europe, \$4.50 in China and Japan and \$1.25 or less in the Middle East and Russia.

The chemical industry is the backbone of our nation's manufacturing sector. It is the largest industrial user of natural gas. The chemical industry uses natural gas for heat and power, but also as a raw material, a key ingredient, used to make thousands of products that consumers use every day.

The chemical industry has been especially hard hit—its natural gas costs increased by \$10 billion over the past two years, it has lost more than \$50 billion in business to overseas operations, and watched more than 100,000 jobs (1/10th of the U.S. chemical workforce) disappear since 2000.

Business Week magazine published a story in its May 2, 2005 edition entitled, "No Longer the Lab of the World, U.S. Chemical Plants Closing in Drove as Production Heads Abroad." This carefully researched article provides ample evidence of the severe damage historically high natural gas prices have had on the U.S. chemical industry, and by extension the entire U.S. manufacturing sector. The following excerpts from the Business Week article graphically illustrate the quandary the chemical industry is in:

- "Only a decade ago the U.S. was the world's top spot for making chemicals...Today none of that is true...And in a crippling reversal, U.S. natural gas prices are the highest in the world."
- "Chemical companies closed 70 facilities in the U.S. in 2004 and already have tagged 40 more for shutdown". Industry employment is now below 880,000, down from over 1 million as recently as 2002."
- "...of 120 chemical plants being built around the world with price tags of \$1 billion or more, just one ... is in the U.S. ... China, by comparison, has 50. The U.S. has gone from a privileged position to where it's hard to find a rationale to put anything here."
- "As recently as 1997, the U.S. posted a trade surplus in chemicals of almost \$20 billion...(now) the nation's balance of trade in chemicals, a rock-steady surplus for 80 years, has become a deficit."
- "For the U.S., the likely results are less investment, fewer jobs, and fewer scientific discoveries...Innovation may be the nation's next casualty. Production facilities need engineers to run them and scientists to do workaday research. So as capital investment migrates, these tasks will too."
- "Across the industry, capital investment is being herded away from the U.S. toward the Middle East and Asia".while U.S. plants are being turned over to salvagers."

According to figures published by the U.S. Commerce Department on April 12, 2005 the U.S. trade deficit has risen to an all-time monthly high of \$61 billion—

lending further evidence to the exodus of manufacturing from the U.S. The chemical industry once had the nation's most favorable balance of trade—nearly \$20 billion in the 1990's, but now posts a \$4 billion deficit.

As bad as the natural gas crisis is today, it is expected to deepen, further widening the gap between supply and demand. Experts predict demand will far outpace supply by nearly 10 trillion cubic feet (TCF) in the future. Today the U.S. consumes roughly 22 TCF, and predictions are by 2010 demand will be over 25 TCF and by 2025 will top 30 TCF. What actions are being taken today to prevent this decade's growth in demand for natural gas from requiring further demand destruction from the industrial sector?

Higher Natural Gas Prices Shift Chemical Industry Investment Overseas

The May 2, 2005 edition of Business Week magazine article succinctly provided ample evidence of the severe damage historically high natural gas prices have had on the U.S. chemical industry and how it has promoted a shift in production overseas.

With a mature market and the movement of customer industries overseas, companies are shifting investments toward regions offering lower feedstock costs (and cost of production) as well as in markets experiencing a higher degree of dynamism. The absence of a comprehensive U.S. energy policy ensuring adequate and diverse supplies will retard investment (and subsequent job creation) in the United States. This is equivalent to "capital flight."

This on-going geographical shift in spending by American chemical companies is evidenced by the allocation of capital budgets among American Chemistry Council member companies. Every few years, The American Chemistry Council conducts a survey of long-term geographic investment intentions (US vs. foreign locations) and results from the latest reveal significant changes in distribution patterns.

Geographic Focus of US Basic & Specialty Chemical Company Capital Budgets
(Unless noted otherwise, % share of total)

	2004	2009	Change in Share
United States	71.1	58.6	-12.5
Canada	2.3	2.7	0.4
Japan	0.6	0.7	0.1
Western Europe	16.6	16.7	0.1
Central & Eastern Europe	0.5	1.7	1.2
China	2.9	9.1	6.2
Asian NICs	1.9	5.0	3.1
Other Asia	0.3	0.8	0.5
Mexico	1.4	1.6	0.2
Latin America	1.9	2.2	0.3
Africa & Middle East	0.6	0.9	0.3
Total	100.0	100.0	

American chemical companies are planning to significantly boost their investments in the Asia/Pacific regions. This region's share of the capital budget will nearly triple during the five-year period from 2004 to 2009. Investments in China in particular will increase (threefold) as a share of capital budgets. Strong expansion of the share going to the Asian NICs and other Asian nations will gain as a share of total capital budgets. Even Japan will witness slightly higher investment. U.S. chemical companies plan to allocate greater capital investment in Africa & the Middle East, Central & Eastern Europe, Mexico and Latin America. Canada (with abundant hydrocarbon resources) and Western Europe will receive a larger share of capital. All of the aforementioned expansions of share will occur at the expense of projects in the United States.

How did we get in this predicament? Concerns with the nation's overall air quality led the federal government to encourage use of cleaner burning fuels in the 1990's. Electric utilities switched from burning coal to natural gas, and today electricity generation consumes 25% of all domestic natural gas.

Ironically, at the same time the federal government policies encouraged greater use of natural gas, it also imposed moratoria on large sources of domestic natural gas supplies out of environmental concerns. Today much of our nation's sizeable natural gas reserves are off-limits to exploration and production, despite the fact that today's technology can safely remove natural gas with minimal disruption to the surrounding environment.

The situation the chemical industry faces today is reversible—if Congress takes action to restore natural gas to globally competitive prices. Thankfully, it appears that some in the U.S. Congress are starting to realize that our nation is in the depths of an energy crisis and are taking steps to address the crisis so that our

nation's eroding chemical and manufacturing base is revitalized and returned to being the robust engine that drives our economy.

In early April 2005, Senators Lamar Alexander (R-TN) and Tim Johnson (D-SD) introduced bipartisan legislation, S. 726, The Natural Gas Price Reduction Act which recognizes the enormity of the nation's natural gas crisis and provides the keys to bringing the problem under control.

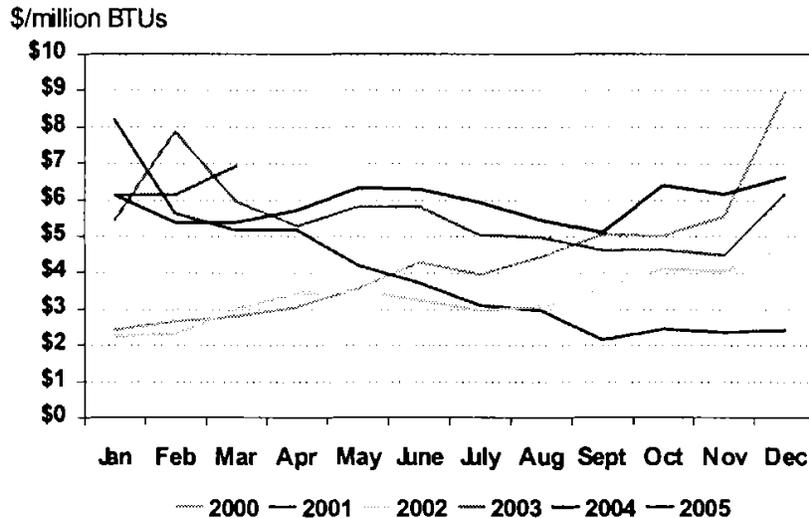
Senator Alexander and Johnson demonstrate a thorough understanding of the steps needed to address the natural gas crisis. The bill proposes to:

- Curb consumption of natural gas by aggressively implementing a number of energy efficiency measures;
- Invest in development and implementation of new technologies, such as coal gasification;
- Improve the system for storing and transporting natural gas; and
- Create greater access to our own domestic sources of natural gas.

The American Chemistry Council applauds the introduction of S. 726. It is an important step towards enacting a sorely needed balanced national energy plan. ACC has urged the Senate Energy & Natural Resources Committee to fully adopt S. 726 as it writes its comprehensive energy legislation.

Every day that Congress fails to confront and address this crisis, more jobs are lost to foreign operations and more residential consumers must choose between heat or food. Only Congress can solve these problems and put the long-term economic future of the nation back on track.

Natural Gas Prices



Source: Energy Information Administration

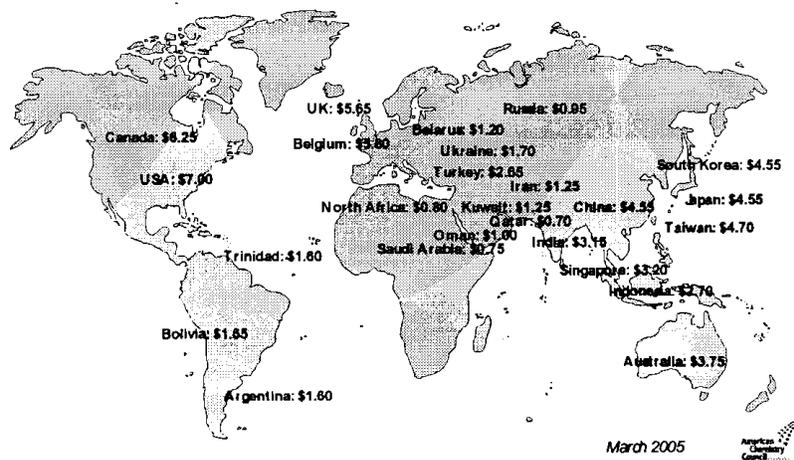
Since late-2000, there have been two major spikes in natural gas prices and recently, prices have settled in the range of about \$7.00 per million BTUs. This is triple historical levels. The figure to the right illustrates how prices have generally trended upwards since 2000.

More recently, high oil prices have affected natural gas prices as well and prices have generally been above \$7.00 per million BTUs. The United States now has the highest natural gas costs in the world, as the accompanying figure titled "Natural Gas Costs around the World" illustrates. The data in the figure are for mid-March.

Fundamentally, the problem is one of demand for natural gas exceeding available supply. This has resulted in record natural gas prices in the United States and the highest natural gas prices in the world. During the last decade various environmental and other government policies have promoted the use of natural gas. At the same time, little was done to foster supply of natural gas. Natural gas demand is growing in all sectors but underlying economics suggest a fundamental imbalance in natural gas supply and demand that is unlikely to recede in the short-term. How-

ever, growing demand by electric utilities is resulting in demand destruction in the industrial sector. Utilities are generally allowed by state regulators to fully pass on their additional fuel costs to customers. Industrial companies, however, face international competition and have generally not been able to pass on these costs. This results in utilities' gas demand being somewhat price insensitive and has resulted in plant closures and job losses among the industrial sector. This demand destruction is illustrated in the above figure titled "Natural Gas Consumption Trends by Sector". The source is the March 2005 Short-Term Energy Outlook prepared by the Energy Information Administration (EIA) of the U.S. Department of Energy. Moreover, the EIA projects even further increases in natural gas prices. Actions of ACC member companies would question the availability of natural gas needed to increase industrial demand as projected by the EIA. We have member companies that use natural gas as a raw material with plans to shut down U.S. production facilities and import these products across this period. The gravity of the current natural gas imbalance is so pronounced that Federal Reserve Chairman Alan Greenspan has raised concerns about the issue.

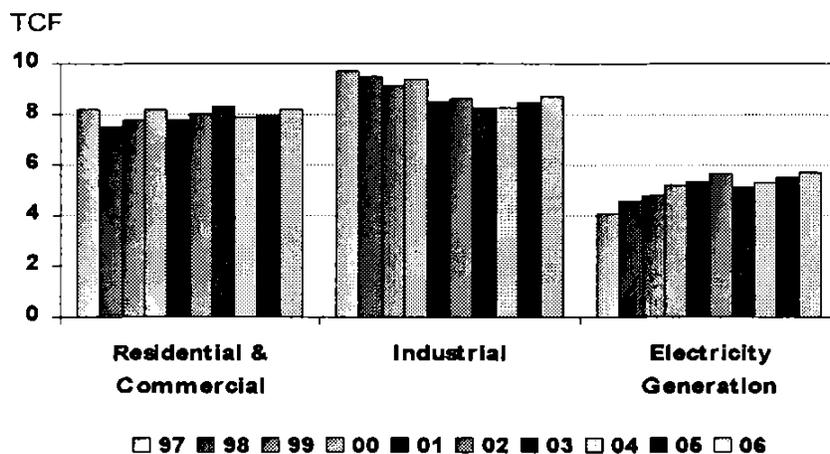
Natural Gas Costs around the World (\$US per million BTUs)



The Effects of Higher Natural Gas Prices Quantified

To better understand the role of natural gas price shocks on the economy, the American Chemistry Council used the Oxford Economic Forecasting (OEF) Global Model to examine the effects of large run-ups in natural gas prices on the U.S. economy. The OEF Global Model is a quarterly linked international econometric model that provides an analyst with the ability to examine how economies react to shocks to the economic environment, perform scenario analyses and produce forecasts. The model contains independent price, production and consumption variables for oil and natural gas, which can be changed to produce customized simulations. The model is linked to the OEF international industrial model.

Natural Gas Consumption Trends By Sector



Source: EIA Short-Term Energy Outlook (3-05)

Changing the natural gas price assumptions and then comparing the results of the model solution with a baseline simulates the effects of higher natural gas prices. The current analysis examines the effects of a sustained natural gas price rise of roughly \$3.50 per million BTUs over prior levels. This is roughly what has occurred since the first spike in natural gas costs.

The results of economic modeling suggest that the effects of sustained higher natural gas prices have a negative effect on the U.S. economy. The following table presents the deviation from the base case that occurs with these sustained higher prices. Unless noted otherwise, the data are presented as a deviation from the baseline expressed as percentage points.

**Deviation from Base Case:
The Case of Sustained High Natural Gas Prices
(Unless noted otherwise, percentage point deviation from base case)**

	Year 1	Year 2	Year 3
Growth in Gross Domestic Product (GDP)	-0.2	-0.3	-0.4
Growth in Consumer Spending	-0.3	-0.5	-0.3
Growth in Disposable Personal Income (DPI)	-0.5	-0.3	-0.1
Savings Rate	-0.3	-0.2	-0.1
Non-Farm Employment (thousands)	-99	-330	-549
Unemployment Rate	neg	+0.2	+0.3
Inflation – Consumer Prices	+0.4	+0.3	0.0
Current Account Balance (billions)	-\$15.7	-\$25.2	-\$37.2
Federal Budget Balance (billions)	-\$9.4	-\$21.1	-\$28.2
Short-Term Interest Rates (basis points)	+14	+29	+15
Long-Term Interest Rates (basis points)	+12	+29	+23
Growth in Industrial Production	-0.1	-0.4	-0.7
Production – Total US Chemical Industry	-0.1	-0.8	-1.1
Production – Basic Chemicals	-0.3	-1.5	-3.2

Higher natural gas prices act much like a tax on consumers, depressing disposable personal incomes and savings, and ultimately consumer spending, which accounts for two-thirds of the economy. The results of the analysis indicate a decline in aggregate demand in combination with the shock to the supply side. This results in a lower economic growth rate, about 0.3% less per year. With a \$12 trillion economy, that's about \$36 billion in reduced GDP.

Econometric evidence indicates that lower economic growth results in lessened job creation (about 325,000 fewer jobs on average during the first three years) and a higher unemployment rate. At the same time, inflation as measured by the consumer price index would accelerate and interest rates would rise.

Rapidly rising U.S. natural gas prices adversely affect the industrial sector, resulting in less production and lower capacity utilization. In turn, this affects profits and corporate cash flow and coupled with higher interest rates, would lead to lower business investment (or capital spending). The most recent recession was led by a severe downturn in capital spending. Higher natural gas prices have the effect of hampering capital spending so needed for a sustained economic expansion. It is capital spending that is critical to fostering long-term productivity growth and rising incomes and wealth.

In addition, the current account balance deteriorates, as would the federal deficit and deficits run by state and local governments. The deterioration in government balances occurs as tax receipts fall short of expectations and as higher unemployment increases benefit claims. Most state and local governments are currently facing fiscal difficulties and the Federal government is running record deficits. The analysis suggests that the current account balance deteriorates by over \$35 billion after three years as does the Federal deficit (by about \$28 billion) as tax receipts fall short of expectations because of lower economic growth and as higher unemployment increases benefit claims.

For energy-intensive sectors such as farming, cement, aluminum, steel and chemicals, the effects would be even more severe. For the business of chemistry, the effects would be felt across all segments. Basic chemicals would face severe competitive disadvantages as over 70% of feedstocks are derived from natural gas. Exports would falter and imports would rise. In addition, lessened industrial activity would result in lower demand. Over the extended period, the basic chemicals segment suffers the most.

Effects on Industry

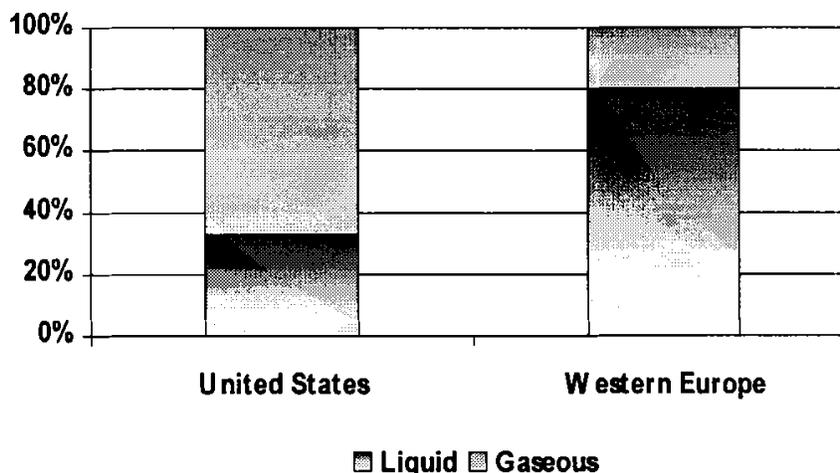
Higher natural gas prices in particular affect the competitiveness of industries using natural gas as input for fuel and power and as raw material. This occurs because natural gas markets are generally national (or regional) in nature. As a result, exporting industries in the United States and Canada face higher costs vis-a-vis competing nations, as the latter do not incur these costs. Natural gas is generally a regional market (e.g., North America) as it is not widely traded globally. Thus, natural gas markets outside of North America are largely unaffected. For energy-intensive sectors such as farming, cement, aluminum, steel and chemicals, the effects are quite severe.

Rising natural gas costs have been one factor in the exploding manufactured goods deficit, which increased from \$330.2 billion in 1999 to a record \$612.1 billion deficit in 2004. During the period from 1999 to 2004, manufacturing sector payrolls declined 17%, about 3.0 million people.

Effects on the Chemical Industry

The U.S. chemical industry is the largest industrial user of natural gas, consuming one-eighth of total natural gas demand. Higher natural gas prices in particular severely diminish the competitiveness of the industry as it uses natural gas not only as inputs for fuel and power, but also as a raw material (feedstocks).

Liquid vs. Gas Ethylene Feedstocks (% of total)



Worldwide the feedstocks for most petrochemicals are ultimately derived from either oil or natural gas. Oil includes heavy liquids such as naphtha and gas oil. Natural gas includes natural gas liquids such as ethane, propane, and butane. The price of a feedstock is largely determined by the price of oil or natural gas. Unlike oil and naphtha, which can be imported or exported in large quantities, natural gas markets are generally regionally constrained because of physical limitations in moving natural gas over long distances. Oil and naphtha prices are determined in a global market.

Rising natural gas prices directly affect the natural gas liquids market. Both ethane and propane, widely used in the United States as feedstock, have fuel value and can be left in the gas stream along with methane, to sell as natural gas. Methane is another constituent of natural gas. Besides its thermal value, it's directly used to produce methanol as well. As an alternative to fuel, ethane, propane and butane can be processed into liquids to be sold as feedstock. Because prices of these feedstocks rise in proportion with natural gas prices, a petrochemical producer has to offer more than the equivalent fuel value plus processing cost to induce a gas processor to remove the liquids and shrink the natural gas stream.

Rising natural gas prices directly affect the natural gas liquids market. Higher natural gas liquid (ethane, propane, etc.) feedstock costs can place much of the Gulf Coast-based petrochemical production in a position of diminished competitiveness relative to other major producing regions. In the US, 70% of ethylene, for example, is derived from natural gas liquids while in Western Europe, 70% is derived from naphtha, gas oil and other light distillate oil-based products. These competing nations face raw materials costs that reflect global, not the regional markets affecting natural gas prices in North America. U.S. petrochemical facilities are based on converting natural gas liquids and cannot be economically converted to use other feedstocks. This is a significant driver for new investment capital being spent in other regions and reducing exports from the U.S.

The U.S. net trade position in chemicals swung from an \$8.3 billion surplus in 1999 (before the first natural gas price spike) to a deficit of \$9.6 billion in 2003. In 2004, rising global demand improved the trade deficit to \$3.6 billion. We anticipate further erosion in the net trade position as new petrochemical facilities are built in regions of the world with lower raw material costs.

Not only do high natural gas prices affect the chemical industry directly, but to the extent that these prices contribute to the deterioration of competitiveness in downstream end-use customer industries (rising imports and movement overseas),

the chemical industry is also negatively affected. The chemistry content of this is measurable and during the period since the first natural gas price hike (1999-2004), the business lost from these end-use customers totaled \$25.8 billion. Combined with the \$11.9 billion swing in the trade position, this represents \$37.7 billion in lost sales.

During this period, chemical industry employment fell by 96,000, about 10%. Losses occurred in virtually every state. The decline has continued and based on data from the Bureau of Labor Statistics now exceeds 105,000 jobs.

As a provider of raw materials to other manufacturers, the chemical industry is often looked on as a harbinger of what lies ahead for those companies. Unfortunately, it's only a matter of time until the plant closings, job losses, vanishing trade surplus and capital investment flight experienced in chemicals spreads to all of its downstream customers.

[A statement submitted for the record by The 60 Plus Association follows:]

The 60 Plus Association
1600 Wilson Blvd.—Suite 960—Arlington, VA 22209
Phone (703) 807-2070—Fax (703) 807-2073 www.60Plus.org

STATEMENT BY 60 PLUS ASSOCIATION PRESIDENT JIM MARTIN
 SUBMITTED TO THE HOUSE ENERGY AND MINERALS SUBCOMMITTEE

I submit this testimony on behalf of the 60 Plus Association, an 11-year-old senior citizen's advocacy group. 60 Plus calls on some 4.5 million seniors nationally for support. Our seniors are concerned about their needs as well as that of their children, their grandchildren, and their great-grandchildren.

60 Plus commends you for convening this important hearing focusing on the lack of adequate energy supplies and resulting high energy costs. 60 Plus respects the law of supply and demand. We know that if energy supplies are tight, seniors pay disproportionately more for everything: heating, cooling, transportation, drugs, food, hospital costs, etc. Any increase in the cost of energy is a regressive tax on seniors living on fixed incomes. The same is true for the urban poor.

60 Plus strongly supports the President's repeated call for a comprehensive energy strategy. If Congress wants to help bring the cost of energy under our control, it should swiftly enact an energy bill that provides more incentives for production. The President recently proposed that we use abandoned military bases to build new refineries. There has been a recent announcement of the issuance of a permit for a new refinery in Yuma, Arizona. These efforts to help solve the problem of the availability of gas for our transportation needs deserve your strong support.

We need all forms of domestic energy that we can produce and this includes coal, natural gas, nuclear and renewables such as wind and hydroelectric power. But the real test is to do this at an economically affordable cost.

More than half of our electricity comes from coal and we've come a long, long way from the days of strip mining and abandoned sites that were not only eyesores but environmental disasters to where sound technology allows for energy exploration and production with minimal risk now to the ecology.

And you know, about the ecology: I was struck by the fact that President Bush's energy recommendations in 2001, some 120 overall, contained more than 40 proposals dealing specifically with the environment.

You see, any limits to domestic exploration (whether offshore Florida, drilling in the Arctic National Wildlife Refuge, or the mountain West) at a time when international supplies are so uncertain is not good for this country. We must wean ourselves from our dependence on foreign energy supplies.

Back in 1973 during the Arab oil embargo, then Minority Leader John J. Rhodes (R-AZ) appointed Congressman Roger Zion of Indiana, Chairman of the House Republican Task Force on Energy. Roger is Chairman of the 60 Plus Association at a hale and hearty 83 years young. Roger is a driving force at 60 Plus for keeping us on track with this problem of dependence on foreign sources of energy.

Back in his Presidency, Jimmy Carter once remarked that with oil imports at 37%, he stipulated that his goal was to see that this percentage did not rise another point. Well, 25 years later, it's more than 57% and still rising. When does it stop?

With well over 80% of 60 Plus' supporters being veterans of military service, I assure you many of them now consider a sound energy policy a matter of national

security, especially following September 11, 2001 and the resultant war against terrorism our great country is presently engaged in.

Now, let me say something about those who would impede the important work of this Committee and this Nation. They go under the names of groups like the Natural Resources Defense Council, and the Friends of The Earth with the help of organizations like MoveOn.org. These feel-good activists, both nationally and internationally, have done a simply marvelous job at swaying public opinion and building walls and roadblocks that stymie the vitality of the energy industry. And by and large, they've done it all with smoke and mirrors! Under the guise of something called "global warming", these anti-growth, anti-energy activists have placed an economic straight jacket and political handcuffs upon any country—but notably, the United States—that dares plan for tomorrow, dares plan for the well-being of our children and grandchildren with much needed domestic energy supply. They were effective in killing the future of nuclear power and are trying to do the same to coal. And for the most part, it's not only my observation but the consideration of many in the scientific community far more intelligent than I, that it's all being done by myth and unsupportable theory. The author Michael Crichton makes this case extremely well in his book "State of Fear". I would commend this book to you because it is based on Dr. Crichton's extensive bibliography and footnotes.

I'm convinced we can explore for fossil fuels like gas, coal and oil and do so as responsible stewards of the air that we all breathe, the water we drink and the land that we cherish.

I am convinced we can expand hydro and do so responsibly.

I am convinced we can expand nuclear energy and do so safely. As a matter of fact, I believe nuclear is key to the health of our planet. Nuclear has proven to be safe, reliable and abundant and yet we haven't constructed a new facility in 30 years. You'd think an energy source such as nuclear would be embraced by the environmental activist community as it effectively replaces fossil fuels to satisfy energy demand—but no. There is a growing awareness even in Europe that there must be another generation of nuclear power.

For that matter, wouldn't you think something as readily available as wind—admittedly less productive on a cost versus output basis—but everywhere around us and plentifully available—that commercially feasible wind power would pass the enviro's test for suitable energy creation? Nope. Wind turbines kill birds and are rather unsightly so no, wind power must go, also. Some of the major proponents of wind power in the Congress come from the Northeast, yet we see staunch opposition in the MA delegation to the Cape Wind Farm off Cape Cod. This is not rational.

This sort of anti-supply bias has to stop for the good of seniors and consumers of all ages. This wonderful country of ours has abundant energy wherewithal, much of it renewable, some of it biodegradable.

Ladies and gentlemen, we can do something about higher residential energy bills, about higher gasoline costs, about the higher cost of food and the difficult choices that have to be made every day around our kitchen tables. Looking upstream, we can do something about lost manufacturing jobs, about farmers whose yields are lessened, companies that shutter their operations, about lost capital enterprise, diminished competitiveness and declining profitability here at home and all around the globe. But we must abandon sensationalism in favor of reasoned, informed energy progress predicated upon that which our country does best: market-driven solutions to solve problems and meet needs.

Our economy can run better, create more jobs, provide more revenue to meet social security needs and afford a better tomorrow for all of us—but we must pass comprehensive pro-supply energy legislation now. The time for action is now. Our children, grandchildren, and great-grandchildren deserve nothing less.

Thank you for the opportunity to have my say on these important matters.

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60 Plus is an 11-year-old nonpartisan group with a less government, less taxes approach to seniors' issues. 60 Plus has become one of the fastest growing seniors groups in the country, doubling then tripling its support in the past year. 60 Plus can now call on support from nearly 4.5 million citizen lobbyists to print and mail millions of letters and petitions. 60 Plus publishes a newsletter, SENIOR VOICE, and a SCORECARD, bestowing a GUARDIAN OF SENIORS' RIGHTS award on lawmakers in both parties who vote "pro-senior." 60 Plus has been called "an increasingly influential lobbying group for the elderly."

