NATURAL GAS AND HEATING OIL FOR AMERICAN HOMES

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND AIR QUALITY

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NATURAL GAS AND HEATING OIL FOR AMERICAN HOMES

WEDNESDAY, NOVEMBER 2, 2005

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ENERGY AND COMMERCE,
SUBCOMMITTEE ON ENERGY AND AIR QUALITY,
Washington, DC.

The subcommittee met, pursuant to notice, at 1 p.m., in room 2123 of the Rayburn House Office Building, Hon. John Shimkus presiding.

Members present: Representatives Shimkus, Wilson, Shadegg, Radanovich, Rogers, Burgess, Barton (ex officio), Boucher, Waxman, Markey, Engel, Wynn, Green, Allen, and Solis.

Also present: Representative Bass.

Staff present: Mark Menezes, chief counsel for energy and the environment; Maryam Sabbaghian, majority counsel; Elizabeth Stack, policy coordinator; Peter Kielty, clerk; Sue Sheridan, minority senior counsel; and Bruce Harris, minority professional staff.

Mr. SHIMKUS. If we can get the doors closed in the back, we will get this hearing to begin. Thank you for coming. I am sitting in for Chairman Hall, who is going to be returning this afternoon, so I am glad to have this opportunity.

I would like to start with my opening statement. Please let me start by submitting a letter regarding our Nation's current energy supply situation in the record on behalf on Noble Energy.

Mr. SHIMKUS. Noble has been very active in Illinois over the last several years, accounting for as much as 15 percent of the drilling activity in the State over the last 3 years. I believe their current production is more than 3,000 barrels per day, making them the largest producer in the State of Illinois. Much of their production takes place in Wayne, White Clay, Richland, and Jasper Counties in my southern Illinois district.

Many of you who have been here have heard me talk numerous times about the diversity of Illinois's energy resources, and we forget that we still are an oil-producing region. We have all seen the reports with the speculation of significant increase in dollars spent by American families this winter for natural gas and heating oil. In the Midwest, we are expecting to see a 61-percent increase in the costs this winter. One statistic recently showed that, overall, 56 percent of American families with incomes of $50,000 or less, which totals about 63 million families, will spend 20 percent of their pretax income on energy in 2005. There are ways to bring these burdensome consumer costs down by increasing supply and cre-

ating more competition, we can lower the cost to the American families.

Congress has recently acted upon legislation that creates an atmosphere to make this possible. Specifically, in July of this year, we passed the Energy Policy Act of 2005, which recognized the need for fuel supply increases to make energy more affordable. This country has a 250-year supply of coal located in every region of the country, and industrial coal gasification technology exists now that would combust coal into a gas to produce electricity. The Energy Policy Act gives us an opportunity to utilize this technology, which is called integrated gasification combined cycle, IGCC, creating an alternative to natural gas for electricity production, and creating more competition in the gas market to bring the price down for consumers.

The Energy Policy Act also recognizes nuclear power as a clean and efficient means of generating electricity. By generating, to create an atmosphere where this type of power generation looks attractive to investors. Also included in that same bill were provisions to help increase our domestic natural gas supply by streamlining burdensome permitting and process issues, giving regulatory certainty along with tax and royalty incentives and greater access and liquefied natural gas.

These are all logical steps increasing supply and lowering costs. In addition to making natural gas pipeline infrastructure a safer investment, so that the product can be transported in an efficient manner. Just last week, we passed a budget reconciliation bill out of this committee that increases Low Income Heating Energy Assistance Program, commonly known as LIHEAP, by $1 billion, to make sure that the very young and the elderly do not go cold this winter.

Finally, H.R. 3893, the GAS Act, gives us an opportunity to expand and build new refineries by implementing several incentives to bring outside investors into the crude oil refining business, creating more supply and competition to bring the price of gas at the pump down. And also, one provision of the bill, which I know my colleague is very excited about, is coal to liquid definition as a refinery.

I look forward to hearing from our panelists today to get an idea of how and what Congress has done this far, and what we can do to make energy costs more affordable, along with what we can do in the future. And with that, I will yield to the ranking member, my friend Mr. Boucher.

Mr. BOUCHER. Well, thank you very much, Mr. Chairman, for convening this timely hearing, and thank you also for those thoughtful opening remarks. You will find portions of mine to be remarkably similar to the themes you have addressed.

Across our Nation, gasoline prices at the pump have been declining from post-hurricane highs, as hurricane-damaged production and refining facilities have come back into operation. But a major energy concern is on the immediate horizon, as cold weather arrives, and as Americans turn on their furnaces. Due to the unhealthy reliance by electric utilities on natural gas to fuel electricity generation, our Nation has become highly vulnerable to any disruption in natural gas production or distribution, and the hurri-

cane-related disruptions will drive natural gas costs for home heating to truly stressful levels during the course of this winter.

More than one half of all Americans heat their homes with natural gas, and under current estimates, the cost to the homeowner who heats with natural gas will, on average, be 48-percent higher this winter than the winter before. And last year's cost to the homeowner was significantly higher than the year before that. Those who heat with oil will experience an increase of 32 percent this year, while the cost of heating with electricity will increase somewhat more modestly.

Over the longer term, one obvious strategy to address the unsustainable price of natural gas is to encourage electric utilities to rely more on coal and less on natural gas for electricity generation. As the chairman mentioned in his remarks, with the advent of technologies such as integrated gasification combined cycle, the utility industry is now showing renewed interests in coal and new orders are, for the first time in a long time, being placed for coal-fired facilities.

EPACT 2005, which this committee originated and which the President in August signed into law, contains incentives that were originated on the House side to encourage more reliance on coal and less reliance on natural gas for electricity generation. Those incentives will help, and I think the renewed interest we have seen from some electric utilities in employing technologies, such as integrated gasification combined cycle, have been driven to some extent by the presence of those incentives. Going forward, this committee and the Congress in general should seize every opportunity to further encourage this shift from natural gas to coal on the part of electric utilities.

For home heating oil, the concept of a strategic refinery reserve similar to the strategic petroleum reserve, is also an appealing long-term strategy. It can easily be established, and it would provide the same shock absorber benefits for refined products that the strategic petroleum reserve provides so effectively with respect to crude oil.

In the near term, a major new infusion of Federal dollars into the Low Income Home Energy Assistance Program is essential for all low-income homeowners and renters. People are going to be in genuine need this winter. The Congress has an obligation to address their plight and fund LIHEAP adequately to assure that people are not put to the choice of having heat, of having food, or of having medicine.

I look forward to the comments by our witnesses this afternoon on the strategies that I have suggested in these remarks, and on other strategies that they may want to suggest, whether they are short term, intermediate term, or longer term in nature, in order to address the very real problems our Nation now confronts with respect to home heating prices.

Mr. Chairman, I thank you very much, and I look forward to the witnesses' testimony.

Mr. SHIMKUS. Thank you. Now, the Chair recognizes the chairman of the full committee, Chairman Barton, for an opening statement.

Chairman BARTON. Thank you, Mr. Chairman.

I would like to begin today by welcoming our witnesses, thanking them for their time today, especially Chairman Joe Kelliher, who is the Chairman of the FERC. I have known Chairman Kelliher for a number of years, and at one point in time, he even had to say yes, sir to me, because he worked for me, so I am glad to have him back where he can say now, no, sir, go jump in the lake, Mr. Barton. I am glad to have him here.

I also want to welcome Chairman Jeffery from the Commodity Futures Trading Commission. We don't often have your agency before this committee, and I am glad that you could find time to appear today.

Two weeks ago, we heard from the EIA, the Energy Information Administration, about their projections for the outlook for winter fuels this coming winter. According to EIA, households that rely on natural gas and home heating oil are expected to spend approximately $350 per household more this winter for heating than they did last winter.

Today, we are going to look specifically at home heating oil and natural gas, to get a better understanding of supply, availability, and price. And like we did with gasoline, we have invited representatives along the entire natural gas supply chain. We are going to hear from Federal and State regulators, producers, pipelines, local distribution companies, and of course, the consumer. Many of our witnesses are experts in their fields. I am anticipating that what they are going to tell us is that high prices are driven by a relatively low supply and lack of availability. Supply and demand, just as in Economics 101.

It is with great concern that I view the list of energy projects that could help on the supply side, and find that they have been stalled or killed in the very areas of the country where the prices will probably be the highest. In the Northeast, for example, 51 percent of our households rely on natural gas for their heating, but projects that would have provided more natural gas to heat Northeastern homes have been stopped cold, no pun intended.

For example, the Logan Township New Jersey Liquefied Natural Gas Terminal would provide warmth to about 5 million homes in the Northeast, but it is bogged down in a lawsuit. New Jersey actually wants this project, but Delaware doesn't. While the terminal would be located in New Jersey, the pier would touch the Delaware River, and Delaware won't allow development along that river. The Millennium Pipeline project would supply much needed natural gas to the people of New York City. The New York Algonquin natural gas trading prices are among the highest in the country because of supply bottlenecks. The project's original application was filed with the FERC in 1997, 8 years ago. The project would have been finished and bringing natural gas to the city today, but local officials apparently have just said no. Back in the 1990's, the pipeline was named Millennium, because it was intended to supply natural gas in the next century, which is now this century. Maybe it should be called Millennium, because that is how long, apparently, it is going to take to get it built.

In the Northeast, 30 percent of the households use heating oil as their primary heating fuel. However, 50 percent of the Northeast distillates consumption, which is where home heating oil comes

from, now comes from overseas, from countries like Venezuela, and yet, even as we face dramatic price increases at the beginning of what appears to be a cold winter, I am not aware of any refinery projects, new or expanded, in the Northeast. Why is that? You oppose a refinery in your back yard, but apparently, it is okay to let America-haters like the President of Venezuela gain more control over our supplies.

Now, I am sure that some are going to be tempted to say well, Venezuela only hates our President, not our people. Well, I am not so sure about that. Put me down as skeptical. Investing faith in a snarling foreign country dictator seems unlikely to keep heating oil flowing into the U.S. at prices people can afford to pay even in our coldest, bluest States.

The expected continuing high natural gas prices and home heating oil prices will be a hardship this winter for everyone. We know that. We know that there are many members on both sides of the aisle that want to do as much as we can, and we have a low income heating assistance program, called LIHEAP. This committee last week increased it by $1 billion, $1 billion real dollars that will be available if we get reconciliation done in the House and the Senate to help heat homes, not just in the Northeast, but all over our country this winter. That is an increase of 50 percent. It is not subject to appropriation, and it is direct help today.

LIHEAP, however, is only a caulking for a loose window. If we want warmer homes and more affordable heating bills, we need more natural gas and more heating oil, which means we need more infrastructure and more projects. As the chairman of this committee, I stand committed to work with people on both sides of the aisle, with the other body, and with the President of the United States, and with officials like those that are here before us today, to come up with projects that are environmentally friendly, economically make sense, and can be built in a reasonable amount of time.

I hope that this hearing today helps us begin that process, and that very soon, and again, in a bipartisan, bicameral basis, we can begin to move forward, so that we are not just talking about Band Aid approaches, we are talking about long term solutions that help our country and help our citizens, not just in the wintertime, but all the time.

Thank you, Mr. Chairman.

[The prepared statement of Hon. Joe Barton follows:]

PREPARED STATEMENT OF HON. JOE BARTON, CHAIRMAN, COMMITTEE ON ENERGY AND COMMERCE

I would like to begin by welcoming our witnesses and thanking them for their time today. I would especially like to welcome Chairman Joe Kelliher, the Chairman of the Federal Energy Regulatory Commission. I have known Chairman Kelliher for many years from his work on this very Committee and I hold his views and perspectives in great regard. Joe, welcome back to the Energy and Commerce Committee, thank you for being here, and good luck with your Chairmanship.

I would also like to specifically welcome Chairman Reuben Jeffrey from the Commodities Futures Trading Commission. I look forward to your testimony regarding natural gas and home heating oil futures trading.

Two weeks ago, we heard from the Energy Information Administration regarding their winter fuel outlook. According to their projections, households that rely on natural gas and home heating oil are expected to spend approximately $350 more this winter in fuel expenditures.

Today, we look specifically at home heating oil and natural gas to get a better understanding of supply availability and price. And like we did with gasoline, we have invited representatives along the entire natural gas supply chain. We will hear from federal and state regulators, producers, pipelines, local distribution companies and the ultimate consumers.

Many of our witnesses are experts in their fields, and I'm anticipating that they will tell us that high prices in home heating oil and natural gas are driven by the relatively low supply. Supply and demand, just like in economics 101. So it's with great concern that I review the list of energy projects stalled or killed in the very areas of the country where prices will be the highest.

In the Northeast, 51% of the households rely on natural gas. But projects that would have provided more natural gas to heat Northeastern homes have been stopped cold. For example:

- The Logan Township, New Jersey LNG terminal would provide warmth to about five million American homes, but it is bogged down in a lawsuit. New Jersey wants the heat, but Delaware doesn't want the project. While the terminal would be located in New Jersey, the pier would touch Delaware River waters and Delaware won't allow development along the river.
- The Millennium Pipeline Project would have supplied much needed natural gas directly to the people of New York City. The New York Algonquin natural gas trading hub prices are among the highest because of supply bottlenecks. The project's original application was filed with the FERC in 1997. That's 8 years ago. This project could have been finished and bringing heat to the city today, but local officials just said, "No." Back in the 1990s, the pipeline was named ″Millennium″ because it was intended to supply natural gas into the next century, which is now this century. Maybe it should be called "Millennium" because that's how long it will take to build it.

In the Northeast, 30% of households use heating oil as their primary heating fuel. However, 50% of the Northeast's distillate consumption, which is where home heating oil comes from, now comes from other areas of the country or overseas, from countries like Venezuela. And yet even as we face dramatic price increases at the beginning of a cold winter, I am unaware of any refinery projects, new or expanded, on the Northeast's drawing boards. Why is that? You oppose a refinery in your backyard, but apparently think it's okay to let America-haters like the president of Venezuela gain more control over our supplies.

Now, I'm sure that some will be tempted to say, "Well, Venezuela only hates our President, not our people. Why, they'll never cut off Massachusetts."

Put me down as skeptical. Investing faith in a snarling foreign country seems unlikely to keep heating oil flowing into U.S. homes at prices people can afford, even in the blue states.

The expected continuing high prices of natural gas and home heating oil will be a hardship this winter for everyone we know. I know there are many members on the other side of the aisle that will blame this hardship on Low Income Energy Assistance Program funding. First of all, as a direct help to those with low-incomes, last week this Committee increased the Low Income Energy Assistance Program by $1 billion dollars. That's an increase of 50%, not subject to appropriations and it's direct help today. LIHEAP, however, is only a caulking for a loose window. If we want warmer homes and affordable heating bills, we need more natural gas and more heating oil.

I stand committed to more energy at prices working people can afford. I stand opposed to those who spend their energies killing the very projects that would help their own people. If you want your constituents to freeze in the dark, the way to do it is to kill energy projects here at home and rely on more heat from President Chavez.

Mr. SHIMKUS. The Chair thanks the chairman. And now, I recognize my colleague from Massachusetts, Mr. Markey, for 3 minutes.

Mr. MARKEY. Thank you, Mr. Chairman.

Mr. Chairman, we are holding today's hearings less than a week after the full Energy and Commerce Committee voted to defeat an amendment sponsored by Representative Rush and Green and myself, which would have provided $3 billion for the low-income, heating-assistance program, which, in addition to the $2 billion in funding for the program that is contained in the appropriations bills, would have actually funded this heating program at the $5.1 billion

authorization level that the committee voted for in the Energy Policy Act of 2005 that the President signed into law in August.

I believe that the committee's decision to reject additional funding for this program was fundamentally wrong. It is inconceivable to me that this Congress would give higher priority to protecting tax cuts for millionaires than to providing consumers with some help in addressing the home heating crisis that we will be facing in the Northeast and Midwest this winter. And we know that this crisis is coming. Just 3 weeks ago, the Department of Energy's Energy Information Administration released its short-term energy outlook and winter fuels outlook. This report projected that home heating oil prices are likely to rise 31 percent this winter compared to prices paid last winter. That translates into an additional $378 over this coming winter for seniors, for poor people, for everyone. In the event of a colder than normal winter, consumers could face an even worse situation. Home heating oil expenditures could rise $774 this winter, if we have a colder than normal winter, which many prognosticators are predicting. These expenditures are a lot higher than seniors have been forced to pay in past winters.

But the crisis we are facing goes beyond just the question of how to help low income seniors that qualify for Federal programs. With price increases on the order of what we are going to be seeing, even seniors that consider themselves to be comfortably middle class will be facing difficult choices. Today, we will be hearing from Dorothy Elizabeth Tucker of Medford, Massachusetts, about the pressures she and other seniors in Massachusetts are facing this winter, as a result of high energy prices. And this is all about choices, moral choices: who needs help and who doesn't need help?

Mrs. Tucker and seniors like her are sitting around the kitchen right now trying to make tough decisions about whether to pay for more medicine or heat or for groceries. Our constituents all across the Northeast and Midwest are being squeezed in this way, as Conoco and Exxon Mobil and others report astronomical profits, so this is a moral choice. Should we, in fact, have tax breaks of $70 billion for mostly the millionaires in our country, or should we put more money into programs to help the seniors, to help the needy, pay for their home heating bills this winter. That is a moral choice, not a political choice, a moral choice, and I am afraid that this committee and this Republican Congress and this Republican President is failing this test.

I yield back the balance.

Mr. SHIMKUS. The gentleman yields back his time. The Chair recognizes the gentleman from Michigan, Mr. Rogers.

Mr. ROGERS. Thank you, Mr. Chairman. My friend neglected to inform us that we had the single largest increase in LIHEAP funding ever, a 50-percent increase over last year's funding. I am sure that is in the bottom of your notes there.

I just wanted to, and I look forward to hear our panelists, but welcome Steve Ewing—he is on the second panel—who is not only a great leader and CEO and, certainly, someone who cares about his community. He is a great corporate citizen. He is involved in so many activities in southeast Michigan. Thank you for not only being a great leader of a great company, but taking of the time that you do to give so much back to our local community around

Detroit, Michigan. I just wanted to thank you for that, and I look forward to hearing the statements of the panelists.

And with that, Mr. Chairman, I will yield.

Mr. SHIMKUS. The gentleman yields back. The Chair recognizes the gentleman from New York, Mr. Engel, for an opening statement.

Mr. ENGEL. Thank you, Mr. Chairman, for holding this important hearing on natural gas and home heating oil prices. As we move toward the fall and winter, I am very concerned about the welfare of my constituents back home in New York, and of people all over the country.

Two weeks ago, our subcommittee heard from the Energy Information Administration on their short term energy outlook and winter fuels outlook. Their findings were grim. Home heating oil prices are likely to rise by 31.5 percent this winter compared to last winter, and prices for households heating their homes with natural gas are expected to rise by 48 percent. In September, the NYMEX market prices for natural gas had moved from an average of 6.81 per decatherm in the winter of 2004-2005, to the current price of 14.64 for the period between November 2005 and March 2006. It is expected that on average, people will pay a minimum of more than $350 each on heating costs this winter, money that is needed to be spent on food, electricity, gas, prescription drugs, you name it. Clearly, tradeoffs will have to be made on these basic necessities for living, but they shouldn't have to be.

I am terribly, like my colleagues, disturbed by the failure of the Administration and Republican leadership here in Congress to promote policies that will have significant impact on stabilizing energy prices, and protect consumers from price gouging. Just last week, as Mr. Markey pointed out, in the reconciliation bill, an amendment offered by Mr. Rush, Mr. Green, and Mr. Markey to increase LIHEAP funding to $5.1 billion, as authorized under the Energy Policy Act, which everyone on this committee initially voted for, was rejected on a party line vote, with all Democrats voting for it and all Republicans voting against it.

As you know, most LIHEAP recipients have a family member living with them that is elderly, disabled, or a minor child. Simply put, in light of the colder than average temperatures expected this winter, current funding for the program is simply inadequate. The Administration has also declined, so far, to make releases from the Northeast Home Heating Oil Reserve, which would help address the soaring energy prices of those living in the Northeast, despite the sustained high prices reaching the trigger margin for using the reserve. I know my colleagues and I hope to hear back from them on when such a release will be made.

So not only has the majority rejected granting low income constituents necessary help with their heating bills, but they won't even offer them comprehensive protection from price gouging. The Democratic substitute to the GAS Act had a price gouging amendment that authorized the FTC to punish unscrupulous companies charging unfair prices for gasoline, heating oil, propane, and natural gas. By contrast, the majority bill was weaker, in that it failed to offer consumers any protections for natural gas and propane gouging.

In the meantime, the oil companies are making out like bandits. Just a few days ago, Exxon Mobil announced that its third quarter net income jumped 75 percent to $9.92 billion. The Washington Post noted that this set an industry record, and that Exxon's sales of $107.2 billion were the highest in any quarter, according to Standard & Poor's. So the rich get richer and the poor get poorer, and the Administration and the Republican majority offers only tax breaks for the wealthy, not help for low and middle income people.

Now, the chairman of the Finance Committee said yesterday that oil and gas companies reaping record profits from soaring prices—I just need 10 more seconds, Mr. Chairman—should give 10 percent of those profits to supplement a Federal program to help the poor. I agree. While oil executives are jumping for joy over their third quarter profits, families across the country are worrying about how to make ends meet, and how to stay out of the cold. It is just wrong. We have to make companies accountable for their profits, and we must help our constituents in this very real time of need.

And I yield back. Thank you.

Mr. SHIMKUS. The gentleman's time has expired. The Chair recognizes the gentleman from Texas, Mr. Burgess, for an opening statement.

Mr. BURGESS. Thank you, Mr. Chairman. I appreciate the opportunity to deliver an opening statement, and I thank you and Chairman Barton for holding this important hearing today.

I think this hearing today will do a good job of providing a good deal of information about the natural gas and home heating oil supply chains. Chairman Barton did something similar following Hurricane Katrina and Rita, to break down the supply chain for gasoline, and I found it extremely useful.

As we discussed here last week during our hearing, the EIA expects home heating costs to soar next year, and people can expect to pay an additional $300 to $400 this winter for heating costs. This committee and this Congress have already taken steps to help address home heating needs for the future. When President Bush signed the Energy Policy Act of 2005 into law, it included several important provisions intended to boost supply and to hold down costs for consumers. It incentivized the domestic production of both ultra-deep wells in the Gulf of Mexico and onshore marginal wells. It streamlined permitting for natural gas projects on Federal lands, and it clarified the Federal Government's role in siting liquefied natural gas facilities to reduce red tape.

The Energy Policy Act also provided loan guarantees for the construction of the Alaska Gas Pipeline. In Alaska, the problem is not so much of having the gas, but transporting the existing gas in an economical way to the lower 48 states. That is why, in the Energy Bill, Congress provided loan guarantees for the construction of the natural gas pipeline when we passed Energy Bill II, just a few weeks ago, we sunsetted some of these provisions to spur companies to action. At least one company in my area of north Texas was listening, and just last week, the Challenger Capital Group in Dallas announced that it will take the lead in arranging financing for the Alaska Natural Gas Pipeline. The project is expected to cost be-

tween $13 billion and $20 billion when it is finished in the year 2012, and provide a significant amount of natural gas.

We are in this situation, Mr. Chairman, because some members of this panel have consistently opposed measures that would increase both the supply of natural gas and oil. I frankly do not understand how members can be opposed to policies that will bring relief to their constituents from high heating costs. In north Texas, we are geologically blessed with the Barnett Shale that provides us with natural gas. In fact, an article in the Fort Worth Star-Telegram from last Sunday says that drilling companies are flooding into the area, putting up every rig they can find, because it is now economical to break the Barnett Shale and capture its gas.

We have all the gas we need in Texas. In fact, we export it to our friends in the Northeast and the Midwest. North Texas is clearly playing its role in providing the country with safe and secure domestic energy. It is time for those who would stand in the way of increasing the energy supply to realize that it is partly their tactics that are causing the high heating costs that the EIA is predicting this winter for their constituents.

I will yield back.

[The article referred to follows:]

Posted on Sun, Oct. 30, 2005

PRICEY GAS HAS A SILVER LINING

By Mitchell Schnurman, Star-Telegram Staff Writer

It's natural to complain about high energy prices, especially after Exxon Mobil posted nearly $10 billion in quarterly profit last week. Even the top-ranking Republican senator called for public hearings on oil, while others urged a replay of the windfall-profits tax.

Tarrant County should shudder at the thought. Companies are investing billions of dollars here to extract natural gas, and we don't need government spoiling the party.

Many people will say: "So what? Haven't they made enough already?"

Enough profits maybe, but not enough gas. And isn't that what we should focus on—increasing the supply of these limited resources?

It's hard to imagine energy companies putting more money into finding oil and gas if we cut their profit motive.

The Barnett Shale, the massive natural-gas field surrounding Fort Worth, has become an economic juggernaut, in large part because of higher gas prices.

Four years ago, natural gas sold for $2.78 per thousand cubic feet; last year, it was $5.45. In October, the average price topped $14.

Consumers across the country will be shocked by their winter heating bills, and there will be an outcry.

But if we impose extra taxes or price controls, producers might never invest in the new technologies that make the Barnett Shale work.

Companies are flooding into the area, putting up every rig they can find, because it's now economical to break the Barnett Shale rock and capture its gas.

"At $13 [per thousand cubic feet], a lot of things are possible," oilman Mike Patman told the Star-Telegram's Dan Piller this month.

Patman has leases on 75,000 acres in the Barnett Shale, and that helped him bring energy giant Shell Exploration to the game, as well as Boone Pickens. Shell and Pickens are big names, but they're just the latest to tap into a gas field that runs under 10 counties, including Tarrant.

How big is the local natural-gas play?

Ross Perot Jr., whose company is drilling 19 wells in the Barnett Shale, says it's the economic equivalent of three or four Dallas/Fort Worth Airports.

About 125 rigs are working there today, which translates into more than 5,000 jobs. After six years, the Barnett Shale is generating more gas than any other field in Texas. It's likely to produce 400 million cubic feet of gas this year and roughly $4 billion in revenue.

One local economist, Bernard Weinstein of the University of North Texas, says the local economic impact could approach $3 billion a year.

Huge investments are being made in equipment and people; property-tax revenue is surging; many cities and families are earning royalties from gas leases; and Weinstein says the trickle-down effects are reaching home builders, landscapers, even sign-makers.

That means we have a silver lining in the cloud of high energy prices.

The Texas economy as a whole still gains more than it loses when prices rise, says the Dallas Fed.

The upside is not as great as in the past, because the economy is more diverse, but the industry remains a force in the state.

Of course, the positive effects are concentrated in limited locations, and the pain of high prices hits everyone. The Barnett Shale puts us in the select company.

My colleague Piller has chronicled the growing activity in the Barnett Shale, comparing it to the great energy strikes that created past booms in Texas.

Some examples:

Since 2002, Devon Energy of Oklahoma City has drilled almost 2,000 wells in the Barnett Shale and may drill 1,000 more in the area. It's the No. 1 player.

XTO Energy jumped in last year and increased its bet with an acquisition. CEO Bob Simpson says the Fort Worth company plans to drill an average of 20 wells a month for the next six years.

Quicksilver Resources expects to be getting 30 million cubic feet a day from its Barnett Shale wells by the end of 2005. It's opened a pipeline to serve the sector and plans a natural-gas-processing plant near Granbury.

EOG Resources of Houston has drilled 18 wells in Johnson County. Chesapeake Energy, which started drilling here last year, says it has 99 wells—and the potential for 500 to 750.

Energy Transfer Partners of Dallas recently said it's expanding its 264-mile pipeline from near Cleburne through East Texas and into Louisiana. The total cost is $535 million. The company is also adding a $32 million loop to handle extra gas from Johnson and Parker counties.

As you'd expect, natural-gas production here is climbing. It's up 19 percent in the first eight months of the year, while the statewide total declined.

The Barnett Shale alone may not lead to lower natural-gas prices, because older fields in Texas now produce less, while utilities are using much more gas to make electricity. The supply of natural gas peaked three decades ago, while demand is growing, a recipe for soaring prices.

The question is: What's the best way to improve the situation—with government dictates or market adjustments?

Stephen Brown, director of energy economics and microeconomic policy analysis at the Dallas Fed, points to the market's response after Hurricane Katrina.

Within two months, gasoline prices had nearly returned to pre-storm levels, despite some refineries still shut down today.

Many factors contributed to the improvement, including gasoline supplies that were shipped from Europe to the United States. Higher prices made that a profitable proposition.

"Price controls or new taxes would prevent the market from self-correcting," Brown says.

In the 1980s, the Reagan administration effectively ended price controls on natural gas, which led to a boom in exploration and falling prices.

"The history of intervention is that it discourages development and slows the pace," Brown says.

Experts have predicted that we'd run out of oil many times in the past.

But innovations keep leading to new supplies and making it economical to get them out of the ground.

Deep underwater drilling and Canadian oil sands represent promising options, but only if prices are high enough to justify the risk.

The Barnett Shale has emerged because higher prices and new technology make it attractive.

That happens to be very good for the North Texas economy, but it's also the fastest way to get more gas for everyone.

Mr. SHIMKUS. The gentleman's time has expired. The Chair now recognizes the gentleman from Texas, Mr. Green.

Mr. GREEN. Thank you, Mr. Chairman, and like my colleagues, I am glad you are holding this hearing on natural gas and heating

oil for this winter, and I want to welcome both this panel and our future panel.

Along with the war in Iraq, energy prices are the highest concern for my constituents. This Congress passed the Energy Bill that I supported, and to address our medium term and long-term energy future, and I remain confident that bipartisan bill will deliver. However, many of the important new provisions of that bill will not bring benefits this winter, because the energy infrastructure takes many billions of dollars and several years to expand. If we could build five new LNG plants between now and December 1, my Northern friends would rest a lot easier and a little warmer this winter. But these projects cannot be built that fast, and the fact that we will have cheaper gas in the future is little consolation for this winter.

Since today is focused on the immediate crisis coming down the road, I will focus on two policies that I believe would help heat homes affordably this winter: full funding for LIHEAP and economic dispatch. Our committee last week, in a 16-hour markup, increased funding for LIHEAP $1 billion, which was great. The problem is now we hear that that reconciliation bill may not be passed by the full Congress until next year, so it will not help us at all this winter. Maybe we should have done it earlier in the original Energy Bill, but as many observers of this committee know, I have serious problems with the outdated and nonsensical current Tier I LIHEAP formula, and I would be interested to know what some of our witnesses think about this formula, and if they can defend it. However, since the formula gets fairer as the funding increases in the short term, we do have a solution where the rising tide lifts all boats. That is why I was disappointed that we, last week in the budget reconciliation, we only did $1 billion instead of the full $5 billion that was authorized in the Energy Bill that passed in July for LIHEAP, which is really .002 percent of the Federal budget, would show that Congress is responding to high energy prices, which would have the most severe impacts on the needy.

I hope that Congress will continue to consider increasing LIHEAP funding, such as the Katrina supplemental, and that Congress will put all funding in the base account, as opposed to the emergency account, that shortchanges warm weather States, and is controlled by the Office of Management of Budget. Over 15 years, we have had a trigger in our LIHEAP formula that $2 billion, after which funds are allocated more evenly nationwide. Unfortunately, we rarely, if ever, pass that trigger. This year, it looks like we certainly will, so it is extremely important that we do not use accounting tricks, like emergency accounts, to avoid the $2 billion trigger. If we do, I think we will see continuous warm-weather-State rebellions on LIHEAP funding. Northern members cannot expect us to sympathize with their constituents during the winter if we don't get any sympathy for our constituents who have heart attacks, dehydration, heatstroke and exhaustion, and other health impacts from hot weather. If we want to put our differences aside for the 2006 fiscal year, we must put all LIHEAP funding in the base account, not the emergency account.

The second strategy we could use to save natural gas, and lower prices this winter, is economic dispatch. This is a complex elec-

tricity policy issue which I withdrew my amendment during the Energy Bill, but I think the committee needs to start to pay attention to this issue. The Federal Energy Regulatory Commission has convened joint FERC-State boards to study economic dispatch in the various regions of the country. But the bottom line is it does not make economic sense to run inefficient power plants while our more efficient ones are idle. Competitive power markets bring competition for lower prices for consumers, and one big way is a more competitive price is to use your expensive natural gas more efficiently. Many areas of the country are already doing economic dispatch, since they are part of the independent system operators——

Mr. SHIMKUS. The gentleman's time——

Mr. GREEN. And thank you, Mr. Chairman, and I will briefly say Texas and ERCOT use economic dispatch, and we have saved the country 15 billion cubic feet in just 4 years of natural gas. That is a 10-percent efficiency improvement in gas use, and I hope our committee will look at that.

Thank you, Mr. Chairman.

Mr. SHIMKUS. The gentleman's time has expired. The Chair recognizes the gentleman from Arizona, Mr. Shadegg, for an opening statement.

Mr. SHADEGG. I thank you, Mr. Chairman, and I thank you for holding this hearing. I think it is indeed important.

I would like to associate myself with one of the remarks by colleague, Mr. Green of Texas, and that is my colleagues are deeply concerned about the price of energy today, and they want us to act on it, and they want us to look at the issue very carefully. But I also want to associate myself with my colleague from Texas's remarks to my right who said, as I pointed in a hearing a week ago, it is time for those who have stood in the way, in the past, of increasing energy supplies, and those who stand in the way today of increasing energy supplies, to realize that it is their obstructionist tactics that are causing the high heating costs that are being predicted for this winter. I am deeply concerned about those costs, although I share Mr. Green's concern about the high air conditioning costs that some people in the Southwestern part of the United States, where I live, confront, and the program does not deal, I think, in a fair fashion, with the problems they confront.

I am deeply concerned about this issue. I would like to know if, indeed, there was price gouging, but I am saddened that we continue to go along the line of the rhetoric of well, the Republicans don't care. This is just about tax cuts for the rich. What we really need is more programs, more programs, more programs, more programs, and more money from the government. Unfortunately, that money from the government has to come from somewhere. What we need to look at in this discussion is why is the price of natural gas so high, and what can we do about it. Let us talk about not just the effect that has on homes and home heating and home heating oil, for example, and the ability of people to keep their homes warm this winter. But let us talk about it in terms of the long term economy. We have got a serious problem confronting this Nation and confronting our economy. Natural gas in Canada is $9.25 per million BTU; Australia, it is $3.85; China, it is $4.85; Britain, it is $5.65; and in the United States, it is $14.67. We simply cannot re-

main viable in a world economy where natural gas is that much more expensive here than it is anywhere else.

You want to talk about tax cuts. John F. Kennedy is the one who cut tax rates, as a Democrat President, and who said that a rising tide lifts all ships. What he meant by that was that when you lower tax rates, and the economy improves, every American does better. We need to be looking at what policies will improve the lives of every single American, and I would suggest that having natural gas prices 3 or 4 or 5 times as high as they are anywhere else in the world is not going to help our economy. The Federal Government estimates that on the outer continental shelf, there are 406 trillion cubic feet of natural gas, and yet, this Congress has locked away 85 percent of that oil, making it impossible to reach, even with platforms that are completely out of sight, and even with the fact that a natural gas platform has never caused, so far as I know, any environmental damage.

Sure, we should be doing something about LIHEAP, and we have done that. This year, we added $1 billion additional dollars to LIHEAP. That will take the program to its highest level ever, since the program was created in 1981. But more important than more government programs which take from some and give to others is the obligation we have to find out why gas prices are so high, and what we can do to make them lower, and I would suggest improving the competitiveness of American economies, improving our ability to build refineries and to explore in places like the outer continental shelf, hold much more for the American economy than decrying the lack of additional LIHEAP funding.

Mr. SHIMKUS. The gentleman's time has expired. The Chair recognizes the gentleman from California, Mr. Waxman, for an opening statement.

Mr. WAXMAN. Today, we are going to examine the expected impact of the Administration's energy policy on Americans trying to heat their homes this winter.

Energy costs have been steadily increasing over the last 4 years, and for consumers, it is going to get worse before it gets better. Home heating costs are expected to go through the roof this winter. The Energy Information Administration projects that residential natural gas costs will skyrocket 61 percent in the Midwest. Home heating oil is expected to cost more than 30 percent more than last year.

As we would expect, the big oil companies are reaping the benefits of these prices. I have a chart behind me. It shows the profits of the six biggest oil companies from 2002 through 2005.

[Chart.]

In 2004, Exxon Mobil earned more profits than any corporation in the history of the planet, totaling some $25 billion. Last week, we learned that in only three quarters so far this year, Exxon Mobil's profits have already exceeded the 2004 record. They have gone up by 75 percent. This remarkable increase in profits is not unique among oil companies. Each of the big oil companies have enjoyed major increases in their profits, and this didn't occur in a vacuum.

Upon assuming the office, Vice President Cheney began meeting in secret with big oil companies to craft a national energy policy.

The Vice President didn't want any advice from consumers or environmental advocates. We still don't know what the big energy companies requested in the secrecy of the White House, but the prices that consumers are paying today may be the best indication of what happened behind those closed doors.

Upon the Vice President's announcement of the policy, the President started putting it into place. According to Energy Secretary Bodman, 75 percent of the Administration's energy policy was implemented during the President's first term. By March 2005, he reported that 95 percent of the energy policy was implemented, before Congress even passed the Energy Policy Act of 2005. At every step of the way, as this program has been implemented, energy prices have been increasing. The Administration got the energy policy it wanted, and now, the American people are bearing the costs.

We need to promote energy efficiency and renewables, and address the Nation's dangerous dependence on oil. I hope that day will come soon, but it is ironic to hear the Republicans crying about obstructionists. They control the House. They control the Senate. They control the White House. If they wanted any bill to pass, if they had their own members lined up for it, it would pass. But the fact of the matter is, they couldn't get the bill passed in the House without twisting arms of Republican members who had to hold their nose and vote for a very bad bill just a week or 2 ago, and in the Senate, they have got the same problems. It was a Republican that lined up with the Democrats to defeat that bill in the committee.

They have got their policy. The American people are paying for it. Now, all we can do is hope government programs will keep people from going without heat in the winter.

Mr. SHIMKUS. The gentleman's time has expired. The Chair recognizes the gentleman from New Hampshire, Mr. Bass.

Mr. BASS. No opening statement.

Mr. SHIMKUS. No opening statement. Mr. Allen from Maine is recognized.

Mr. ALLEN. Thank you, Mr. Chairman, and thank you to the many witnesses who are here today. This is another in a series of hearings in this subcommittee to explain that yes, fuel prices are high, and yes, they will continue to be high this winter.

What else will be high this winter? Oil company profits. I won't go into all the statistics. I mean Exxon-Mobil's $10 billion is startling. It is twice the domestic product of Kuwait. But it is the case, it absolutely is the case that this——

Mr. SHIMKUS. Now to you, my friend, would the gentleman suspend? Your mic is still not on, and maybe, you can just move over until we figure out why. Everyone else is on. Now, try it.

Mr. ALLEN. I did do that. My apologies. Mr. Chairman, if I can have a little time back, I have lost whatever dramatic effect I was striving for, so——

Mr. SHIMKUS. We will give you your minutes back. Go ahead.

Mr. ALLEN. I did want to say that I believe it is hard to deny the link between the enormous gas company profits, oil industry profits, and then, what is happening to people back home. This is a rising tide that is sinking small business boats in Maine. Our loggers, our fishermen, our building owners and others. There are

a few isolated examples of price gouging at the local level, but in Maine, we have enough pricing information to know that our oil dealers are not the problem. The problem is Exxon Mobil and companies like it, and those profits.

There are two critical questions. Why are the prices so high, and what can we do about it? The answer to the first question is that the Administration, its allies in Congress, and its supporters in the oil industry have made little effort to reduce demand in order to create downward pressure on price. Just a few years ago, the Vice President famously said that conservation was a personal virtue, but not an energy policy. In March 9 of this year, Secretary Bodman said, and I quote: "During his second week in office, the President put together a taskforce to address America's energy challenges. The taskforce sent back more than a hundred recommendations as part of a new national energy policy, and over the last 4 years, we have implemented 95 percent of those recommendations." So essentially, the Administration got exactly what it wanted, and the result is a national crisis. The Energy Policy Act approved in July provided extensive subsidies and tax breaks to the oil and gas industry, and those simply cannot be defended. What we need to do in the short term—there are a multitude of things. I will mention LIHEAP. When you don't talk about authorization levels, but you talk about actual funding levels, here is the truth. In fiscal year 1982, LIHEAP was funded at $1.87 billion. In fiscal year 2005, LIHEAP was funded at $1.88 billion, a $100 million increase. The purchasing power of that program has simply evaporated.

Now, I have legislation I just want to mention briefly, H.R. 3944, the Small Business Fuel Cost Relief Act, to give small businesses a tax credit for the increase in price between diesel, gasoline, and heating oil and natural gas from Labor Day 2004 to Labor Day 2005. Those are the people who need relief, not the people who got the tax relief in the Energy Policy Act that was signed by the President in July. We can do a whole lot better in this country, but not without changing course.

Mr. Chairman, I thank you.

Mr. SHIMKUS. The gentleman yields back his time. The Chair now recognizes the gentlewoman from California, Ms. Solis.

Ms. SOLIS. Thank you, Mr. Chairman, and thank you, ranking member, and also the witnesses that are here today. I appreciate the fact that we are having a hearing on this very important issue, natural gas and heating oil for American homes.

Mr. Chairman, the retail cost of heating oil is expected to increase another 32 percent this winter. The increase will not only impact the Northeastern part of the United States, but will impact thousands of homes across the country. In Northern California, Pacific Gas & Electric estimated heating bills for its customers to be at least 70-percent higher, and in Los Angeles, the Southern California Gas Company, my representative, expects gas bills that could rise above 50 percent.

Working class Americans, in my opinion, can't afford these increases. And the Department of Labor reported that the average weekly pay for production workers took its biggest fall in 10 years. These workers are earning almost 3-percent less than the cost of

inflation, and facing a 50 to 70-percent increase in their heating bills. We should have looked at these issues long before President Bush decided to implement the GAS for America Security Act.

On March 9, 2005, the Energy Secretary, Samuel Bodman, stated that the Department of Energy has implemented 95 percent of the Administration's energy policy. If 95 percent of the Bush Administration's energy policy is implemented, why are Americans, working class families, continuing to suffer? Companies like Exxon Mobil, who have generated $9.92 billion in a third quarter profit are better off than working class Americans. But how is America's working class better today because of the Bush energy policy?

Democrats had a plan to protect consumers. We supported a price gouging amendment that would have authorized the Federal Trade Commission to punish companies that price gouge customers for gasoline, heating oil, natural gas, and propane. But my colleagues across the aisle only supported a very weak version, price gouging language, which does not include natural gas. That doesn't help California.

So under the weak Republican price gouging language, 73 percent of California consumers depend on natural gas, including 20 percent of families in Los Angeles County that fall below the poverty line, and they would have no protections, no legal recourse, no rights, and no relief.

Adding insult to injuries, my colleagues last week moved to cut $10 billion from the Medicaid program, and refused to fully fund the LIHEAP program. So I find it ironic that after refusing to protect customers, consumers from price gouging after cutting aid to working families, and after refusing to fund the program to help the people who will be suffering the most this winter, we are here today talking about protecting consumers. The priorities of the Congress and this Administration are wrong. It is well, long overdue that we start really working on working class family issues, and that is to reduce the cost of high fuels in our country.

Yield back the balance of my time.

Mr. SHIMKUS. The gentlelady yields back. Does the gentleman from Maryland wish to make an opening statement?

Mr. WYNN. Thank you, Mr. Chairman. I would like to thank you for calling this very important hearing on natural gas and home heating oil.

On October 19, we met to discuss the Energy Information short term energy outlook and winter fuels outlook. The report illustrated the critical need for Congress and this Administration to act now, in order to protect our most vulnerable citizens from exorbitant energy prices this winter. As I stated at that time, and I have restated, increased funding for the Low Income Home Energy Assistance Program, LIHEAP, is essential. Home heating bills for the 60 million U.S. households that use natural gas will increase by about 50 percent, translating to about a $350 increase in home heating over last year's prices.

In my Maryland district, 60 percent of residents use natural gas to heat their homes. They could face an increase in their heating bills from last year's average of $750 to $1,100 this year. Heating bills for the 8.5 million U.S. homes that are using heating oil will increase about 32 percent, translating to a $378 increase in home

heating expenses over the last year. For the almost 7 percent of my district's residents that use home heating oil, including myself, this means last year's average spending of about $1,200 could be as high as $1,600 this year.

These increases in home heating energy costs disproportionately our low income, fixed income, and elderly citizens. Low income households spend a whopping 14 percent of their annual income on energy expenditures, compared to non-low income households, which spend only about 3.5 percent. In fact, two thirds of the families that utilize LIHEAP assistance have annual incomes of $8,000, forcing them to choose between heating their homes and putting food on the table. The National Energy Assistance Directors Association's most recent survey on the impact of rising energy costs on poor families illustrates this case in point with troubling data: 32 percent of the families interviewed said that they sacrificed medical care; 24 percent failed to make rent or mortgage payments; 20 percent went without food for at least a day; and 44 percent said they skipped paying or pay less than their full home energy bill in the last year.

There is a great need for increased funding, and in fact, my State of Maryland is going to need almost $84 million in Federal fuel assistance, more than twice the amount anticipated, to help our low income residents heat their homes this winter. The Maryland Energy Assistance Program, which distributes LIHEAP funds locally, is expected to receive $32 million from the Federal Government. However, the program will need $51 million more to cover rising costs based on EIA's home heating price projections this winter.

Unfortunately, my colleagues on the other side of the aisle are not doing enough to address this troubling situation. We missed a critical opportunity last week to increase LIHEAP funding during the budget reconciliation markup. While I recognize that they made a significant effort in this regard, we still need to do more. LIHEAP is working with a limited budget of $2 billion, serving only 20 percent of those eligible for assistance. I urge my Republican colleagues to increase LIHEAP funding and provide true relief for our low income, fixed income, and elderly citizens. I look forward to hearing the panels today, and I hope that they will bring greater attention to this very pressing problem.

Thank you.

[The prepared statement of Hon. Albert R. Wynn follows:]

PREPARED STATEMENT OF HON. ALBERT R. WYNN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND

Chairman Barton, thank you for holding this hearing on natural gas and home heating oil. On October 19th we met to discuss the Energy Information Administration's (EIA) Short Term Energy Outlook and Winter Fuels Outlook. The report illustrated the critical need for Congress and the Administration to act now in order to protect our most vulnerable citizens from exorbitant energy prices this winter. As I have stated time and time again, increased funding for the Low Income Home Energy Assistance Program (LIHEAP) is essential.

Home heating bills for the 60 million U.S. households that use natural gas will increase by about 50 percent, translating into a $350 increase in home heating over last year. In my Maryland district, 60 percent of residents use natural gas to heat their homes. They could face an increase in their heating bills from last year's average of $750 to $1,100 this year.

Heating bills for the eight-and-a-half million U.S. homes that use heating oil will increase by about 32 percent, translating into a $378 increase in home heating ex-

penses over last year. For the almost seven percent of my district's residents that use home heating oil, including myself, this means that last year's average spending on home heating of $1,200 could be as high as $1,600 this year.

These increases in home heating energy costs disproportionately impact our low income, fixed-income and elderly citizens. Low-income households spend a whopping 14 percent of their annual income on energy expenditures, compared to non-low-income households that only spend 3.5 percent. In fact, two-thirds of the families that utilize LIHEAP assistance have annual incomes of $8,000, forcing them to chose between heating their homes and putting food on the table. The National Energy Assistance Directors' Association's most recent survey on the impact of rising energy costs on poor families illustrates this case in point with troubling data: 32 percent of families in the survey sacrificed medical care; 24 percent failed to make a rent or mortgage payment; 20 percent went without food for at least a day; and 44 percent said they skipped paying or paid less than their full home energy bill in the past year.

There is a great need for increased funding. In fact, my state of Maryland is going to need almost $84 million in federal fuel assistance, more than twice the amount anticipated, to help our low-income residents heat their homes this winter. The Maryland Energy Assistance Program, which distributes LIHEAP funds locally, is expected to receive $32.1 million from the federal government. However, the program will need $51.5 million more to cover rising costs based on the EIA's home heating price projections for this winter.

Unfortunately, my colleagues on the other side of the aisle are not doing enough to address this troubling situation. We missed a critical opportunity last week to increase LIHEAP funding during budget reconciliation markup. Now, we are currently in a position of begging the industry for handouts; we should be in a better position than this. Senator Grassley, the chairman of the Senate Finance Committee, suggested that companies contribute 10 percent of their third-quarter profits to LIHEAP. In the absence of a voluntary industry give back, we should give some consideration to the option of a windfall profits tax to fund the necessary support for LIHEAP. Given that there will be no new natural gas coming online for at least the next three years, the outlook is bleak for the next few winters.

LIHEAP is working with a limited budget of $2 billion, serving only 20 percent of those eligible for assistance. I urge my Republican colleagues to increase LIHEAP funding and provide true relief for our low-income, fixed-income and elderly citizens.

I look forward to the panels we have lined up for today.

Mr. SHIMKUS. The Chair thanks the gentleman.

[Additional statements submitted for the record follow:]

PREPARED STATEMENT OF HON. SHERROD BROWN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Thank you, Mr. Chairman, for scheduling today's hearing and for affording me an opportunity to submit this statement for the record.

Gasoline prices spiked nationwide after Hurricane Katrina interrupted gas supplies. They've been on the evening news, on the front page of our newspapers—and high gasoline prices have been a key topic at every one of our town meetings.

But tomorrow—or next week, or no later than a month from now when the winter heating bills start rolling in—what everyone will be talking about is natural gas prices.

According to the Energy Information Administration (EIA), natural gas prices will average more than 50% higher this winter than last. And EIA tells us that residents of Ohio and other Midwestern states could see their natural gas bills jump more than 70%.

You can talk to any energy economist out there and he or she will tell you that the energy bill we passed this year will do little or nothing to stabilize natural gas prices.

We talked to Ken Costello, a Senior Institute Economist at Ohio State University's National Regulatory Research Institute. And he confirmed that the only way we can really get at the problem in the near term is by addressing the demand side of the equation.

But you do not have to be a PhD to know that, in a market economy, both supply and demand matter in setting the price. American motorists know that intuitively.

When gasoline prices spiked after Katrina, motorists responded immediately. Demand for gas-guzzlers dropped, and demand for super-efficient hybrids increased.

We ought to take a hint from our constituents and advance policies that manage the demand side of the natural gas price equation.

We missed an opportunity during the Energy and Commerce Committee's markup of the energy bill. One of the amendments we considered would have required electric power generators to increase their investment in renewable energy sources.

This approach makes energy security sense, because a diverse fuel mix makes our electricity supply less vulnerable to interruptions in the delivery of any particular fuel.

But more importantly for the present debate, investing in renewable energy makes sense as a way to stabilize and moderate natural gas prices.

Electric power generation now accounts for 20-25% of America's natural gas demand. And according to the EIA, demand from the electric power will be the fastest-growing component of total natural gas demand during the next 20 years.

Last year, the Union of Concerned Scientists used an EIA analysis tool to quantify the price benefits of renewables. UCS found that increasing the fraction of America's electric power generated from renewable sources to 20% by 2020 would save consumers nearly $27 billion.

And by the way, UCS also found that diversifying the fuel supply would also lower electric bills by more than $10 billion over the same timeframe.

When it comes to natural gas, the energy bill was by no means a complete loss. Though I felt the liquefied natural gas siting provisions were insufficiently responsive to homeland security concerns, enhancing our access to LNG will eventually bolster supplies.

And the conference bill's emphasis on coal gasification and hydrogen fuel cell development offer promise as tools to reduce natural gas demand.But on natural gas, the energy bull was certainly a missed opportunity.

This committee and the Congress embraced a renewable fuel standard for gasoline for good public policy reasons. We failed to adopt a renewable energy standard for electricity because we chose to ignore those same good public policy reasons.

But it is not too late to make next winter better than this one. We ought to embrace demand-side solutions that could make a real difference for consumers. That means not only Investing in renewable sources for electric power generation. But considering a wide range of sensible demand-management tools, like:

- Cash rebates to help consumers—especially low- and moderate-income consumers—buy energy-efficient appliances;
- Increasing our investment in the Energy Department's Industrial Technologies program, which helps energy-intensive manufacturing businesses save energy and money;
- Incentives for states and local governments to adopt energy-efficient building codes.

We must also take a close look at the ability of federal regulators to fulfill their mandate to protect consumers from natural gas market manipulation.

Companies like Dynegy and El Paso Energy manipulated California's natural gas market during that state's 2001 energy crisis. We should not be so naïve as to expect that the tight natural gas market that exists nationwide today will not attract the same unscrupulous element.

If these corporate wrongdoers fool us once, shame on them. But if we allow them to fool us time after time, shame on us.

This winter will be costly for American consumers in part because Congress failed to consider policy tools that might have blunted the effects of Hurricane Katrina on natural gas prices.

This hearing should begin a new effort to ensure that we do more to protect consumers next winter.

Thank you again for the opportunity to participate in today's hearing.

PREPARED STATEMENT OF HON. GEORGE RADANOVICH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. Chairman, I would like to thank you for holding this important hearing today on Natural Gas and Heating Oil for American Homes.

As we are all aware, the expected continuing high prices of natural gas and home heating oil will be a hardship on all of our constituents this winter. Residential space-heating expenditures are projected to increase for all fuel types compared to year-ago levels. On average, households heating with natural gas are expected to spend about 48% more in fuel expenditures and households heating primarily with heating oil can expect to pay on average 32% more this winter.

Today's hearing is important because it will provide our constituents with a complete understanding of the elements that determine the price they will pay for natural gas, specifically natural gas itself (the gas charge or gas commodity charge);

long-haul pipeline transmission charges; and local distribution and storage charges. In addition, what effects hurricanes Katrina and Rita have had on supply and price along the full natural gas supply chain; As well as what is being done to bring the costs of natural gas down.

The House passage of HR 3893, which I supported, is the first of many steps in the right direction. Increasing the number of refineries and relaxing environmental standards is only the beginning, we will continue to make every effort to do everything we can to allow our constituents to heat their homes at reasonable costs.

Thank you I look forward to hearing from our witness.

Mr. SHIMKUS. Now, we are ready for our first panel. We welcome you. We have the Chairman of the Federal Energy Regulatory Commission, Mr. Kelliher, who was introduced earlier. We also have with us Mr. Jeffery, Reuben Jeffery III, who is the Chairman of the Commodity Futures Trading Commission; Mr. Mark Maddox, Principal Deputy Assistant Secretary, Office of Fossil Energy; and Mr. Donald Mason, Commissioner of Public Utilities Commission of Ohio.

Welcome. All your statements are inserted in the record. We ask for around a 5 minute opening statement, and then, we will follow up with questions after the whole panel has testified.

With that, Joe, would you like to begin?

STATEMENTS OF HON. JOSEPH T. KELLIHER, CHAIRMAN, FEDERAL ENERGY REGULATORY COMMISSION; HON. REUBEN JEFFERY III, CHAIRMAN, COMMODITY FUTURES TRADING COMMISSION; MARK R. MADDOX, PRINCIPAL DEPUTY ASSISTANT SECRETARY, OFFICE OF FOSSIL ENERGY, DEPARTMENT OF ENERGY; DONALD R. MASON, COMMISSIONER, PUBLIC UTILITIES COMMISSION OF OHIO

Mr. KELLIHER. Thank you, Mr. Shimkus. Good afternoon, Mr. Shimkus, Mr. Barton, Mr. Boucher, and members of the subcommittee.

I thank you for the opportunity to address the challenges from high natural gas prices this coming winter, FERC's role in the pricing of natural gas and home heating oil, and development of the U.S. energy infrastructure. It is good to be back at this subcommittee.

As my formal statement details, the Commission has responsibilities in many areas of the energy sector, including regulation of interstate natural gas transportation rates and services, and crude oil and petroleum product pipelines. The Commission has limited jurisdiction over natural gas sales, and does not regulate home heating oil prices or natural gas wellhead prices.

Hurricanes Katrina and Rita have caused the loss of a significant portion of our domestic oil and natural gas supply. Twenty percent of U.S. gas supply comes from the offshore Gulf, and most of this production has been shut in since the hurricanes. We will not be able to offset this loss of domestic gas production through higher imports from Canada, due to Canada's flattening production and increasing demand, nor will liquefied natural gas imports be able to offset the loss of domestic production. Most LNG is locked up in long term contracts, and the U.S. market competes for short term supplies with Europe, and we have been losing this competition.

Gas prices were already high before the hurricanes. Because of the loss of domestic production, gas prices will be higher this win-

ter. The key variables on how high prices will rise are the rate of recovery of offshore gas production in the Gulf, the weather, and the effectiveness of conservation efforts. Effective conservation must start with consumer awareness and appreciation of the high level of gas prices. Normally, consumers receive a price signal after consumption, when they receive their monthly bill, and it is important they recognize it before consumption this winter. The effectiveness of State conservation programs will be critical in moderating natural gas prices this winter.

The Commission has encouraged its counterparts at the State level to make a maximum effort to strengthen their conservation programs, and we met recently with State regulators from regions that will be most affected by high natural gas prices to discuss best practices in State programs.

I particularly want to commend Secretary Bodman for his efforts to promote conservation this winter, and his leadership has been impressive. Now, clearly natural gas prices will be higher this winter, as a result of the loss of domestic production caused by the hurricanes. However, the Commission, FERC, is acting to assure prices do not go higher still because of market manipulation. The Commission actively monitors natural gas markets to determine whether price movements are the result of market manipulation or market fundamentals. To assist this effort, the Commission recently entered into a memorandum of understanding with the Commodity Futures Trading Commission to assure the smooth flow of information between the two agencies, and to improve our ability to identify market manipulation. Under the Energy Policy Act, the two agencies were directed to enter into an MOU within 6 months of enactment. We accomplished it in 2 months, in part, because the two agencies want to be in a position to better monitor gas markets this winter.

Importantly, FERC is acting to exercise the new anti-manipulation authorities in the Energy Policy Act. The Commission recently issued proposed rules to prevent market manipulation with respect to jurisdictional natural gas and electricity sales and transportation. And we intend to issue final rules by the end of the year. The new rules, in conjunction with the new penalty authority in the Energy Policy Act, will provide a strong deterrent to market manipulation.

Now, the Commission has limited jurisdiction over the price of natural gas paid by consumers. Through the natural gas——

Mr. SHIMKUS. You can suspend for a minute. We are just going into session now.

Mr. KELLIHER. [continuing] through the Natural Gas Policy Act of 1978 and the Natural Gas Wellhead Decontrol Act of 1989, Congress deregulated most sales of natural gas.

The Commission regulates the interstate transportation rates for natural gas and crude oil and petroleum products. This regulation involves the rate to be paid for the transportation component of the delivered product, rather than the commodity price. The regulated transportation rate is a very small portion of delivered cost.

The Commission stands ready to act on emergency filings to authorize a more efficient use of our existing gas infrastructure. The Commission has already acted quickly to authorize exemptions and

waivers for Discovery Gas Transmission and Stingray pipeline that allowed shut-in gas to flow to consumers. In both instances, the Commission issued orders the same day the emergency filings came in, and that is a testament to the professionalism and dedication of the Commission staff, and it shows that we know what is at stake this winter.

Now, the Commission plays a critical role in strengthening the U.S. energy infrastructure. Since the year 2000, the Commission has certificated over 8,400 miles of gas pipelines. We have steadily improved our regulatory process, and the average length of a major pipeline proceeding at the Commission is now less than a year. The Commission's Hackberry policy, which ceased economic regulation of LNG terminals, has resulted in a significant increase in proposals to construct LNG import facilities. In the last few years, the Commission has approved eight new LNG terminals, a new pipeline from the Bahamas, and expansions at two existing terminals that will more than quadruple our LNG import capability.

Now, the Commission is also exploring opportunities to provide greater incentives to expand natural gas storage capacity through pricing reform. Since 1988, gas storage capacity has expanded only 1.4 percent, while demand has increased 24 percent. Greater storage capacity may help mitigate gas price volatility. Pricing reform can promote storage capacity expansion at both existing and new facilities, although it will not bring relief this winter.

Now, in closing, the Commission is working diligently within its authorities to prevent market manipulation and authorize the most efficient use of our existing gas infrastructure. We will closely monitor gas markets in the coming winter in conjunction with the CFTC, and take appropriate steps within our authorities to protect customers to the maximum extent possible. We are encouraging our State colleagues to promote effective conservation programs, and we will continue our efforts to promote a strong U.S. energy infrastructure.

And with that, I will be happy to answer any questions you might have.

[The prepared statement of Hon. Joseph T. Kelliher follows:]

PREPARED STATEMENT OF HON. JOSEPH T. KELLIHER, CHAIRMAN, FEDERAL ENERGY REGULATORY COMMISSION

Mr. Chairman and Members of the Subcommittee: Good afternoon, Chairman Hall and members of the Committee. My name is Joseph T. Kelliher, and I am Chairman of the Federal Energy Regulatory Commission (FERC or Commission). I want to thank the Subcommittee for the opportunity to address expected high gas prices this coming winter, FERC's role in the pricing of natural gas and home heating oil, and the development of energy infrastructure.

The Commission has responsibilities in many areas of the energy sector. In the natural gas area, the Commission authorizes the construction of interstate natural gas pipelines and storage facilities, as well as import/export facilities including liquefied natural gas (LNG) import terminals, and it is responsible for the operation and safety of LNG facilities. It also regulates natural gas transportation rates and services in interstate commerce and has limited authority (discussed below) over sales in interstate commerce of natural gas for resale. In the area of electricity, the Commission regulates public utility sales for resale of electric energy in interstate commerce as well as wholesale and unbundled retail transmission rates and services in interstate commerce. It also has authority over certain corporate transactions involving public utilities. In addition, the Commission is responsible for non-federal hydroelectric licensing, administration, and safety. Finally, the Commission regulates the interstate transportation rates and services of crude oil and petroleum

products pipelines. The Commission does not regulate home heating oil prices. With these general jurisdictional parameters in mind, let me begin by briefly reviewing the damage to energy infrastructure and domestic natural gas production in the Gulf of Mexico caused by Hurricanes Katrina and Rita, and then discuss steps the Commission is taking in response, including infrastructure issues.

As of October 31, 2005, the Minerals Management Service (MMS) reported that two months after Hurricane Katrina, approximately 68 percent of the daily oil production and 54 percent of the daily natural gas production in the Gulf of Mexico remains shut-in. According to the Energy Information Administration (EIA), as of October 28, 2005, petroleum refinery shutdowns in the Gulf of Mexico totaled approximately 991,000 barrels per day. A number of natural gas processing plants in Louisiana and Texas, with capacities equal to or greater than 100 million cubic feet per day, are not active. Recent industry press reports indicated that 45 percent of oil and gas pipelines in the Gulf were operational; while 30 percent needed repairs and 25 percent were undamaged but could not be used due to onshore bottlenecks. The Association of Oil Pipelines reported that as of October 14, 2005, all onshore petroleum pipelines have resumed 100 percent normal operation capacity. However, some systems continued to experience reduced availability of products to transport.

The hurricanes have caused the loss of a significant portion of our natural gas supply. It is much greater than the loss last year resulting from Hurricane Ivan, and the recovery of offshore production has been much slower. We will not be able to offset this loss of domestic gas production through higher imports from Canada due to Canada's flattening production and increasing demand. Nor will LNG be able to offset the production loss. Most LNG is locked up in long-term commitments, while the U.S. market, at existing terminals, tends to trade in the short-term or spot market. The U.S. may be losing out on these short-term supplies due to European competition, where prices are expected to be close to our prices this winter, and shipping costs are lower due to shorter distances, thus keeping additional LNG supplies away from the U.S. in the short term.

In testimony before both the House and the Senate, the Administrator of the EIA stated that domestic dry natural gas production in 2005 is expected to decline by 3.0 percent, due in large part to the major disruptions to infrastructure in the Gulf of Mexico. Gas prices, prior to the hurricanes, were already high due to the strain of a hot summer and the anticipation of tight supplies. EIA estimates that the average consumer's natural gas bill may be as much as 48 percent higher this winter than last, if there is an average winter. Natural gas prices will be higher this winter because of this loss of supply. Of course, other variables can affect winter gas prices, either negatively or positively. These factors include the timing of the recovery of offshore Gulf of Mexico production. The sooner the recovery occurs, the less upward pressure there will be on prices. Another factor, and the least controllable, is the weather. A mild winter can buy the industry time to repair or replace infrastructure and to get gas production back on line by reducing demand and dampening price levels. And, conversely, a colder than normal winter will drive up prices even higher.

One more factor that is controllable is conservation. Effective conservation must start with consumer awareness and an appreciation of the high level of gas prices. Under most circumstances, the consumer receives a price signal after consumption, that is, when the bill from the gas utility is delivered. If the consumers understand ahead of time that gas prices will be high this winter, they are more likely to conserve. The effectiveness of state conservation programs will be critical in moderating natural gas prices this winter. The Commission has encouraged its counterparts at the state level to make a maximum effort to strengthen their conservation programs. Hedgingcan also reduce the exposure of consumers to price volatility. The Commission recently met with state regulators from regions that will be most affected by high natural gas prices to discuss best practices in state conservation and hedging programs.

Natural gas prices will be higher this winter as a result of the loss of domestic production caused by Hurricanes Katrina and Rita. Just how much higher prices will go will be driven largely by these variables—rate of recovery of offshore production, weather and conservation.

The Commission is acting to assure prices do not go higher still because of market manipulation. Even though the majority of sales of natural gas are not subject to the Commission's jurisdiction, the Commission actively monitors natural gas markets to determine whether any price spikes are the result of market manipulation or the laws of supply and demand. To assist this effort, the Commission recently entered into a Memorandum of Understanding (MOU) with the Commodity Futures Trading Commission (CFTC) to assure the smooth flow of information between the two agencies. The MOU formalizes a close working relationship between the two

agencies that has developed over the last five years. The MOU will improve the ability of the Commission to identify market manipulation. Under the Energy Policy Act of 2005, the two agencies were directed to enter into an MOU within six months of enactment. We accomplished this in two months, in part because we want to be in a position to better monitor gas markets this winter.

Importantly, with respect to the new anti-manipulation authorities the Congress gave the Commission in the Energy Policy Act of 2005, the Commission recently issued a notice of proposed rulemaking to prevent market manipulation with respect to Commission-jurisdictional natural gas and electric services. The Commission issued rules two years ago to help prevent the manipulation of gas and electric markets, but the new proposed rule, in conjunction with the new Natural Gas Act civil penalty authority in EPAct 2005, will provide a strong deterrent to market manipulation. The proposed rule, following the new statutory language, would make it unlawful for any entity, directly or indirectly, in connection with the purchase or sale of natural gas or transportation service subject to Commission jurisdiction, to:

- Use or employ any device, scheme, or artifice to defraud;
- Make material false statements or omit material facts; or
- Engage in any act, practice, or course of business that operates or would operate as a fraud or deceit upon any person.

As noted earlier, the Commission has limited jurisdiction over the price of natural gas. Through the Natural Gas Policy Act of 1978 and the Natural Gas Wellhead Decontrol Act of 1989, Congress deregulated most sales of natural gas, including imports from countries with which the United States has a free-trade agreement. The Commission's jurisdiction over wholesale sales is limited to sales of gas in interstate commerce by interstate pipelines, intrastate pipelines, local distribution companies (LDCs) and the affiliates of those entities (including marketers) for resale, so long as they do not produce the gas they sell. The Commission's regulation of such sales is through blanket certificates that were issued to entities that fall in these categories, authorizing them to make sales in interstate commerce (to anyone that is not a pipeline) for resale at negotiated rates.

As I mentioned at the beginning of my testimony, the Commission does regulate the interstate transportation rates for natural gas as well as crude oil and petroleum products. This regulation involves the rate to be paid for the transportation component of the delivered product, not the price of the commodity. Regarding natural gas, of the total delivered charge of approximately $17.00 per thousand cubic feet estimated by EIA to the Mid-Atlantic this winter, the interstate transportation portion from the production area would be about one dollar, or about 6 percent. For petroleum products, the amount that transportation contributes is approximately 1 percent of the total delivered cost.

In addition to setting rates for transportation of natural gas and monitoring for market manipulation in the commodity markets, the Commission stands ready to act on emergency filings to authorize more efficient use of our existing gas infrastructure in the Gulf of Mexico. For instance, the Commission received an emergency filing from Discovery Gas Transmission on October 11 at 10:30 AM requesting an exemption and waivers that would expedite the transportation of up to 300 million cubic feet per day of offshore natural gas. This gas supply was shut in as a result of hurricane damage to a Dynegy Inc. processing plant in Venice, Louisiana. This authorization, which was approved by the end of the same day, allows Discovery to re-route gas flows from offshore production fields that previously went to the Venice Processing Plant. Without such an innovative request and a quick response by the Commission, this gas supply would continue to be unavailable to gas consumers. The Commission also received an emergency filing from Stingray Pipeline for a tariff waiver to allow shut-in gas to flow and approved it by the end of the same day it was filed.

Since 2000, the Commission has recognized that there was a growing gap between the demand for natural gas and the gas supply of the North American continent. In this regard, the Commission has taken steps to reduce the processing time for its analysis and consideration of infrastructure projects, most notably through its pre-filing process, that actually commences Commission analysis prior to the filing of a formal application. This has resulted in major projects being approved and constructed to deliver gas from the Rockies region to markets in California and the Midwest.

Since the beginning of 2000, the Commission has certificated over 8,400 miles of pipeline. Also, the Commission's adoption of the "Hackberry Policy", which ceased economic (i.e., rate) regulation of LNG terminals, resulted in a significant increase in proposals to construct LNG terminals to received imported LNG. In the past few years, the Commission has approved eight new LNG terminals with 12 billion cubic feet per day of deliverability and expansions at two existing terminals that will in-

crease deliverability by 1.3 billion cubic feet per day. The Commission has also approved 1.7 billion cubic feet per day of pipeline capacity that would transport Bahamian LNG to Florida. In total, FERC has approved 15.0 billion cubic feet per day of deliverability from LNG. Still, there are proposals pending at FERC for 16.7 billion cubic feet per day of deliverability at new and existing terminals. Also, there is another 0.5 billion cubic feet per day of pipeline capacity pending to transport Bahamian LNG.

Our ability to provide the country with the necessary natural gas infrastructure has been greatly improved by Congress' passage of the Energy Policy Act of 2005. Specifically, this legislation simplifies and streamlines the processes for considering natural gas infrastructure projects filed with the Commission. For this I would like to thank Congress and Chairman Barton, in particular, for his leadership in helping to guide this bill to passage. I note that almost immediately after passage of the Act, the Commission and the California Public Utilities Commission (CPUC) filed a joint petition to dismiss the litigation associated with the CPUC's assertion that it should be the decisional agency for the siting of an LNG terminal in California.

The Commission is exploring opportunities to provide greater incentives to expand natural gas storage through pricing reform. More natural gas storage capacity will increase the flexibility of the industry to manage available supplies and may help dampen peak prices. Since 1988, our total underground natural gas storage capacity has increased by only 1.4 percent, while total national natural gas consumption has increased by over 24 percent. Additional storage capacity will not bring price relief this winter but over the long term pricing reform can promote storage capacity expansion, at both existing and new facilities. Congress did supply additional tools to promote gas storage, by allowing gas storage to be priced at market-based rates even if the project sponsor cannot prove that it does not possess market power. It is now up to the Commission, in light of the new authority in EPAct 2005, to implement pricing reforms that expand storage capacity while protecting consumers.

Even with this progress, there is a danger that we will not be able to meet our expected growing demand for natural gas in the near term. Existing natural gas production has been flattening—and this was before the effects of Hurricanes Katrina and Rita. Also, the newly approved LNG terminals that will fill the gap between domestic (and imported Canadian) production will not be available until 2008 at the earliest. Further, new projects to extract gas from the Rocky Mountains and bring it to market are slated to begin in 2008. Given these potential shortages, there are still regional interests that make it difficult to site the needed infrastructure, especially in the Northeast, which is most dependent upon gas supplies from outside of its region. Inability to strengthen the energy infrastructure will likely result in higher prices and greater price volatility.

In closing, the Commission is working diligently within its authorities to promote adequate and reliable infrastructure and to prevent market manipulation. We will closely monitor gas markets in the coming winter and take appropriate steps within our authorities to protect customers to the maximum extent possible. I would be happy to answer any questions that members of the subcommittee may have.

APPENDIX A

The following is a list of major projects approved by the Commission, but not built due to various reasons.

Project Name	Dispostion	Comments
Georgia Straits Crossing Pipeline CP01-176-000	Authorized 9/20/02	Canadians found a less expensive way to get the gas they needed.
Islander East Pipeline Company CP01-384-000	Authorized 9/19/02	Held up due to negative Clean Water Act funding
Algonquin Gas Transmission Company CP01-384-000		
Independence Pipeline CP97-315	Authorized 7/12/00 Order vacated	No market. Could not meet in-service date.
ANR Pipeline Co. (Supply Link) CP97-319-000		
Millenium Pipeline CP98-150	Authorized 9/19/02	Held up due to lack of CZMA consistency finding. Sponsors now reworking project to avoid Hudson River crossing.
Red Lake Gas Storage Co CP02-420-000	Proceeding terminated 6/4/03	Terminated due to denial of market based rates.

Project Name	Dispostion	Comments
Greenbrier Pipeline Company CP02-396-000	Approved 4/9/03	Could not fulfill requirement to get 90 percent of firm contracts for the gas.
Weaver's Cove CP04-36-000	Approved 7/15/05	Congressional opposition to LNG terminal causing the expenditure of federal funds to maintain a bridge (that was scheduled to be torn down) that needs to be removed to allow access for LNG tankers.

One of the many goals of the Energy Policy Act of 2005 was to strengthen the nation's natural gas infrastructure. The provisions in the legislation could possibly result in more approved projects reaching fruition. Those provisions include making the FERC the lead agency in processing all applications filed under Sections 3 and 7 of the Natural Gas Act. As lead agency, the FERC is tasked with setting a processing schedule by which all other permitting agencies with input into an infrastructure application must adhere. Further, the FERC is charged with establishing one federal record that is to be used in all appeals and rehearing of permitting actions. The Commission took a step towards implementing this provision in late September with a policy statement on the development of consolidated federal administrative records for judicial review of proceedings involving authorization of interstate natural gas pipelines and LNG facilities. Also, judicial appeals of FERC actions are to be heard in the federal appeals court where the proposed facility is located and, if any permitting agency does not comply with the FERC-established schedule, appeals can be made to the U.S. Court of Appeals for the District of Columbia. In addition, the FERC was named as the sole decisional agency regarding the siting and construction of LNG terminals and project sponsors of LNG terminals are now required to participate in the pre-filing program. Further, natural gas storage project sponsors can qualify for market-based rates even if they cannot prove that they do not have market power. These provisions, among other will serve to strengthen our natural gas infrastructure in a timely manner without compromising the environment.

Mr. SHIMKUS. Thank you. The Chair now recognizes the Honorable Reuben Jeffery III, Chairman of the Commodity Futures Trading Commission. You have 5 minutes, sir.

STATEMENT OF HON. REUBEN JEFFERY III

Mr. JEFFERY. Okay. Chairman Barton, Vice Chairman Shimkus, Ranking Member Boucher, members of the committee. I appreciate the opportunity to testify on behalf of the Commodity Futures Trading Commission concerning our oversight of energy futures markets.

The CFTC has been paying particularly close attention to futures trading in energy commodities, both before and since the recent hurricanes, given the importance of energy prices to every American. Based upon our surveillance and market oversight to date, we believe that the heating oil and natural gas futures markets that we regulate have been accurately reflecting the underlying fundamentals of these markets. In my testimony today, I will try to describe how the CFTC works to ensure that energy futures markets are free from manipulation, and will also share some observations concerning the current state of the futures markets for natural gas and heating oil.

Futures markets provide risk management tools that producers, distributors, commercial users of commodities such as natural gas and heating oil can use to protect themselves from unpredictable price changes. They also play a price discovery function, as participants in other markets look to futures markets for accurate information on supply, demand, and other factors. The CFTC's mission, under the Commodity Exchange Act, the so-called CEA, is to ensure that commodity futures markets operate in an open and com-

petitive way, free of manipulation or price distortions. Our focus is primarily on the regulated futures exchanges, such as with respect to energy, the New York Mercantile Exchange, known as NYMEX. The CFTC fulfills its obligation through a comprehensive program designed to identify and mitigate the potential for manipulation and other market abuses, and to ferret out and punish illegal behavior.

On every trading day, CFTC staff closely monitor trading activities on the exchanges to detect unusual activity or price aberrations that may indicate actual or attempted manipulation. The cornerstone of the CFTC's market surveillance, oversight of the markets, is their market surveillance program, as implemented through the Large Trader Reporting System. This requires traders to file confidentially with the CFTC daily reports concerning their positions in a particular contract.

On the enforcement side, the CFTC's Enforcement Division investigates and, as appropriate, prosecutes those who violate the Act, the CEA, through manipulation, false reporting, and trade practice abuses. Enforcement investigations are often conducted in cooperation with the Exchange and other regulators, such as FERC. In recent years, in the energy area alone, the CFTC has filed 32 enforcement actions against nearly 50 defendants, which have thus far resulted in civil penalties totaling approximately $300 million.

Now, turning to the current state of the futures markets for heating oil and natural gas, recent experience has shown that even small disruptions in production, refining capacity, or transportation networks can significantly affect prices in the face of high demand for energy. Given the scale of the disruptions caused by the various hurricanes, prices for heating oil and natural gas, as we are all painfully aware, have risen significantly. It is precisely during times when the overall market environment is volatile that the risk management and price discovery functions of futures markets are needed most by commercial users of energy markets and energy products.

Now, let me share some of our observations about the futures markets, specifically for heating oil and natural gas. First, with respect to a category of traders we hear about a lot, noncommercial traders, so-called speculators. This group, in the markets, has most recently held net short positions in both heating oil and natural gas futures markets. That is, they would benefit from falling, not rising, heating oil and natural gas futures prices. Second, a recent study by Commission economists of crude oil and natural gas, regarding the relationship between commercial and noncommercial users, so-called speculators and hedgers, is consistent with the view that speculators respond to price changes, that is, they are not the cause of price changes, per se.

Third, high futures prices and price volatility for heating oil and natural gas since the hurricane are signals of market fundamentals, reflecting expectations of the market participants, both commercial and non-commercial, in a time of very tight demand/supply balances, combined with the impact of damage caused to the energy infrastructure by the hurricanes. In other words, futures

prices, when futures markets are working properly, free of manipulation, reflect underlying fundamentals.

Finally, the actual delivery experience in heating oil and natural gas futures contracts over the past 2 years has not displayed unusual patterns consistent with any market manipulative corners or squeezes. Now, in light of the costs and impacts that heating oil and natural gas prices have on all consumers, we are very conscious of our responsibility at the CFTC to ensure that futures markets are fair, competitive, and free of manipulation. To that end, we will continue to conduct active oversight and close surveillance of these markets to ensure that they continue to function properly.

Thank you for having me here today and represent the Commission, and I look forward to your questions.

[The prepared statement of Hon. Reuben Jeffery III follows:]

PREPARED STATEMENT OF HON. REUBEN JEFFERY III, CHAIRMAN, U.S. COMMODITY FUTURES TRADING COMMISSION

Chairman Barton, Ranking Member Dingell, Chairman Hall, Ranking Member Boucher and Members of the Subcommittee: I appreciate the opportunity to testify on behalf of the Commodity Futures Trading Commission (CFTC) concerning the CFTC's oversight of energy futures and options markets. I am pleased to testify alongside Chairman Joseph Kelliher of the Federal Energy Regulatory Commission and Assistant Secretary Mark Maddox of the Department of Energy. Each of our agencies has a distinct and important function in the markets for energy products and we, at the CFTC, are committed to continuing inter-agency cooperation and coordination in order to ensure an effective and efficient regulatory oversight regime.

The CFTC has been paying particularly close attention to futures trading in energy commodities, both before and since the recent hurricanes, because of the importance of energy prices and supplies to the U.S. economy and to every U.S. citizen. Both the level and the volatility of prices will react to new information. If such reactions are based on accurately reported information about market fundamentals, such as short- or long-term changes in supply or demand, then the markets are performing their proper price discovery function. Based on our surveillance so far, we believe that heating oil and natural gas futures markets have been accurately reflecting the underlying fundamentals of these markets.

In my testimony today, I will describe the CFTC's oversight of the energy futures markets. I will also share my observations on the current state of the futures markets for natural gas and heating oil.

A. THE COMMODITY FUTURES TRADING COMMISSION'S CORE MISSION

Futures markets play a critically important role in the U.S. economy. They provide risk management tools that producers, distributors, and commercial users of commodities (such as natural gas and heating oil) utilize to protect themselves from unpredictable price changes. The futures markets also play a price discovery role as participants in related cash and over-the-counter (OTC) markets look to futures markets to discover prices, which accurately reflect information on supply, demand, and other factors. Both functions would be harmed by manipulation of prices.

The CFTC's primary mission under the Commodity Exchange Act (the CEA) is to ensure that the commodity futures and options markets operate in an open and competitive manner, free of price distortions. The CFTC fulfills this obligation through a comprehensive, multi-faceted program that is designed to identify and mitigate the potential for manipulation and other market abuses, and to ferret out and punish illegal behavior.

B. THE CFTC'S MARKET OVERSIGHT PROGRAM

To the extent possible, the CFTC attempts to proactively identify and mitigate the potential for price manipulation. When any new futures or options contract is listed for trading on a futures exchange, the CFTC staff reviews the terms and conditions of the contract to determine if it is readily susceptible to manipulation. For example, although most futures contracts are ultimately cash-settled (meaning participants offset their positions through the exchange by paying or receiving money rather than by making or taking delivery of the actual commodity), the CFTC carefully ex-

amines those contracts that permit physical delivery (as do key energy contracts on the New York Mercantile Exchange, or NYMEX) to ensure that the deliverable supply of the commodity is sufficient to facilitate orderly deliveries and liquidations at contract expiration dates, and to prevent any would-be manipulator from cornering or squeezing the market.

Every trading day, CFTC staff closely monitors trading activities on the exchanges to detect unusual activity or price aberrations that may indicate actual or attempted manipulation. The cornerstone of the CFTC's market surveillance program is the Large Trader Reporting System. The Large Trader Reporting System requires clearing members, futures commission merchants, and foreign brokers to file daily reports with the CFTC concerning their own and customer positions in a particular contract. This reporting requirement is triggered when a trader holds a position at or above specific reporting levels set by CFTC's regulations. Through Large Trader Reports, the CFTC becomes aware of concentrated and coordinated positions that might be used by one or more traders to attempt manipulation.

In addition to the daily Large Trader Reporters, the CFTC may issue a "special call" to a reportable trader or firm. Through these special calls, the CFTC can obtain additional, more detailed information on a participant's trading and delivery activity, and on the trader's positions and transactions in the underlying commodity.

Market surveillance is not conducted exclusively by the CFTC. Each futures exchange is required under the CEA to affirmatively and effectively supervise trading, prices, and positions. The CFTC examines the exchanges to ensure that they have devoted appropriate resources and attention to fulfilling this important responsibility. The CFTC staff's findings from these rule enforcement reviews are reported to the CFTC, and are publicly posted on the CFTC web site (www.cftc.gov). Furthermore, exchanges must impose position limits, where appropriate, to guard against manipulation. For example, NYMEX imposes spot month speculative limits on its energy futures contracts.

When the CFTC's surveillance staff identifies a potential problem situation, the CFTC engages in an escalating series of regulatory steps to work to correct the problem. Typically, the CFTC's staff consults and coordinates its activities with exchange staff. CFTC staff contacts the largest long- and short-side traders to obtain information on, among other things, their delivery intentions and capability, and their price objectives in liquidating trades. The traders are advised of the CFTC's concern regarding the orderly expiration of the futures contract, and reminded that they are expected to trade in a responsible manner. This "jawboning" activity by CFTC staff and the exchanges is usually quite effective in resolving most potential problems. However, when staff is not satisfied that it has been successful, a more formal warning will be issued to the trader in writing of the CFTC's concern about the possibility of manipulation.

Given the CFTC's statutory role as an oversight regulator, and the exchanges' statutory responsibility to monitor trading to prevent manipulation, the CFTC expects that the exchanges will take the lead in resolving problems in their markets, either informally or through emergency action. If an exchange fails to take actions that the CFTC deems necessary, the CFTC has broad emergency powers to direct the exchange to take such action as in the CFTC's judgment is necessary to maintain or restore orderly trading in, or liquidation of, any futures contract. Such actions could include limiting trading to liquidating transactions, imposing or reducing limits on positions, requiring the liquidation of positions, extending a delivery period, or closing a market. Fortunately, most issues are resolved without the need for the CFTC's emergency powers. The fact that the CFTC has had to take emergency action only four times in its history demonstrates its commitment not to intervene in markets unless all other efforts have been unsuccessful.

C. THE CFTC'S ENFORCEMENT PROGRAM

The CFTC aggressively pursues any individual or entity that intentionally seeks to disrupt or undermine the integrity of markets for trading commodity futures and options contracts. The CFTC's Division of Enforcement investigates and, as appropriate, prosecutes individuals and entities for violations of the CEA or CFTC regulations, including manipulation, false reporting, and trade practice abuses (e.g., wash sales and accommodation trading) involving trading on markets subject to CFTC oversight. The proposed sanctions sought in the CFTC's enforcement actions serve the dual purposes of obtaining redress for the charged violations and acting as a deterrent for would-be violators by sending a clear message that improper conduct will not be tolerated.

The CFTC's Division of Enforcement may receive referrals from several sources: the CFTC's own market surveillance staff; the Division's interaction with compli-

ance staff at the relevant exchange; market participants and complaints from members of the public; and other State, Federal, and international regulatory authorities. Upon determining that further inquiry concerning the referral is warranted, Enforcement staff immediately gathers information internally available within the CFTC and from the exchanges, and conducts relevant interviews. The CFTC may grant formal administrative subpoena authority, which enables its Division of enforcement to obtain documents (for example, audio recordings, e-mail and trade data), and testimony from third parties.

The investigation may be conducted in cooperation with the applicable exchange and other regulators such as the Federal Energy Regulatory Commission (FERC). On October 12, 2005, the CFTC and FERC executed a Memorandum of Understanding, pursuant to provisions of the Energy Policy Act of 2005, to ensure that information requests to markets within the respective jurisdiction of each agency are properly coordinated to minimize duplicative information requests, and to address the confidential treatment of proprietary energy trading data. It will enable both the CFTC and FERC to work actively to assure the price integrity of the energy markets.

If warranted at the conclusion of its investigation, the Division of Enforcement will recommend that the CFTC initiate a civil injunctive action in Federal district court or an administrative proceeding. The CFTC may obtain temporary statutory restraining orders and preliminary and permanent injunctions in Federal court to halt ongoing violations, as well as civil monetary penalties, appointment of a receiver, the freezing of assets, restitution to customers, and disgorgement of unlawfully acquired benefits. Administrative sanctions may include orders suspending, denying, revoking, or restricting registration; prohibiting trading; and imposing civil monetary penalties, cease and desist orders, and orders of restitution.

The CFTC also may refer an enforcement matter to the Department of Justice. Criminal activity involving commodity-related instruments can result in prosecution for criminal violations of the CEA and for violations of federal criminal statutes, such as mail fraud or wire fraud.

Not all investigations necessarily lead to the filing of a CFTC enforcement action. For example, in July 2003, the CFTC and FERC issued a joint statement of the results of investigations into a price spike in natural gas that occurred in late February 2003. The CFTC's investigation focused on exchange-traded futures and options trading in natural gas, including obtaining and listening to numerous audiotapes of conversations between clerks on the NYMEX floor and the customers who were using the markets. The CFTC found nothing in its analysis to suggest any manipulative activity in the natural gas futures and options market at that time.

Similarly, in August 2004, the CFTC issued a statement that it had completed its investigation of the sharp upward movement in prices in the natural gas market that occurred in late 2003. The investigation, which was conducted in full cooperation with FERC and enhanced by the cooperative effort of NYMEX, did not uncover evidence that any entity or individual engaged in activity that violated the CEA with respect to natural gas trading in late 2003. The CFTC's investigation included the extensive review of documents and audio recordings produced by numerous companies and individuals in the natural gas markets, including physical and financial traders, industry analysts, and operators of natural gas storage facilities, as well as testimony and interviews of dozens of individuals.

In recent years, the CFTC's Enforcement program has conducted an extensive investigation of alleged abuses in energy-related markets. This investigation has focused on energy trading firms that allegedly have engaged in: 1) reporting false, misleading or knowingly inaccurate market information to natural gas reporting firms (including price and volume information) which affects or tends to affect the market price of natural gas, including futures prices as traded on NYMEX; and 2) manipulation or attempted manipulation which could affect prices of NYMEX natural gas futures contracts. The CFTC's enforcement actions in the energy sector reflect an approach to market oversight that emphasizes tough enforcement actions against proven wrongdoers. As a result of its efforts in investigating wrongdoing in the energy markets, the CFTC has filed 32 enforcement actions charging 27 companies and 22 individuals. These enforcement actions, which are identified more fully in the Appendix, have thus far resulted in civil monetary penalties totaling nearly $300 million, among other sanctions.

D. CURRENT STATE OF FUTURES MARKETS FOR HEATING OIL & NATURAL GAS

Having described the process the CFTC uses to ensure that futures markets are operating in an open and competitive manner, I will now describe what CFTC staff has recently observed in the futures markets for heating oil and natural gas. These

observations are directed at the following: 1) participation rates of non-commercial traders, the so-called "speculators"; 2) current futures market prices for contracts with delivery dates during the upcoming winter heating season; 3) recent delivery experience; and 4) the relationship between crude oil futures prices and heating oil futures prices.

1. Participation Rates of Non-Commercial Traders

Data from the CFTC's Large Trader Reporting System help answer questions about the role of non-commercial traders in futures markets for heating oil and natural gas. A weekly summary, called the Commitments of Traders (COT) Report, is based on information gathered through the Large Trader Reporting System. The CFTC publicly releases the COT Report every Friday afternoon via its web site (www.cftc.gov).

A snapshot of positions in the futures markets for heating oil and natural gas, current as of October 25, 2005, shows that as a group, non-commercial traders—that is, those who are commonly labeled as speculators - have most recently held net short positions in both heating oil and natural gas futures markets. In other words, non-commercial traders have held positions that will gain in value if prices for heating oil or natural gas futures fall. In the heating oil futures market, non-commercial traders hold approximately 10 percent of the open long positions and 14 percent of the open short positions. These numbers reflect a net short position since the total number of long positions must equal the total number of short positions in the overall market. In the natural gas futures market, non-commercial traders hold approximately 12 percent of the open long positions and 15 percent of the open short positions. In other words, as of October 25, 2005, non-commercial traders would benefit from falling—not rising—heating oil and natural gas futures prices.

Positions in both heating oil and natural gas futures are held predominately by commercial traders - that is, producers, refiners, and retailers, who are commonly known as hedgers. In the heating oil futures market, nearly 59 percent of outright long positions (i.e., positions that will gain value if prices rise) are held by commercial traders compared to 10 percent for non-commercial traders. In the natural gas futures market, approximately 44 percent of outright long positions are held by commercial traders compared to 12 percent for non-commercial traders.[1]

Managed money traders, including those called hedge funds, fall into the category of non-commercial traders because they do not have a commercial interest in the product upon which the futures contract is written. As a group, managed money traders represent a significant portion of the relatively small percentage of non-commercial positions in both heating oil and natural gas futures markets. On average, managed money traders make up approximately 61 percent of the non-commercial long positions and 92 percent of the non-commercial short positions in the natural gas futures markets. In the heating oil futures market, managed money traders make up 85 percent of the non-commercial long positions and 69 percent of the non-commercial short positions.

Figures 1 and 2 provide a snapshot of participation by managed money traders in the November 2005 heating oil futures contract and the December 2005 natural gas futures contract traded at NYMEX. The net positions of managed money traders as a group are displayed by the vertical columns. These positions are reported, in thousands of contracts, for all futures and options combined (defined as "AFOC" in Figures 1 and 2). Each heating oil contract is written on 1,000 barrels (equivalent to 42,000 gallons) of heating oil. Each natural gas contract is written on 10,000 million British Thermal Units (mmBTU) of natural gas. The continuous line on each chart shows the end-of-day price for the nearby futures contract. Both charts show that managed money traders have most recently held net short positions in both markets, and they would benefit from falling—not rising—futures prices. The charts also show that while the positions of managed money traders and prices generally move together, there are several instances where prices move independently from the positions of managed money traders. A conclusion that can be drawn from this chart is that managed money traders, and speculators in general, do not have perfect foresight.

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[1] A large percentage of the remaining long positions are held by traders whose positions are too small to meet the reporting size threshold for inclusion in the Commission's Large Trader Report. The remaining long positions are held as part of so-called "spread" positions across contract months. A spread position is established by simultaneously taking a long position in one futures contract and taking a short position in a related contract. Although spread positions are generally regarded as speculative, the speculation is based on relative price differences between contracts. Spread strategies do not depend on, and are therefore unrelated to, the overall level or direction of the market.

The role of non-commercial traders in futures markets has been studied extensively, both by the CFTC's economists and others. One lesson from these studies is that non-commercial traders are necessary in order for futures markets to facilitate the needs of hedgers. In order for hedgers to reduce the risk that they face in their day-to-day commercial activities, they need to trade with someone willing to accept the risk the hedger is trying to shed. Therefore, both hedgers and speculators are necessary for the futures markets to perform their vital role of transferring risk to those who are willing to accept it for a price.

A recent study by the CFTC's economists demonstrates the relationship between speculators and hedgers. The study shows that when a commercial trader sells, it will often be a managed money trader who takes the other side of the transaction; when a commercial trader buys, it will often be a managed money trader who is the seller. This observation is consistent with the notion that managed money traders respond to price changes; they are not the cause of price changes.

2. A Snapshot of Current Futures Market Prices

As I mentioned earlier, the futures markets serve an important price discovery function. As a general policy, the CFTC refrains from predicting prices. However, futures market prices can be viewed as reflecting the markets' aggregate expectation of future spot market prices. Each table below displays current (as of 10/31/2005) futures prices for contracts expiring during the upcoming winter heating season. These futures prices show, based on current information, that the futures markets expect spot market prices to remain close to current levels. These prices and expectations are revised continuously by the market as new information becomes available.

Heating Oil Futures Prices

U.S. dollars and cents per gallon

Delivery Date	Futures Price as of 10/31/2005
December 2005	1.824
January 2006	1.870
February 2006	1.889
March 2006	1.871

Natural Gas Futures Prices

U.S. dollars and cents per million British thermal units (mmBtu).

Delivery Date	Futures Price as of 10/31/2005
December 2005	$12.14
January 2006	$12.55
February 2006	$12.56
March 2006	$12.28

Here I should briefly mention what are, in our opinion, the primary causes of the recent high prices and price volatility for heating oil and natural gas. In recent years, demand for petroleum products and natural gas has risen faster than have supplies of these commodities. This has created very tight demand/supply balances in these markets. In economists' jargon, both supply and demand for heating oil and natural gas are price inelastic in the short run. Therefore, changes in supply or demand can, in the short run, have disproportionately large effects on price. In addition, futures markets are by their nature anticipatory; they incorporate into prices a probabilistic estimate of possible future changes in supply and demand. For example, early summer weather forecasts of an unusually active hurricane season this year, and memories of the damage caused last year by Hurricane Ivan, had already caused the natural gas futures market to price-in some possible damage from summer hurricanes well before Hurricane Katrina hit the Gulf Coast. Of course, when Katrina did hit, it did substantially more damage to the energy infrastructure than the futures market had anticipated, and prices increased further. The impact of these storms has significantly changed the fundamentals of these markets. Hurricanes Katrina and Rita have caused cumulative losses of Gulf production of 74.7 million barrels of crude oil (equivalent to about 5 days of crude inputs into U.S. re-

fineries) and 381 billion cubic feet of natural gas (equivalent to about 7 days of U.S. consumption). Shut-ins of Gulf production of crude oil and natural gas remain at relatively high levels. In addition, outages of crude oil refineries and natural gas processing facilities continue to impact the markets. Nevertheless, heating oil and natural gas prices have recently fallen from their post-Katrina highs in response to declining crude oil prices and apparent declines in demand in response to high prices and generally mild weather.

The direction of heating oil and natural gas prices this winter will be substantially determined by how quickly the energy infrastructure comes back on-line and by winter weather. Current heating oil and natural gas prices, while down a bit from their highs, are by historical standards at high levels.

3. Recent Delivery Experience

Figures 3 and 4 show deliveries for heating oil and natural gas futures contracts since the beginning of 2004. The vertical columns depict the number of contracts delivered. The number of contracts corresponds with numbers displayed on the left-hand axis of the figures. The continuous line, corresponding to the right-hand axis, shows the size of the deliveries as a percentage of the maximum number of open positions established for each contract month. For example, if the maximum number of open positions over a contract's life was 100,000 contracts, and 4,000 positions were settled by delivery, the continuous line would represent 4 percent. The remaining open positions are settled by offset, that is, by taking an equal and opposite futures position that brings the trader's net position to zero.

Since futures contracts are primarily risk management contracts, positions are almost always settled by offset. Across all futures markets, less than one percent of open futures positions are settled by delivery. In physically settled futures contracts, such as heating oil and natural gas futures, close scrutiny of the delivery process is vitally important for preventing corners or squeezes. This process is watched closely by the CFTC surveillance staff and the exchanges. A trader holding a large long position into the delivery process can expect that his actions will be closely monitored. The CFTC surveillance staff looks at many sources of information in addition to actual deliveries. The actual delivery experience in heating oil and natural gas does not display any unusual patterns consistent with a corner or squeeze during this period. (Note: Each heating oil contract is written on 1,000 barrels (equivalent to 42,000 gallons) of heating oil. Each natural gas contract is written on 10,000 million British Thermal Units (mmBTU) of natural gas.)

4. The Relationship between Crude Oil Futures Prices and Heating Oil Futures Prices

A common trading strategy is to simultaneously establish offsetting positions between crude oil futures contracts and futures contracts for the products refined from crude oil, such as heating oil traders commonly call this trading strategy the "crack spread," referring to the cracking process of turning crude oil into refined products. The chart below displays the heating oil crack spread, using nearest-to-delivery futures contracts, over the past year. This chart shows that the value of the crack spread increased significantly following Hurricanes Katrina and Rita. In other words, prices for heating oil have moved much higher, on a percentage basis, than prices for crude oil. A conclusion that can be drawn from the behavior of the heating oil crack spread is that the increase in heating oil prices immediately following Hurricanes Katrina and Rita were driven primarily by disruptions to the refining process, and not as much from increases in the level of crude oil prices. In recent weeks, the heating oil crack spread has fallen, but still remains higher than the normally prevailing level.

E. CONCLUSION

In U.S energy markets, recent experience has shown that even small disruptions in production, refining capacity, or transportation networks can significantly affect prices in the face of high demand for energy products. Therefore, given the scale of disruptions caused by Hurricanes Katrina and Rita, it is not surprising that current prices for heating oil and natural gas, as well as other energy products have risen significantly. It is precisely during times when the overall market environment is volatile that the risk-management and price-discovery features of futures markets are needed most by commercial users of energy products. All the evidence that we have seen is consistent with the notion that futures markets for heating oil and natural gas and other energy products have been properly performing their risk management and price discovery roles. The staff of the Commission will continue to conduct very close surveillance of these markets to ensure that they continue to function properly. Finally, improper conduct will not be tolerated, and the CFTC will

continue to pursue aggressive enforcement actions against those who break the rules.

This concludes my remarks. I look forward to your questions.

Mr. SHIMKUS. Thank you. Now, the Chair recognizes Mr. Mark Maddox, Principal Deputy Assistant Security of the Office of Fossil Energy. Thank you.

STATEMENT OF MARK MADDOX

Mr. MADDOX. Mr. Shimkus, members of the committee, subcommittee. I am pleased to be here today to discuss the supply and demand for heating oil this winter. I will also discuss the natural gas situation and its relationship to the heating oil market.

America's homes and businesses are heated predominantly by three fuels: heating oil, natural gas, and electricity, the last of which is used for heat pumps and resistance heating. Heating oil provides heat to only about 7 percent of the fuel consumed by residences on a national basis, but the demand is not uniformly distributed. The Northeast consumes about 73 percent of all the heating oil used in this country.

Heating oil and natural gas each have economic and security of supply advantages. Heating oil supplying the Northeast comes from a number of sources. This diversity of supply has the obvious advantage of increased security. It would be rare for more than one source of supply to falter at the same time. The disadvantage is that most of these sources are distant from consumers, and they are subject to interruptions due to shipping problems.

Unusual conditions can bring to light weaknesses in any system. In the late winter of 1999-2000, for example, the country suffered a severe cold spell. Just as demand was rising to record levels, domestic natural gas production slumped in the producing regions, harbors froze, North Atlantic storms kept ships at sea, and barges could not move. Heating oil availability became spotty. Dealers were rationing supplies and prices surged.

In response to that incident, the State and Federal Governments have taken several actions to improve the security of supply. Coordination between the States and Federal Government has been improvement, and the State energy offices are in close contact with the Department of Energy. The Coast Guard has dedicated the necessary resources to assure that ports and rivers in the Northeast remain ice-free and open to ship and barge movements. We also created a 2 million barrel inventory of heating oil, called the Northeast Home Heating Oil Reserve, which is stored in New York Harbor, New Haven, Connecticut, and Providence, Rhode Island. Since 2000, despite some severe winters, these measures have helped assure that the Northeast has not suffered from any shortages of heating fuel.

The situation going into the winter of 2005 and 2006 will be different from what we have grown to expect. Crude oil prices have been rising, and this year, we realized the excess capacity had shrunk to a minimum level. In late August, Hurricane Katrina devastated the central Gulf Coast. A week later, Hurricane Rita did the same to the western Gulf Coast. The impact on the domestic oil industry was significant. At its worst point, virtually all of the production of oil and gas in the Gulf of Mexico was halted.

The Administration responded immediately to the hurricanes by taking a number of crucial measures to minimize the impact of the storm on the Nation's energy supply, and they are outlined in my submitted testimony. Today, the heating oil situation is less clear. While inventories of other products have been rising over the last several weeks, inventories of distillates have dropped, but are comparable to last year's levels. However, the outlook is not bleak. The high prices occasioned by the hurricanes have caused refineries all over the world to put available capacity to work. Furthermore, based on our conversations with industry, we expect that distillates will continue to enter the U.S. from overseas.

The other factor that makes the heating oil situation unclear is that our supplies of natural gas from the Gulf of Mexico were so thoroughly disrupted. However, we still project that we will meet or exceed the predicted 3.2-tcf goal. Whether that inventory will be adequate will depend on the rates of production from domestic fields going forward.

Prices for natural gas are expected to remain high. According to the Energy Information Administration, Henry Hub natural gas prices are expected to average around $9.00 per thousand cubic feet, or mcf, in 2005, and $8.70 in 2006.

The Administration has taken every action available to the government. The Strategic Petroleum Reserve sites are all operating and capable of drawing down and selling oil as quickly as may be required. The Northeast Home Heating Oil Reserve stands at its maximum authorized volume of 2 million barrels. To encourage reduced energy consumption, the Administration has launched an energy efficiency and conservation campaign, and is educating consumers on steps they can take to reduce their utility bills.

I would like to conclude by saying that the Department of Energy stands ready to make the heating oil reserve available immediately in the event of a supply disruption.

That concludes my prepared testimony. I will be happy to answer questions.

[The prepared statement of Mark Maddox follows:]

PREPARED STATEMENT OF MARK MADDOX, PRINCIPAL DEPUTY ASSISTANT SECRETARY, OFFICE OF FOSSIL ENERGY, DEPARTMENT OF ENERGY

Mr. Chairman and members of the Subcommittee. I am pleased to be here today to discuss the Nation's energy supply and especially the supply and demand for heating oil this winter. I will also discuss the natural gas situation and its relationship to the heating oil market.

America's homes and businesses are heated predominantly by three fuels, heating oil, natural gas and electricity, the last of which is used for heat pumps and resistance heating. Heating oil provides heat to only about 7 percent of the fuel consumed by residences on a national basis, but the demand is not uniformly distributed; the Northeast consumes the about 73 percent of all the heating oil used in the country.

Heating oil and natural gas each have economic and security of supply advantages. Heating oil supplying the Northeast comes from a number of sources:

- Oil refined along the Gulf of Mexico is transported by water and by the Colonial Pipeline to the New York City gate;
- Refiners in New Jersey, Pennsylvania and Delaware ship their production to the Northeast by pipeline and by water;
- Imports mainly from Canada, the Caribbean, and Europe arrive by ship.

This diversity of supply has the obvious advantage of increased security: It would be rare for more than one source of supply to falter at the same time. The disadvantage is that most of these sources are distant from consumers and they are subject to interruptions due to shipping problems. Historically, we have been concerned that

severe winter weather could freeze ports and delay ship movements at exactly the time that demand would be surging.

Unusual conditions can bring to light weaknesses in any system. In the late winter of 1999-2000, for example, the country suffered a severe cold spell. Just as demand was rising to record levels, domestic natural gas production slumped in the producing regions, harbors froze, North Atlantic storms kept ships at sea and barges could not move. Heating oil availability became spotty; dealers were rationing supplies and prices surged.

In response to that incident, the state and Federal governments have taken several actions to improve the security of supply. Coordination between the states and the Federal government has been improved, and the state energy offices are in close contact with the Department of Energy. The Coast Guard has dedicated the necessary resources to assure that ports and rivers in the Northeast remain ice free and open to ship and barge movements. We also created a 2 million barrel inventory of heating oil called the Northeast Home Heating Oil Reserve, which is stored in New York Harbor, New Haven, Connecticut and Providence, Rhode Island. Since 2000, despite some severe winters these measures have helped assure that the Northeast has not suffered from any shortages of heating fuel.

The situation going into the winter of 2005-06 will be different from what we have grown to expect. Recent world economic growth caused a surge in oil demand that outstripped forecasts. Worldwide investment in oil exploration and production over the last ten years has been insufficient to maintain the wide margin of production capability above current demand that we have been used to. In addition, investment in refining has lagged demand growth, in large part because of the low returns on capital that beset the industry for many years. As a result, crude oil prices have been rising, and this year we realized that excess capacity had shrunk to a minimal level, and that Saudi Arabia and other member countries of the Organization of Petroleum Exporting Countries no longer had the ability to increase production and rapidly stabilize or reduce oil prices. During the summer of 2005, everyone realized that fuels for heating would be expensive this winter. However, inventories were building and we expected to go into the winter with the best inventory picture that we have had in years.

Hurricane season changed that. In late August, Hurricane Katrina devastated the Central Gulf Coast. A week later Hurricane Rita did the same thing to the Western Gulf Coast. The impact on the domestic oil industry was significant. At its worst point, virtually all production of oil and gas from the Gulf of Mexico was halted.

The Administration responded immediately to the hurricanes by taking a number of crucial measures to minimize the impact of the storm on the nation's energy supply:

- The Department worked to get power to the interstate pipelines that were essential to ensuring adequate supplies of refined products to the southeast and east coast.
- We authorized loans from the Strategic Petroleum Reserve to refiners in the Gulf region and the Midwest whose scheduled deliveries had been disrupted.
- The President authorized the sale of oil from the Strategic Petroleum Reserve to help keep markets well supplied at a time when there were widespread fears of looming shortages.
- We reached an agreement with the International Energy Agency for its members to release an additional 30 million barrels of crude oil and refined products to world markets.
- The Environmental Protection Agency provided temporary waivers allowing the early use of winter blend gasoline.
- The Department of Homeland Security rescinded legal restrictions on tanker transportation of fuel supplies.
- The Department of the Interior's Minerals Management Service immediately began to streamline processes for various permit approvals to resume production and expedited reviews of requests for temporary barging of oil until pipelines could be repaired.
- The Treasury Department increased the flexibility available to fuel distributors to meet diesel fuel demand by waiving penalties for highway use of "dyed" diesel fuel normally restricted to off-highway use.
- The Navy and Coast Guard worked to clear shipping channels in the Gulf and the Lower Mississippi River.
- And we worked with European allies to provide extra cargo tankers, as well as refined product to help supply the American gasoline market. These steps had a positive effect and helped calm the markets.

We do, however, want to note that additional facilities were shut-in due to Hurricane Wilma, resulting in an approximately four percent increase in shut-in produc-

tion. These facilities did not sustain any damage and therefore, are expected to come back on line in the next few days. Nevertheless, as of early this week, 223 production platforms and 6 drilling rigs were still evacuated—the equivalent of 27 percent and 4 percent, respectively, of all platforms and rigs. Approximately 100 platforms and rigs were destroyed by the storms. Shut in oil production still exceeds one million barrels of oil per day, or 68 percent of expected daily production from the Gulf. Similarly, shut in gas production from the Gulf is 5.6 billion cubic feet per day, equal to 54 percent of expected production. So far the country has foregone the production of 71 million barrels of oil and 360 billion cubic feet of gas during this time.

On shore, the damage to refineries, gas processing plants, and power lines was equally serious. Over two million barrels of daily refining capacity was shut down. While onshore pipelines were not damaged, the lack of power meant drastically reduced operations. And when the pipelines came back into service there was not enough refined product to keep them operating at capacity.

To a large extent the U.S. petroleum industry is making tremendous progress in recovering from the hurricanes, and it is a tribute to the workers in the Gulf region, many of whom have lost their homes and possessions, that they have done so much to restore electricity, pipelines, refineries and producing operations to service. At this time there are still four refineries with about one million barrels of capacity that have not returned to production, but two of these are expected to come back on line in November.

The product pipeline problems that created shortages of gasoline along the East Coast have been corrected. While crude oil production in the Gulf of Mexico is still seriously hampered, imports are more than sufficient to meet demand, and inventories of crude oil are high and increasing. Furthermore, as refineries have come back on line and gasoline imports have continued at a high rate, gasoline is in ample supply. Inventories are rising and prices are declining from their peak.

The heating oil situation is less clear. While inventories of other products have been rising over the last several weeks, inventories of distillates have dropped. To some degree that is because the U.S. economy is still strong and the demand for diesel fuel has not abated, and refineries as they have come back on line are emphasizing gasoline production. However, the outlook is not bleak. The high prices occasioned by the hurricanes have caused refineries all over the world to put all available capacity to work. Contrary to recent talk about the growth in demand for distillates in Europe, and many predictions that there will be no imports this winter, imports surged last week. Furthermore, based on our conversations with industry we expect that distillates will continue to enter into the U.S. from all over the world, but especially from Asia.

As we actually go into winter, the demand for distillates will increase everywhere. However, that demand will be offset by the increase in domestic supply of distillates as refineries continue to come back on line.

The other factor that makes the heating oil situation unclear is that our supplies of natural gas from the Gulf of Mexico were so thoroughly disrupted. Natural gas and distillates compete in many applications, and in the case of a disruption in supply for one product, a demand increase for the still available product can be nearly instantaneous. Prior to the hurricanes, industry observers believed that the target inventory level of 3.2 trillion cubic feet of natural gas entering the heating season would be achieved, and we still project that we will meet or exceed that goal, despite the disruption caused by the hurricanes. Whether that inventory will be adequate will depend on the rates of production from domestic fields, which in turn will be largely dependent upon the recovery of production and treatment facilities in the Gulf of Mexico and along the coast. It will also depend on the severity of the weather and the increased demand it could create.

Prices for natural gas are expected to remain high. According to the Energy Information Administration's October Short-Term Energy Outlook, under the baseline weather case, Henry Hub natural gas prices are expected to average around $9.00 per thousand cubic feet, or mcf, in 2005 and around $8.70 per mcf in 2006.

Total natural gas demand is projected to fall by 1.2 percent from 2004 to 2005 due mainly to higher prices, but recover by 3.0 percent in 2006 due to an assumed return to normal weather and a recovery in consumption by the industrial sector, which is projected to increase by about 6 percent over 2005 levels. Residential demand is projected to decline slightly from 2004 to 2005 mostly because of relatively weak heating-related demand during the first quarter, while industrial demand is estimated to decline by nearly 8 percent over the same period due to the much higher prices for natural gas as a fuel or feedstock.

By 2006, both end-use sectors recover somewhat with residential demand estimated to increase 2.6 percent from 2005 levels and industrial demand increasing by 6 percent. The industrial rebound in 2006 is partly because of assumed reactiva-

tion of damaged industrial plants in the Gulf of Mexico region but also reflects renewed fuel demand growth as domestic industrial plants adjust to higher prices. Power sector demand growth continues through the forecast period along with electricity demand growth. The pace is slower than the 5.7-percent rate projected for 2005 because an unusually hot summer and high cooling demand boosted 2005 growth significantly.

Domestic dry natural gas production in 2005 is expected to decline by 3.0 percent, due in large part to the major disruptions to infrastructure in the Gulf of Mexico from both Hurricanes Katrina and Rita, but increase by 4.2 percent in 2006. Working gas in storage as of October 7 was estimated at 2.99 trillion cubic feet, a level 162 billion cubic feet below 1 year ago but still 1.2 percent above the 5-year average.

About 15 percent of our natural gas comes from Canada via pipeline. Otherwise, there is not much opportunity to import gas, and the possibility for a surge of Canadian gas this winter is diminished because the expanding Alberta oil sands industry is a very heavy consumer of natural gas. Liquefied natural gas is a valuable but still relatively minor element in our natural gas supply. While it is an integral and essential part of the market, especially in Boston, the spot market for that product is so small that we cannot count on it for measurable relief in the event of shortages due to weather.

Faced with this situation, the Administration has taken every action available to the Government. First, the supply of crude oil appears to be ample, in part due to the decision by the President and the Department to use the Strategic Petroleum Reserve. Since the hurricanes we have loaned 10.8 million barrels of oil and sold 11 million barrels. In addition, the sale of oil was coordinated with the other member countries of the International Energy Agency. The United States has been able to import so much refined product during the last month in large part because the release of those products from strategic storage in Europe and Asia created the necessary price differentials for traders to export the products to the United States.

The Strategic Petroleum Reserve storage sites are all operating and capable of drawing down and selling oil as quickly as may be required. Further, we have made it clear to industry that if any individual company is having trouble finding feedstock for its refineries, we stand ready to make loans as necessary to assure the refineries operate at maximum capacity. We do not foresee shortages this winter due to shortages of crude oil.

The only program directly affecting the availability of heating oil is the Northeast Home Heating Oil Reserve. The Reserve stands at its maximum authorized volume of 2 million barrels. The companies holding the oil for the Government are contractually bound to complete delivery of all the oil within 10 days of the Government contracting to sell the inventory. Our method for selling the heating oil is an internet-based interactive auction system, and we are ready to make the oil available, conduct an auction and award contracts within 48 hours of a declaration by the President of a severe petroleum supply interruption and subsequent authorization by the Secretary.

Beyond these efforts, it is our belief that the markets are acting to make the best of what has been a severely disrupted fall season. Nevertheless, now that the Hurricane season is coming to a close, fears are diminishing and prices are receding. The wholesale price of heating oil peaked at about $2.20 per gallon early in October, and is down about $0.30 per gallon from that point. While low inventories for distillates present the possibility of volatility, and the price of natural gas, heating oil and distillates in general will be high throughout the winter, the awareness that high prices brings will cause people to use natural gas and oil more sparingly and to take what measures they can to reduce consumption.

To encourage reduced energy consumption, the Administration has launched an energy efficiency and conservation campaign aimed at educating consumers on steps they can take to reduce their utility bills. Senior Department of Energy officials, led by Secretary Bodman, have been traveling the country to encourage consumer conservation efforts. We are also working with energy-intensive businesses and industries on ways to conserve. And the President has called on the Federal government to lead by example and conserve its own energy use.

Additionally, the Department has published the Energy Saver$ booklet, an informative guide for your constituents with helpful tips on saving energy and money at home. Both the President and Secretary Bodman have encouraged Federal agencies and employees to use these reference guides in their daily activities. Many Members have requested copies for their constituents and an on-line version has been emailed to your offices.

I would like to conclude by saying that the Department of Energy is in continual contact with state and local governments to monitor our heating fuel supplies, and

that the Department stands ready to make the heating oil reserve available immediately in the event of a supply disruption.

This concludes my prepared testimony and I will be happy to answer any questions you may have.

Mr. SHIMKUS. Thank you. Now, the Chair recognizes Commissioner Mason from the Public Utilities Commission of Ohio. Welcome.

STATEMENT OF HON. DONALD L. MASON

Mr. MASON. Thank you Chairman Barton, Chairman Shimkus, Ranking Member Boucher, members of the committee. I am pleased to be here to represent the united views of the National Association of Regulatory Utility Commissioners, but I would also like to represent views of the State of Ohio and the Public Utilities Commission.

In the State of Ohio, we are concerned, as Congress is, with the energy prices on our consumers. Our State economy, regional economy, and national economy all are important to us, and we know the difficulties will be meeting with this coming winter heating season. I will touch particularly on issues relative to what State regulators can do this present winter heating season.

For example, in Ohio, the Public Utilities Commission issued an order directing utilities to reconnect gas and electricity customers who have been disconnected from last year's high energy prices. As long as those customers continue to make payments toward last year's balances, they will not be disconnected. Our objective is to ensure that customers are not disconnected during the winter heating season. It is my understanding over 217,000 customers were disconnected last year, of which only 77,000 were on what we call the Percent of Income Plan program.

Second, we strongly encourage consumers to take advantage of budget billing, so that their payments could be spread evenly over a 12 month period. However, this means utility commissions must work with local distribution companies on carrying the costs associated with the LDCs holding those balances. Now, in Ohio, additionally, we instituted a bad debt rider, whereby the uncollectibles accrued from the previous quarter are placed into a rider for purposes of spreading the uncollectible costs over the gas consumer customers who are paying their bills.

Presently, the PUCO, the Public Utilities Commission of Ohio, is in discussions with one local gas company regarding abandoning the traditional regulatory structure, and implementing a demand-side management program, in conjunction with a decoupling of rates from the throughput movement of natural gas. This would better enable the company, the PUCO, and the State's Consumer's Counsel to work together on reducing demand. The result is that the LDC would not make more money just because customers used more natural gas.

Fifth, legislators in Ohio are presently preparing to introduce bills which would encourage timely review of proposals to explore for and develop mineral interests under our State's properties. One proposal being considered is to create a board of review for such proposals.

In Ohio, as in many other States, the natural gas distribution company is unbundled from the supplying of natural gas. As a result, marketers in the State of Ohio, at least, are providing natural gas to consumers sometimes on fixed price contracts. Therefore, those customers do not feel the effects of the $14 gas we are now seeing.

The Public Utilities Commission of Ohio, in 2001, began to encourage the use of financial hedges by LDCs. The best example of success has resulted in a $3.00/mcf savings to customers in the Dayton area, by Vectren of Ohio. The benefits derived from hedging and long term fixed contracts are evident in the price of natural gas increases in the marketplace. In the case of Vectren of Ohio, the company has committed to a hedging program in which 75 percent of its winter volumes are known and locked in prior to November 1. VEDO, as they are known as, is able to lock in 75 percent of its winter volumes through a combination of hedged prices, locking in future prices in forward months, and contractual storage, where the gas is injected into storage during the non-winter months, typical from April through October, and then withdrawn during the winter months of November through March. VEDO has a near equal split of winter volumes between hedging and this contractual storage.

There is also success story in a very small company, maybe 15,000 customers, Pike, Eastern, and Southeastern Natural Gas Companies presented the Commission in 2001 a fully hedged program in which all volumes were known or locked in in advance of delivery. This allowed the companies to offer their customers fixed burner-tip commodity pricing. The companies utilized an asset manager who managed the companies' pipeline entitlements, and secured fixed commodity pricing through the use of NYMEX strips and straddle provisions. Additionally, a holding company of a small rural LDC used fixed rate contracts, which benefited those customers by having a GCR under $10.00 an mcf through this last quarter.

And finally, though not Ohio specific, the NARUC Committee on Gas, on which I serve as the Chairman, has adopted resolutions in past meetings encouraging utility commissions to work with local gas companies to encourage the proper hedging strategy for each. In addition, NARUC and the Interstate Oil and Gas Compact Commission, and that was chaired presently by Governor Freudenthal of Wyoming. The past Chairman is Governor Murkowski of Alaska, and the past Chairman before that was Governor Richardson of New Mexico. We have cooperated in creating a taskforce with the purpose of exploring whether long term contracts, as a supply strategy, would benefit consumers. After taking comments from interested parties, holding a workshop, and reviewing filed comments, the taskforce did issue a report which is attached to my testimony. The taskforce is recommending that public utility commissions work with the LDCs in understanding and implementing a proper contracting strategy for their respective needs.

Mr. Chairman, members of the subcommittee, I thank you for your time, and look forward to any questions you may have.

[The prepared statement of Hon. Donald L. Mason follows:]

PREPARED STATEMENT OF HON. DONALD L. MASON, COMMISSIONER, PUBLIC UTILITIES COMMISSION OF OHIO ON BEHALF OF THE NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS

Good Afternoon Mr. Chairman and Members of the Subcommittee.

I am Donald L. Mason, a commissioner at the Public Utilities Commission of Ohio (PUCO). I have served in that capacity since 1998. I also serve as the Chair of the Committee on Gas for the National Association of Regulatory Utility Commissioners (NARUC). As Chairman of the NARUC Committee that focuses directly on some of the issues that are the subject of today's hearing, I am testifying today on behalf of that organization. In addition, my testimony reflects my own views and those of the PUCO. On behalf of NARUC and the PUCO, I very much appreciate the opportunity to appear before you this morning. The issues that you are addressing in this oversight hearing are very important to NARUC's membership and the natural gas consumers in my State, and I am grateful to have this opportunity to present our views on the nation's supply and demand for natural gas.

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

Today, I will cover a variety of areas ranging from encouraging additional domestic production, to increasing conservation efforts and personal finance. I will be covering some of these issues in a generic national overview and some of these issues will be addressed specifically from an Ohio perspective.

NARUC believes that any Federal policy on natural gas will be sustainable only if that policy includes "the triad" of: conservation and efficiency; increasing supply; and diversification of energy sources. Any policy must include all three dimensions or the goal of energy security will not be met. In addition, any successful Federal policy must respect and preserve the States' traditional roles in regulating distribution systems, planning, siting approval, reliability assurance, and consumer protection.

INCREASING DOMESTIC NATURAL GAS SUPPLY

Natural gas is an important North American commodity, and the availability of abundant supplies of natural gas is a critical part of the energy security of the United States. The United States Congress, through enactment of the Natural Gas Policy Act of 1978, implemented phased-in decontrol of gas prices at the wellhead; and through the Natural Gas Wellhead Decontrol Act of 1989, eliminated wellhead price controls for sales of natural gas. The result was a decrease in natural gas prices that lasted many years. Recent increases in natural gas prices are, in part, a result of a substantial increase in demand for natural gas, especially in the electric generation and industrial sectors of the economy, coupled with a less than corresponding increase in supplies. This rise in natural gas prices is a cause for concern to all industry participants, including producers, suppliers, marketers, and especially consumers.

Technological advances have improved the economics of natural gas exploration and production activities. New domestic natural gas production should improve supply reliability, and therefore, government policies that foster increased supplies of natural gas could benefit consumers by exerting downward pressure on natural gas prices. Substantial volumes of natural gas may lie beneath lands that are not available for exploration and production because of economic reasons or land-use policies and restrictions.

NARUC believes that increasing domestic supplies of natural gas requires the coordination and cooperation of both State and Federal governments. NARUC has encouraged State Public Utility Commissions (PUCs) to support environmentally sound natural gas exploration and production activities and to communicate that support to their State legislators, executive branch officials, and U.S. Congressional delegations. NARUC supports the need for Federal legislation that institutes a comprehensive national energy policy that recognizes and encourages environmentally sound development and production of new domestic natural gas supplies where appropriate.

The nation possesses large untapped deposits of both oil and natural gas in the State and Federal waters of the Atlantic and Pacific Oceans and Gulf of Mexico. If

developed, these deposits could increase energy supplies and thereby both mitigate rising energy prices and reduce our nation's dependence on foreign energy sources. Regulatory and tax barriers currently exist that inhibit offshore oil and natural gas exploration and production in the United States. NARUC recognizes the particular concerns of States affected by offshore drilling and NARUC encourages Federal policy makers to:

1. Consider removing existing moratoriums to oil and gas exploration and production in both State and Federal coastal waters off the coast of the States that agree to such removal, while also urging State and Federal policy makers to ensure that offshore oil and gas production practices are environmentally sound.
2. Consider expanding State boundaries seaward from the current three miles and giving each State the right to control all resource development within their expanded boundary.
3. Consider providing enhanced royalties to States that choose to allow new production off their shores, thereby providing a significant new revenue source for coastal States.
4. Encourage domestic exploration and production of new natural gas supplies and expansion of natural gas transmission and delivery infrastructure in an environmentally sound manner at reasonable costs, but avoid an over-reliance on natural gas for new electric generation.

LIQUEFIED NATURAL GAS (LNG)

Because of changes in the costs of producing gas from domestic resources, the United States and North America will turn increasingly to imported LNG to sustain gas markets. LNG offers access to an additional option for a source of supply as an alternative to increasingly more costly domestic production. Domestic growth in gas consumption is being driven, in part, by the use of gas for power generation. Without LNG, gas and electricity prices can be expected to increase.

With over 40 LNG import facilities announced or proposed, there is great concern and debate about the effect of LNG on gas markets, public safety and the environment. State PUCs have a key role in this conversation and in the decision making on individual LNG facilities as well as on purchases of LNG by the Local Distribution Companies (LDC) they regulate.

Both Federal and State governments have roles in approving the construction and operation of LNG facilities. Additionally, State and Local permitting are necessary for most proposed LNG projects. The ambiguities created by this overlap of authorities have contributed, in part, to LNG siting difficulties and controversies. There has not been a case to date where FERC has approved a project over Local and State objections—indeed, FERC's pre-filing approach to LNG certification encourages the resolution of differences early in the process.

Safety concerns have attracted the most attention in individual LNG siting controversies. The long record of safe operations by the LNG industry reflects purposeful decisions to implement conservative design standards and operational safety procedures. Recent technical disagreements about the adequacy of current regulations governing LNG safety center on three questions: whether the studies of LNG accidents to date adequately take into account terrorist capabilities; whether the models used to measure the effects of LNG accidents are adequate; and whether LNG facilities should be sited remotely. These issues are still under discussion and no final resolution has been reached.

There are currently concerns about whether gas supplies from domestic production will be adequate to meet projected increases in demand for natural gas. In response many developers of LNG have proposed building regasification terminals in North America to help bridge the potential supply gap. In order for new LNG terminals to be expeditiously approved and in service, cooperation in the permitting process between Local, State and Federal authorities is essential. NARUC recognizes that LNG is an important future source of energy for the United States and encourages coordination among State agencies that oversee permitting for regasification, and between Local, State and Federal government agencies, in order to facilitate and streamline regasification terminal permitting. Additionally, NARUC encourages States to hold public hearings to educate consumers and stakeholders on the safety issues, costs, and benefits of LNG.

The economics of the LNG trade are dominated by the large investment in capital equipment necessary to liquefy the gas, transport and re-gasify the LNG. As such, the industry is dominated by large international energy companies, state oil and gas companies, and trading houses. The web of contract commitments among these firms is designed to ensure security of both supply and markets and to cover large investments. A characteristic of the LNG contracts has been long-term contracts

with take-or-pay provisions. This is not unlike the contracting practices that dominated the U.S. gas industry while it was under development. Trends underway in the LNG trade suggest a more flexible system and a growth of spot-type trading, yet long-term contracting will remain a backbone element of the industry.

In September 2003, then Secretary of Energy Spencer Abraham announced the Department of Energy/NARUC Liquefied Natural Gas (LNG) Partnership as a means to assist in the education and outreach of critical energy decision-makers on the opportunities as well as the impediments related to the increased development of LNG Resources. The LNG Partnership sponsored two reports: an LNG white paper for State public utility commissioners and a model communication plan for State officials. The purpose of the white paper is to provide an overview of LNG policy issues facing State public utility commissions, State environmental officials and State legislators. The model communication plan is intended for State officials that have determined that building or expanding an LNG facility is in the best interest of the ratepayers. A critical goal of the communication plan includes encouraging better stakeholder involvement (and early resolution of stakeholder issues) in relation to LNG facility siting and operation. You may access both of these documents on the NARUC website at: http://www.naruc.org/displaycommon.cfm?an=1&subarticlenbr=313

NATURAL GAS INFRASTRUCTURE

U.S. demand for natural gas is projected to increase by 50% or more during the next 20 years, including significant growth in the use of natural gas for electric power generation. The expected increase in demand for natural gas will necessitate construction of significant amounts of new distribution pipeline capacity, as well as investment in gas utility facilities, operational and maintenance changes, additional storage capacity and upgrading ability to serve changing load profiles. (Even before the terrorist attacks of September 11, 2001, the National Petroleum Council estimated that the natural gas distribution utilities will need to invest $100 billion to upgrade and expand their systems over the next two decades.)

With regard to pipeline activity, NARUC is pleased that the 108th Congress began the process to efficiently transport Alaska North Slope gas to domestic markets by passing legislation to encourage construction of a pipeline. Such a pipeline can free stranded Alaska North Slope gas reserves by linking those reserves to the Lower 48 natural gas transportation and distribution grid. However, this is only a first step.

To ensure that the nation's gas distribution system is adequate in the future, NARUC supports Congressional legislation establishing an R&D funding program for gas distribution utilities to ensure essential research for distribution delivery systems in the amount of approximately $65 million per year. Additionally, NARUC has similar R&D funding concerns for other energy sectors.

Annual funding would be collected through a legislatively designed, volumetric or per-therm equivalent charge designed to collect approximately $1 per year from residential customers, with a cap of approximately $250 per year for very-large-volume customers. Funds collected for this research would be directed by a governing body and would be focused on improving gas system reliability and integrity; enhanced health, safety and environment; and reduced operating and maintenance costs for local natural gas distribution companies. Funds would not be dedicated to end-use applications so that the research program's efforts would be devoted entirely to enhancing distribution service operations as demand for those services continues to increase.

NARUC believes that security of existing and new facilities is a vital component to improving and increasing the nation's natural gas delivery infrastructure. Individual utility services do not function without support from other industry sectors and are therefore interdependent. Due to this interdependency, a disruption or outage in one utility sector can have a profound impact on other critical services, including information systems, healthcare, national defense, finance, shipping, and manufacturing. The vast majority of the Nation's utilities and services are owned and operated by the private sector, and these businesses continue to develop, implement and update response and recovery plans for all critical service elements, including business continuity and contingency plans. Robust response and recovery plans must be applied to our Nation's critical infrastructures so that each sector has a recovery plan that clearly defines sector responsibilities, articulates interdependencies and provides for communications with other critical sectors, as appropriate.

NARUC strongly recommends that the States participate in private/public and cross-sector collaborative efforts that promote the Nation's economic stability, national security and infrastructure integrity. Further ensuring the security and reli-

ability of the Nation's critical infrastructures is of the highest public interest due to the risk of terrorism, as well as other natural and technological hazards. NARUC has formed the Ad Hoc Committee on Critical Infrastructure to identify the appropriate role(s) of regulatory commissions with respect to the security of the Nation's electric, natural gas, petroleum, water and telecommunications infrastructure. NARUC has strongly encouraged coordinated security efforts by Federal, State and Local authorities.

NARUC recommends that State Commissions address the matter of how critical infrastructure or systems are being protected, how this protection is being financed and sensitive information is protected from disclosure. To accomplish this goal, NARUC member Commissions initiated a dialogue in 2004 with stakeholders to address these issues. NARUC urges the U.S. Department of Energy, the U.S. Department of Homeland Security, the Federal Energy Regulatory Commission, the Federal Communications Commission, Environmental Protection Agency and other key Federal agencies to support State actions by providing assistance and guidance in protection of critical infrastructure.

DOE should establish a single point of contact, either an office or an individual, in the event of a disruption or emergency. NARUC recommends that DOE work with NARUC, the National Association of State Energy Officials (NASEO), other State level stakeholders, and industry to develop communication protocols where States would identify contacts in State government, by fuel type, and set up an internal State level communication mechanism which would be supported by DOE in order to assure that information is rapidly shared with key participants and to avoid misinterpretation of information. Existing, not new, industry/government information sharing efforts should provide the foundation for this exchange of information. NARUC urges assistance with regional coordination and exercises to avoid one State taking action contrary to actions taken by others and to ensure federal/regional/State and industry coordination.

NARUC encourages DOE to assist in developing State and regional models on critical infrastructure policies and practices that will focus on various approaches for meeting States' needs on items such as information disclosure, cost recovery and prudence of investments, emergency natural gas allocations, and to assist with dissemination of this information to States. NARUC supports DOE-sponsorship of meetings to examine the outlook for energy supply for the summer and winter as an opportunity for States to meet with DOE and the industry to discuss the potential for supply disruptions and actions to mitigate the risk.

Mr. Chairman, due to the effects of Katrina and Rita on the natural gas infrastructure, I have concerns that the national infrastructure will not be 100% reliable in serving all the natural gas needs this winter 24 hours a day 7 days a week as is necessary. I encourage the appropriate officials at the Federal and State levels of government to consider temporary environmental air quality waivers in selective States to encourage the use coal in lieu of natural gas for electricity generation. Such a move would allow more natural gas for home heating and reduce the price to residential consumers.

Additionally, I believe that port authorities and federal officials should consider temporary measures to increase the delivery of LNG to coastal terminals. There are bottlenecks at the delivery level meant to provide additional measures of security and safety. I believe it would be prudent to inquire, investigate and possibly implement any measure that could deliver additional supplies of LNG. Of course, this should be done consistent with all the appropriate safeguards and security measures that the US Coast Guard and other agencies have instituted.

EFFICIENCY, CONSERVATION AND DIVERSIFICATION

NARUC believes that increased use of alternative energy sources that minimize the environmental impacts of energy generation, delivery and use coupled with increases in efficiency can play a part in any effort to remedy the environmental challenges of increased gas supply. If we need less gas, we would be able to reduce the expansion of gas production, and likewise limit the associated environmental challenges.

Conservation and efficiency must both be integral parts of any policy to improve the nation's natural gas situation. NARUC does not believe that increasing domestic supply alone is a logical or sustainable solution for energy security. NARUC believes that State and Federal regulatory commissions should revisit, review and reconsider the level of support and incentives for existing gas and electric utility programs designed to promote and aggressively implement cost-effective conservation, energy efficiency, weatherization, and demand response in both gas and electricity markets. We recognize that the best approach towards promoting gas energy efficiency pro-

grams and electric energy efficiency programs for any single utility, State or region may likely depend on local issues, preferences and conditions.

The National Petroleum Council (NPC), in its September 25, 2003, report on *Balancing Natural Gas Policy—Fueling the Demands of a Growing Economy,* also found that greater energy efficiency and conservation are vital near-term and long-term mechanisms for moderating price levels and reducing volatility and recommended all sectors of the economy work toward improving demand flexibility and efficiency. The NPC, in its report, identified key elements of the effort to maintain and continue improvements in the efficient use of electricity and natural gas, including (but not limited to):

1. Enhanced and expanded public education programs for energy conservation, efficiency, and weatherization,
2. DOE identification of best practices utilized by States for low-income weatherization programs and encouragement of nation-wide adoption of these practices,
3. A review and upgrade of the energy efficiency standards for buildings and appliances (to reflect current technology and relevant life-cycle cost analyses) to ensure these standards remain valid under potentially higher energy prices,
4. Promotion of the use of high-efficiency consumer products including advanced building materials, Energy Star appliances, energy "smart" metering and information control devices,
5. On-peak electricity conservation to minimize the use of gas-fired electric generating plants, and
6. Clear natural gas and power price signals

Further, the American Council for an Energy-Efficient Economy (ACEEE), the Natural Resources Defense Council (NRDC), and the American Gas Association (AGA) have adopted a Joint Statement noting that traditional rate structures often act as disincentives for natural gas utilities to aggressively encourage their customers to use less gas. Therefore, the NRDC, AGA, and the ACEEE have urged public utility commissions to align the interests of consumers, utility shareholders, and society as a whole by encouraging conservation. Among the mechanisms supported by these groups are the use of automatic rate true-ups to ensure that a utility's opportunity to recover authorized fixed costs is not held hostage to fluctuations in retail gas sales.

NARUC has encouraged State commissions and other policy makers to support the expansion of natural gas energy efficiency programs and electric energy efficiency programs, including those designed to promote consumer education, weatherization, and the use of high-efficiency appliances, where economic, and to address regulatory incentives to address inefficient use of gas and electricity. NARUC has also supported State and Federal policy makers efforts to: (i) review and upgrade the energy efficiency standards for buildings and appliances, where economic, and to ensure these standards remain valid under potentially higher energy prices, and (ii) promote the use of high-efficiency consumer products, where economic, including advanced building materials, Energy Star appliances, and energy "smart" metering and information control devices.

NARUC has urged DOE to expeditiously promulgate and implement new national standards for commercial air conditioners, heat pumps, residential furnaces and boilers, and electric distribution transformers so as to achieve the greatest level of cost-effective energy savings. We have also encouraged DOE to establish an updated national standard for residential furnaces and boilers that takes into account both the equipment's electricity use and its fossil fuel consumption, and to establish a voluntary standard more stringent than the national minimum standard that is designed to be cost-effective in cold climates and which cold-weather States could elect to implement in place of the national minimum.

History has taught us the economic and environmental risk of over-reliance on a single source of fuel for new electric generating capacity. Since the early 1990s, new electric generating facilities have been predominately gas-fired. According to the Energy Information Administration, of the capacity added to the electric power grid in the United States between 2000 and 2004, over 90 percent was gas-fired, and over the next several years, most of the new electric generating facilities that will become operational also will be gas-fired. This has led many regions of the country to significantly increase their dependence on natural gas for electric generation.

While natural gas-based generation technologies have made significant advances in efficiency and environmental performance, and are a necessary part of the overall generation mix, natural gas prices have continued to climb, relative to price levels in the 1990s, and are expected to continue to reflect a tight natural gas market over the next several years. Fuel diversity, therefore, is increasingly being advocated by industry stakeholders and policy makers as desirable for resource planning in the electric industry.

The choice of fuel mix for electric generation, takes into account several factors, including long-term economic costs, environmental effects, power system reliability, and price volatility. However, market incentives alone would be unlikely to achieve the most reliable long-term fuel mix for electric generation. Evidence from various studies sponsored by both government and industry, including the September 2003 National Petroleum Council study requested by the Secretary Abraham, has shown the decline in recent years of gas-fired generating facilities with dual-fuel capability. At the same time, these same studies have also shown the economic benefits of gas-fired generating facilities with dual-fuel capability, including the dampening of both electricity prices and natural-gas demand during peak periods.

These studies have identified the need to consider the use of alternative fuels in the electric generation industry, in order to provide for a balanced fuel mix. They have also identified the important role that State commissions can play in affecting the capabilities of new gas-fired generating facilities, when considering building with dual-fuel capability or considering the ability of existing gas-fired generating facilities, to switch to an alternate fuel where economic. NARUC encourages State commissions and other policy makers to support the concept of fuel diversity for electric generation. NARUC recognizes that the appropriate diversity of fuel sources for electric generation for any single utility or region likely depends on local issues, preferences and conditions. Additionally, NARUC urges Congress or the Administration to increase the efficiency for licensing and relicensing processes of hydroelectric and nuclear facilities, without compromising substantive environmental and safety standards.

AN OHIO PERSPECTIVE

In my State of Ohio we are concerned, as is this Congress, about the effects of energy prices on our consumers, our State economy, our regional economy, and our national economy, and we have taken some actions that we hope will help the consumers of our State through this difficult time.

In Ohio, the Public Utilities Commission issued an order directing utilities to reconnect gas and electricity customers who had been disconnected from last years high energy prices. As long as those customers continue to make payments toward the last years balances, they can not be disconnected. Our objective is to ensure that customers are not disconnected during the winter months.

We strongly encourage our consumers to take advantage of budget billing so that payments are spread over 12 months. However, this means that our utility commission must work with Local Distribution Companies (LDCs) on carry costs associated with the LDC holding the balances. Additionally, we instituted a bad debt rider whereby the uncollectible accrued of the previous quarter are placed into a rider for purpose of spreading the uncollectible costs over all gas consumer customers.

Presently, the PUCO is in discussions with one local gas company regarding abandoning the traditional regulatory structure and implementing a demand side management program in conjunction with a decoupling of rates from throughput movement of natural gas. This will better enable the company, the PUCO, and the State's Consumer's Counsel to work together on reducing customer demand. The result would be that the LDC would not make more money just because customers used more natural gas.

Legislators in Ohio are preparing to introduce bills which would encourage the timely review of proposals to explore for and develop mineral interest on our under State properties. One proposal is considering creating a board to review such proposals.

In Ohio, as in many other States, the national gas distribution is unbundled from the supplying of the natural gas. As a result, marketers in the State are providing natural gas to consumers, including fixed rate contracts.

The Public Utilities Commission of Ohio began in 2001 to encourage the use of financial hedges by LDCs. The best example of success has resulted in a $3.00/mcf savings to customers in the Dayton area (Vectren of Ohio). The benefits derived from hedging and long term fixed contracts are evident as the price of natural gas increases in the market place. In the case of Vectren Energy Delivery of Ohio (VEDO), the Company has committed to a hedging program in which 75% of its winter volumes are known/locked in prior to November 1st. VEDO is able to locked in 75% of its winter volumes through a combination of hedged prices (locking in future prices in forward months) and contractual storage, where the gas is injected into storage in the non-winter months (April to October) and then withdrawn during the winter months (November to March). VEDO has a near equal split of winter volumes between hedging and contractual storage.

Pike, Eastern and Southeastern Natural Gas Companies (Companies) presented to the PUCO in 2001, a fully hedged program in which all volumes were known/locked in advance of delivery, which allowed the Companies to offer to its customers fixed burner-tip commodity pricing. The Companies utilized an asset manager who managed the Companies pipeline entitlements and secured fixed commodity pricing through the use of NYMEX strips and straddle provisions. Additionally, a holding company of small rural LDCs used fixed rate contracts which benefited consumers by providing a gas costs recovery of under $10.00 a mcf.

Though not Ohio specific, the NARUC Committee on Gas, on which I serve as Chair, has adopted resolutions at past meetings encouraging utility commissions to work with local gas companies to determine the proper hedging strategy for each. In addition, NARUC and the Interstate Oil and Gas Compact Commission (IOGCC) cooperated in creating a task force for the purpose of exploring whether long term contracts as a supply strategy would benefit consumers. After taking comments from interested parties, holding a workshop and reviewing filed comments, the task force issued a report which is attached to my testimony. The Task Force is encouraging PSC/PUCs to work with LDCs in understanding and implementing the proper contracting strategy for their respective needs.

Finally, for your information and review, I have attached a joint letter, to which NARUC was a signatory, regarding energy emergency appropriations that was sent on September 15, 2005, in anticipation of high winter energy costs.

Mr. Chairman, and members of the Subcommittee, thank you for your time and attention. I look forward to answering any questions you may have.

Mr. SHIMKUS. Now, the Chair would like to recognize the chairman of the full committee, Chairman Barton, for opening the round of questions.

Chairman BARTON. Thank you, Mr. Chairman, and let me say you are doing an excellent job in Chairman Hall's absence. Some of you may wonder why Chairman Hall is not here. His wife is ill, and he is having to attend to her, but she is doing better, and Ralph, Congressman Hall does expect to be back later this afternoon. I don't know if you announced that or not.

Mr. SHIMKUS. Not in totality.

Chairman BARTON. Okay.

My first question is to Chairman Kelliher. The LNG projects that the FERC has already permitted, I think you said, eight. Is that correct?

Mr. KELLIHER. Yes.

Chairman BARTON. How many of those do you expect to actually be completed?

Mr. KELLIHER. I don't know. I mean we have approved——

Chairman BARTON. Do you have——

Mr. KELLIHER. [continuing] in some cases, multiple sites, in fairly close to the same proximity. I would not expect all of them to be completed.

Chairman BARTON. Do you think 50 percent will be completed? Or 20 percent?

Mr. KELLIHER. I really don't know. It will end up the market will decide how many of them can be financed and how many can acquire contracts for supply.

Chairman BARTON. Well, let me try it another way. Let us assume they all were completed.

Mr. KELLIHER. Right.

Chairman BARTON. You said that it would quadruple——

Mr. KELLIHER. Yes.

Chairman BARTON. [continuing] the capacity. What would that take the capacity to, in terms of billions or trillions of cubic feet per year——

Mr. KELLIHER. Okay.

Chairman BARTON. [continuing] if they were to all be permitted, all be constructed and go into operation.

Mr. KELLIHER. And I believe my number included the pipeline from the Bahamas, because there is a proposal to site LNG import terminals in the Bahamas, and then have a pipeline coming to Florida, so my estimate includes that, and also expansions at existing facilities. If you include the eight new facilities we have approved, the expansions, and the pipeline, current import capability is at four bcf a day. Those projects combined would increase that from 4 to 19. It would be an addition of 15.

Chairman BARTON. 15 billion——

Mr. KELLIHER. Cubic feet.

Chairman BARTON. [continuing] cubic feet a day.

Mr. KELLIHER. Yes.

Chairman BARTON. All right. Convert that to trillion cubic feet per year.

Mr. KELLIHER. This is where I am not going to follow. Do you want to know what the ultimate amount of LNG might provide of U.S. gas supply? Or——

Chairman BARTON. Well, how much natural gas do we use a year in the United States? We use about 22 trillion cubic feet, or is it more than that?

Mr. KELLIHER. I am consulting my staff.

Mr. SHIMKUS. The Chairman is usually pretty close.

Mr. KELLIHER. I don't have any reason to dispute your figure, Mr. Chairman.

Chairman BARTON. Okay. Well, let us say it is 20 trillion cubic feet.

Mr. KELLIHER. Okay.

Chairman BARTON. And let us say we get 20 billion cubic feet a day, 300 days times 20 is, I want to say, 6 trillion cubic feet a year. Actually, it is 360, but I am just kind of rounding it up, so if every LNG facility that is permitted were to actually be constructed, it would be a sizable increase in natural gas availability, and let us assume that my number is right. It is probably not right, but it is good enough for committee work. We would probably, if you increase the gas supply by about 30 percent, which I think that is what that is, yeah, I think that is exactly 30 percent, we would expect natural gas prices to come down considerably, wouldn't we, as long as they increased larger than the demand?

Mr. KELLIHER. Are you assuming demand is a constant, or now?

Chairman BARTON. No, I am assuming demand is going up about 3 percent a year.

Mr. KELLIHER. You just get into other variables, what will the increase production from the Rockies in the U.S. be, will an Alaska gas pipeline be built?

Chairman BARTON. No, I am not.

Mr. KELLIHER. Oh. Now. Okay.

Chairman BARTON. I am just assuming the only thing that we get is what you just testified that you have permitted.

Mr. KELLIHER. That domestic production remains constant.

Chairman BARTON. Yeah, it doesn't go down.

Mr. KELLIHER. It remains constant, and the Canadian imports remain constant, and the only delta is——

Chairman BARTON. That is right. That is right.

Mr. KELLIHER. Projecting some reasonable increase in demand.

Chairman BARTON. Right, 3 percent a year.

Mr. KELLIHER. And the question is what, how much will——

Chairman BARTON. Where is our price going to go to? It is going to go down. If we have increased supply 30 percent and demand is only going up 3 percent a year——

Mr. KELLIHER. But it is a small base, LNG imports right now are 3 percent of gas supply.

Chairman BARTON. Well, but it is 6 trillion cubic feet, on the 20 trillion cubic feet demand, that is going up 3 percent a year.

Mr. KELLIHER. Right.

Chairman BARTON. I am not trying to pin you down. All I want is an answer that if everything you have permitted——

Mr. KELLIHER. At some point——

Chairman BARTON. [continuing] gets built, natural gas prices will go down.

Mr. KELLIHER. Sure. Also, there are other proposals.

Chairman BARTON. I would say they are going to go down $5 or $6 an mcf, but that is just me.

Mr. KELLIHER. There are other proposals as well that are pending on the Commission. These were just the ones that we have approved, but there is others pending.

Chairman BARTON. Now, see, when he worked for me——

Mr. KELLIHER. At some point, LNG imports——

Chairman BARTON. [continuing] he couldn't give me this runaround. Now he exercises his——

Mr. KELLIHER. I agree with you that at some point, LNG imports will start depressing prices. I don't think we are at that point yet.

Chairman BARTON. All right. Let me ask one final question, because I had a bunch for the other people, but my time is already gone. Are any of these projects that have been permitted actually under construction?

Mr. KELLIHER. Yes, three of them are under construction right now.

Chairman BARTON. And what is your estimated completion of those that are under construction? How many——

Mr. KELLIHER. 2008.

Chairman BARTON. 2008. So we are in 2005.

Mr. KELLIHER. Yes.

Mr. KELLIHER. Yes.

Chairman BARTON. So it takes, you said in your testimony—the average permitting time is about 1 year. Is that right?

Mr. KELLIHER. That was for pipelines. For LNG projects, it is about 15 months, so it is close to a year.

Chairman BARTON. Okay. So 15 months to permit it, and then 3 years to build it?

Mr. KELLIHER. Typically, 3 years to build. Yeah.

Chairman BARTON. Okay. So no help is on the way for all these good things you are doing at FERC, really, for another 3 years.

Mr. KELLIHER. Infrastructure tends to be long term in effect.

Chairman BARTON. All right.

Mr. KELLIHER. Yes.

Chairman BARTON. Mr. Chairman, my time has expired. I am going to provide some questions that I would have asked the witnesses to answer as expeditiously as possible on underground storage, pipeline capacity constraints, localized as to where the bottlenecks are, and what, if anything, needs to be done legislatively to help de-bottleneck some of those.

I thank the indulgence of the Chair to give me extra time.

Mr. SHIMKUS. The Chair now recognizes the gentleman from Virginia.

Mr. BOUCHER. Well, thank you very much, Mr. Chairman, and I want to say thank you to our witnesses for their excellent presentations here this afternoon.

Mr. Chairman, before asking my questions, I ask unanimous consent that the opening statement of Mr. Brown from Ohio be made a part of the record.

Mr. SHIMKUS. Without objection, so ordered.

Mr. BOUCHER. Thank you, Mr. Chairman.

Well, let me pick up on a subject that was mentioned during Chairman Barton's questions, and that is, the natural gas pipeline from Alaska. This is a project that enjoys broad bipartisan support, and I think there is an acknowledged need to construct this. We placed in EPACT 2005 a Federal loan guarantee to assure the economic nature of this pipeline, and yet, I now am hearing that the pipeline is not moving forward. In fact, there was some debate in the recent refinery specific legislation we reported from this committee and that was passed on the floor, of sunsetting that loan guarantee, in the expectation that perhaps this pipeline would not be built.

So would anyone care to give us a status report today of where this pipeline stands? Perhaps an indication of any problems that it is encountering, and some kind of projection of what we can anticipate?

Mr. MASON. I can speak from the Commission's point of view. Our role is to be ready to act when and if an application comes in the door, and we are ready to act, but we can't compel an application. We monitor the status of the negotiations in Alaska, and we are hopeful, but you know, we are focusing our efforts on being prepared to act in the event there is an application, that we can act in a timely manner to——

Mr. BOUCHER. I am confident that you could, and that is obviously not in dispute here today. Based on your monitoring of the negotiations that are underway, can you report anything about the progress of those, and what is anticipated? Do we really think this project is going to move forward?

Mr. MASON. I think it is inevitable that a pipeline will be built at some point. I think we do need that natural gas. The variable is when a deal is struck sufficient to support an application to the Commission.

Mr. BOUCHER. Mr. Maddox, would you care to comment?

Mr. MADDOX. Yeah. Currently, the negotiations are very intense, ongoing. There has been a lot of discussion over guarantees and what happens when and if the price of gas goes down. Complicating factors are several. One of them is the fact that this is the

world's most expensive construction project, which by definition, creates a lot of financial risks even to the healthiest of companies. Second is the history of relationship, I think, between the State and the parties, the producing parties, in trying to develop a level of trust. As you know, with any financial deal of this magnitude, there is always some questions, and the history between the two parties has not encouraged a lot of trust, and that trust has to be developed throughout these negotiations.

My sense is, in talking to all the parties involved, is that everyone believes one, that they need to get this done, two that they are getting close, and that they will see a deal some time, or an agreement some time in the next several months.

Mr. BOUCHER. Well, that is encouraging. Thank you very much for that report. In the time I have remaining, Mr. Mason, let me ask a couple of questions of you. For electricity consumers, who are concerned about higher than normal electricity prices generally this winter, as a consequence of buying their electricity from an electric utility that is gas-fired, one way that they could save money on their electricity bills is through the use of smart meters, and I noticed a reference to smart metering technology in your remarks. I strongly share the desire to see smart meters and demand-side pricing deployed across this country in every State, and in fact, authored a provision in EPACT 2005 that is designed to achieve that result. What we do is encourage the State PUCs to establish rulemakings, in fact, we require that that happen, to consider whether or not, within their State, a rule should be employed requiring electric utilities to offer time of use pricing, and in turn, deploy smart meters.

A couple of questions for you. Do you have any sense of, at this early stage, after that bill has become law, of what States may be moving quickly in order to put these proceedings in place? They have a 2-year period within which to do it, but obviously, some will start sooner. So do you have any report for us on what is being done there? And do you have any recommendations for us as to what follow-on measures we might consider to encourage smart metering more broadly, more uniformly?

Mr. Mason?

Mr. MASON. Mr. Chairman and ranking members of the committee, thank you for that comment. And one of the reasons we filed comments is so we can give you a lot more information than we can in our remarks.

I chair the Natural Gas Committee, and I deal with the electricity issues as they affect Ohio, and of course, in Ohio, we have deregulated generation. We thought we would be at a point by now where we would have smart metering taking place, because customers would be advantaged from it. We have yet to get to that place. But I do know there are at least three or our other States that are looking at smart metering. I think we are looking to take our lead from other Federal agencies at this time. We will be meeting in about two to 3 weeks from now, actually, in California, and that will be a subject matter we will be discussing.

But on the issue of this decoupling that you are talking about, it really takes a change of mentality by regulators as they approach not just gas, but also electricity utilities, that you actually

have to change the entire regulatory paradigm that we have been dealing with, you know, the old standard ROE, and the company makes money based on how much either electricity they push through the system or gas, and once we start moving more aggressively on those, then the smart metering actually makes sense for consumers.

Mr. BOUCHER. Well, it strikes me that NARUC would be an appropriate forum for these conversations, and perhaps, for information about the new Federal statute, to be shared among all State utilities regulators. Do you know if there is any such plan on the part of NARUC at this point?

Mr. MASON. I wouldn't say a written plan, but we have had discussions on that, and we are moving in that direction. What I will do for you is we will provide additional information specifically as to which States are more aggressive in that, for you.

Mr. BOUCHER. Well, let me just encourage you, finally, to bring the issue up at NARUC, and see if you can get NARUC involved in encouraging the States to implement this Federal requirement at the earliest possible time. Thank you, Mr. Mason.

Mr. MASON. Thank you.

Mr. BOUCHER. Thank you, gentlemen.

Mr. SHIMKUS. Thank you. I now recognize myself for, I think, 5 minutes.

And thanks for your testimony. What I would like to talk about is that energy is really a fungible commodity. You really can't talk about natural gas, and how the demand is based upon it, and not talking about electricity generation or fuels, and they all are interrelated. We know a couple things. We know the projection, especially by the Energy Information Agency, the projected demand for natural gas continues to go up, and I have a chart here, you can't see it, but I mean, we are going to be, by 2020, into the over 8,000 billion cubic feet is what is projected.

Natural gas goes for home heating, as we are talking about today, but we have also used it for electricity generation over the past decade. We are using it for fueling vehicles. Also, it is a major product for manufacturing, and when we use the other types of charts that I always carry around with me, talking about how can the manufacturing sector stay competitive, when we are paying $14 per whatever cubic feet, versus $0.95 in Russia, and what does that do with our farmers and the fertilizers. So this is a big debate, but it is tied to everything else. So because I have limited time, I am going to focus, first, I want to go to Mr. Maddox, and he is probably not surprised about these two questions: what is the Department of Energy doing on FutureGen, and what is it doing to incentivize Fischer-Tropsch coal-to-liquid technologies, which was part of the refinery bill that we just passed? Of course, FutureGen is a DOE initiative on electricity generation.

Mr. MADDOX. Quickly, FutureGen is moving forward. The private sector alliance has been formed, and we are in negotiations, and hopefully, we will be concluding negotiations very soon, do the first tier of contracts, which will allow us to move out quickly on our NEPA work, and begin the siting process hopefully in early 2006.

We have had numerous meetings now with foreign governments who have expressed interest in participating. As you will recall,

part of the program requires or expects foreign financial support. We just last week had a Chinese coal generation company join the private alliance. We also have members from Australia, so on the private side, we are already getting extensive international interest.

We have also seen some important policy things. Recently, the IPCC, which looks at technology in terms of Kyoto, made a very substantial statement in terms of viability of sequestration as possibly meeting 15 to 50 percent of the carbon reduction requirements to 2050. So we are seeing extensive interest internationally in FutureGen and the technology we are trying to lay forward.

Mr. SHIMKUS. The rest is on Fischer-Tropsch coal-to-liquid stuff.

Mr. MADDOX. We are moving out on that. We are looking at how to support the loan guarantee program that was part of EPACT. There are a number of loan programs throughout the Department of Energy, and we are trying to develop the expertise, and figure out the best way to implement those as expeditiously as possible.

Mr. SHIMKUS. Thank you. Now, I would like to move quickly to Chairman Kelliher. And you mentioned the Bahama pipeline, which is one of the most enjoyable things I like to talk about. Why a pipeline from the Bahamas to Florida?

Mr. KELLIHER. I think it recognized the difficulty of siting an import terminal on the Florida coast, on the Atlantic coast.

Mr. SHIMKUS. And so when we have an LNG facility in the Bahamas, obviously, the construction jobs that built that refinery are being employed by Bahamans.

Mr. KELLIHER. Bahamians.

Mr. SHIMKUS. I am a Midwesterner. And the tax base, then, would go to Bahama. Again, the jobs in operating the LNG terminal would go to that location, and not to Floridians. I think it highlights the problem with our public policy. When we are excited about a pipeline to import natural gas to a terminal in the Bahamas, and then pipe it into Florida, because of the siting problems, and the other issue that I will try to end on, the other chart I like to always carry around is that Congress has placed over 85 percent of outer continental shelf off limits for exploration, and we are the only developed Nation in the world to cutoff access to our offshore energy reserves, and we are going to have people testifying from New England, and I think they would probably be surprised that off their cost, where we have some available resources, that they are off limits. So I would go back to Mr. Maddox, what is the Department of Energy doing to try to help the Interior Department open up some of these access areas?

Mr. MADDOX. Well, from my own gas program, we work very extensively to help minimize the footprint of any oil and gas exploration activity. That is kind of the basis of our program. We work very directly with the Department of the Interior to identify technologies and methods to minimize that impact, develop rules that will expedite permitting. We give some grants to EPA to help them streamline their permitting process, in terms of travel money, in work with IOGCC, among others, to certify the protection of the programs. Obviously, in the Energy Bill, we supported the OCS inventory, among other provisions.

Mr. SHIMKUS. Thank you, and my time has expired. I would like to turn now to my colleague from Massachusetts, Mr. Markey.

Mr. MARKEY. Thank you, Mr. Chairman, very much.

Mr. Kelliher, welcome back.

Mr. KELLIHER. Thank you.

Mr. MARKEY. What investigations do you currently have underway to ensure that today's high prices are not at least in part the result of manipulative activities by gas companies, oil companies, or traders in the related commodities markets?

Mr. KELLIHER. Well, we have an office at the Commission, Office of Market Oversight and Investigations, and they, on a daily basis, monitor gas markets.

Mr. MARKEY. Do you have specific investigations underway right now of specific companies and specific activities?

Mr. KELLIHER. We do not have a formal investigation right now. If OMOI identifies anomalous behavior, that is not explained by some kind of market fundamental, and they make a recommendation to the Commission to initiate an investigation.

Mr. MARKEY. So you have not found any suspicious behavior in the market?

Mr. KELLIHER. No. None.

Mr. MARKEY. Mr. Jeffery, do you have any ongoing investigations?

Mr. JEFFERY. We have investigations going back, that are ongoing, going back to issues that occurred——

Mr. MARKEY. Could you turn on the microphone, I am sorry.

Mr. JEFFERY. Sorry about that. Excuse me.

Mr. MARKEY. I am talking about the last 6 months. Do you have any——

Mr. JEFFERY. Yes.

Mr. MARKEY. Do you have any new investigations that you have begun of——

Mr. JEFFERY. Related to——

Mr. MARKEY. [continuing] manipulative conduct, given the sky high prices that are being charged to consumers in the marketplace?

Mr. JEFFERY. I would like to come back to you with, for the record, with the answer to that question, sir. Not to the best of my knowledge. What we are doing, and have done, and continue to do, is monitor, on as active and a real-time basis, the actual trading flows in the futures markets——

Mr. MARKEY. You don't know of any——

Mr. JEFFERY. No, sir.

Mr. MARKEY. You don't have any new investigations of manipulative behavior. How about you, Mr. Maddox? Do you know at the Department of Energy of any new investigations in the last 6 months, since these prices have skyrocketed, of new investigations of manipulative behavior in the oil or gas marketplace?

Mr. MADDOX. The Department does not have any investigatory enforcement authority in this area.

Mr. MARKEY. Okay. Thank you. Mr. Maddox, a few weeks ago, the price trigger for releasing oil from the Northeast Home Heating Oil Reserve was reached, and yet, the Administration, your Admin-

istration, failed to use the reserve to help provide price relief to New England and Northeast consumers.

Why did the Bush Administration decide not to release that home heating oil, given the fact that the price trigger had been reached, where the government could have acted to help to keep prices down?

Mr. MADDOX. The threshold you represent, the 60-percent threshold, is a threshold for triggering our looking at it, and monitoring it closely, and identify the reasons behind that threshold, but the Act requires there to be a shortage or disruption, and none existed at that time. We have made numerous calls. We talked repeatedly to State heating officials, to identify if there was truly a shortage of——

Mr. MARKEY. But doesn't your mandate also allow you to make that determination based upon price considerations?

Mr. MADDOX. It does. It also requires us to look, be prudent with these reserves. They are very limited.

Mr. MARKEY. No, but why did you exclude that from your answer to me? Why did you give the other two reasons, but not price considerations? Do you consider that not to be as important?

Mr. MADDOX. It is important, and it is a threshold, but it is not a sole decisionmaker. You asked specifically about the threshold, and why we didn't respond as part of the threshold. It should be noted that the differential has declined, and that currently, that that threshold is not being reached, because it requires two consecutive increases. We have actually had two consecutive decreases in that threshold.

Mr. MARKEY. But you could have given consumers help over that run-up period, that would have sent a signal to the marketplace that you were going to be serious, the government. In other words, my feeling is that the home heating oil consumer doesn't feel that the Bush Administration is on their side. The ordinary consumer feels that the Bush Administration is on the side of the oil and gas companies, and they expect——

Mr. MADDOX. The Bush——

Mr. MARKEY. [continuing] the Bush Administration, when these prices are skyrocketing, to move in on the side of consumers, and yet, they stand on the sidelines——

Mr. MADDOX. No, the Bush Administration views that it is best for the consumers to make certain they have heating oil in January, if there is some sort of infrastructure disruption. This is a small reserve that can cover about 2 days worth of total supply for the Northeast, or a partial disruption for many 10 days, 200,000 barrels.

Mr. MARKEY. Do you believe that——

Mr. MADDOX. If we emptied that reserve now, we would have no ability to help consumers, indeed, in January——

Mr. MARKEY. Do you believe the size of the reserve should be increased, Mr. Maddox, so you have more capacity to be able to use, rather than having to wait until the middle of January? Would you prefer that we, for example, increased it from 2 million barrels to 5 million barrels, so that you could use it in October or November?

Mr. MADDOX. I am not prepared to say that at this point. One of the key parts of the market right now is that we are seeing a

lot of supplies coming into the United States by ship, due to the differential with Europe. There is a shipping time, there is an ordering time, and if we create a situation where we can undercut the market, and European shipments are not sent to the United States——

Mr. MARKEY. No, but you do have——

Mr. MADDOX. [continuing] we will have significant issues, because we don't have refining capacity to make our own heating oil——

Mr. MARKEY. You seem to indicate, Mr. Maddox, that you want to save the home heating oil that the government has stored, because there is not much of it, so we should save it until January, but the problem for home heating oil consumers all across the Northeast and Midwest, is that they have been whacked in October and November, and they are going to be whacked in December, and you seem to be saying, well, let me just, we already passed a bill through the House of Representatives, increasing the size of it from 2 million to 5 million barrels, does the Administration have a view on that bill that has already passed the House?

Mr. SHIMKUS. And we will let the Chairman, the gentleman answer his question, and this will be the last question.

Mr. MADDOX. Quickly, the Administration has not taken, does not take positions until bills generally reach conference. There has been no Administration position. Second, that——

Mr. MARKEY. Can I say this? That is absolutely not true. The Administration has spoken on every single refinery issue, LNG issue, as a matter of fact, this is the only issue on which the Administration has not spoken. That is where you have to decide——

Mr. SHIMKUS. The Chairman, I——

Mr. MARKEY. And that is it. You have to——

Mr. SHIMKUS. I am being more than generous to the gentleman and my colleague from Massachusetts.

Mr. MADDOX. If I could quickly reply to the other part.

Mr. SHIMKUS. If Mr. Maddox would like to answer the question.

Mr. MADDOX. Yeah. What I would like to point out, and here is the conundrum we are in. The Northeast gets a large amount of its heating oil imported. If we start releasing heating oil because of prices, especially early in the season, we will lose confidence for someone to say I want to ship oil, it takes 10 days to get to the United States, and we will lose our access to that market, because people won't have confidence to import here, because by the time it lands, they could be looking at a loss. So we are running a very, very tight market, and one of these problems is because we had no ability to create heating oil in the United States. We don't have the refinery capacity to make our heating oil. So we are——

Mr. MARKEY. But you could——

Mr. SHIMKUS. The gentleman's time has——

Mr. MARKEY. [continuing] you could store oil.

Mr. SHIMKUS. The gentleman's time has expired. The Chair now recognizes—the gentleman will suspend. Very similar to what happened with the SPRo, prior to the hurricane, we had released the SPRo early because of price concerns, then when we really needed it, because of disruptions, a lot of it would have already been re-

leased. So it is a tough decision. Now, I would like to recognize the gentlewoman from New Mexico.

Ms. WILSON. Thank you, Mr. Chairman. I have got a couple of things that I wanted to ask about, and I am not sure I am directing the right question to the right people. So I think this is a question for Mr. Maddox, but in 2003, Secretary Abraham came up and we had a copy of a letter that he sent to the State public utility commissions that talked about what can be done with respect to natural gas. And one of his recommendations was taking offline the most inefficient electricity generating plants first. And we had asked, I think, in H.R. 6, for a study to be done on this. Does the Administration still support, and is still pushing that approach, and what is the status of this study that was mandated under the Energy Bill?

Mr. MADDOX. I am sorry. That is actually not part of my portfolio, and so I couldn't really give you any hard answers, but I would be happy to get an answer for the record for you.

Ms. WILSON. If you could, because I think when we look at the use of natural gas, and I am more and more concerned about our increasing reliance on natural gas for the generation of electricity, getting rid of the inefficient plants strikes me as something that we have to put on the table as a priority, because there is a significant difference in the efficiency of these plants, and when, you know, when you have one plant that uses 10,000 BTUs per kilowatt, to create a kilowatt of electricity, and another plant that uses 7,000 BTUs to create a kilowatt of energy, that is a 30-percent difference in efficiency, and it will have a huge impact on the demand for natural gas, and I would like to see the Administration continue to push that matter.

Mr. Kelliher, and this, again, I am not sure whether you are the right guy, but you may be. With respect to permitting for new plants, new electricity generation, what percentage of the plants out there on the drawing board are natural gas-fired?

Mr. KELLIHER. I am not sure what the current projections are, and the siting of generation facilities is done at the State level, not at the Federal level, but there have been some references to the Administration's national energy policy, and that was one of the issues the Administration was looking at when it developed the national energy policy. When it came in, the Clinton Administration had projections that 93 percent of all new generation added between the year 2000 and 2020 would be gas-fired. The Administration wanted to lower that number. It didn't want to bet everything on one fuel, because it was concerned about volatility of gas supplies, and also, possibly, the adequacy of gas supplies. So the national energy policy was designed in part to increase other sources, other primary fuels used for electric generation, coal, nuclear, renewables.

Ms. WILSON. Is that happening is what I am asking?

Mr. KELLIHER. That, I don't know. I know there has been, there is more interest now in fuel diversity, with the increase in gas prices. It is something the Administration was concerned about almost 5 years.

Ms. WILSON. Mr. Mason, are you seeing it in Ohio, or do you have any plants on the drawing boards in Ohio that you are familiar, and are they looking at other than natural gas-fired?

Mr. MASON. Mr. Chairman, Congresswoman. Chairman Kelliher is, I think, right on the point that State utility commissions do regulate. We have actually seen, at one point, in the later 1990's, the generation from natural gas being permitted, though not constructed, and a couple that were constructed, not in use. We now have an application pending before us that the ranking mentioned, the IGCC, which is a gas-fired facility, is actually before the Ohio Public Utility Commission, so I cannot comment on that in particular. But we have also seen Synergy look at constructing one in Indiana, so to answer your question shortly, we are seeing the new electricity generation proposals coming at us, using clean coal technologies, rather than natural gas. The gas-fired technologies I saw proposed in Ohio, and in the Midwest, in the later 1990's, were all based on $4 to $6 natural gas to be economic. Obviously, those prices are behind us by some great degree, so it does look like coal does have a future, and I might say my father is a retired United Mine Worker, whenever I see a coal application, I am somewhat excited by that.

Ms. WILSON. Thank you. Thank you, Mr. Chairman. I appreciate it.

Mr. SHIMKUS. I thank the gentlelady. The Chair recognizes the gentleman from Maryland, Mr. Wynn.

Mr. WYNN. Mr. Chairman, I don't know whether this should go to you, Mr. Kelliher, or you, Mr. Maddox, but earlier, our committee chairman was asking about the impact of new license, and I think you said that actually, 3 of 8 projects were under construction, best estimate that they would take about 3 years before we would see them online. And so my question is this. We have established about 3-percent annual growth, so we have got to say in the next 3 years, we will have a 9-percent increase in demand, growth in demand, 3 years out.

Do you make projections on prices that would give guidance to Congress and the American public, as to what we could expect in terms of natural gas prices over the next 3 to 5 years, in light of these factors?

Mr. KELLIHER. We don't make projections. The Department of Energy's Energy Information Administration makes some projections. We——

Mr. WYNN. So you are handing it off to Mr. Maddox.

Mr. KELLIHER. I think that is correct.

Mr. WYNN. Right. Okay. Mr. Maddox.

Mr. MADDOX. Who will happily kick this can down the field. As Joe said, EIA does act as an independent agency. I don't have their long term forecasts. I think most folks would say they were, probably will decline, but not dramatically. You know, I would guess, I would be happy to get you the EIA forecast for the record, but I know the next 2 years, we are looking at $8.70 in 2006, so——

Mr. WYNN. So pretty much consistent levels of pricing for the next couple of years. Beyond that, maybe a slight decrease, but are you projecting a decrease?

Mr. MADDOX. Yeah, a moderation, yes. A decrease——

Mr. WYNN. About how much would you say you are going to project?

Mr. MADDOX. I don't have those numbers in front of me. I would guess they would probably be in that $8 range, give or take. I would be happy to, you know, give you a full answer for the record, and get the EIA projections.

[The following was received for the record:]

The November 2005 *Short Term Energy Outlook* (STEO) projects that the lower-48 average natural gas wellhead price in nominal dollars will be $7.62 per thousand cubic feet (Mcf) in 2005 and $7.86 per Mcf in 2006. Current longer-term projections will be available in December, when the *Annual Energy Outlook 2006* is issued.

Mr. WYNN. Okay. I certainly would appreciate that. The other question, Mr. Kelliher, you were saying that one of the things you do is monitor State conservation programs. Have you identified best practices by State governments, in terms of conservation?

Mr. KELLIHER. Well, yes. We had Commissioner Mason participate in the Commission meeting on October 12, looking at the gas infrastructure, the damage that the hurricanes caused to the existing infrastructure, and also, the need to develop infrastructure over the long term. And then, the Commission meeting——

Mr. WYNN. Well, I don't want to cut in on you. I just want to know what the best practices are.

Mr. KELLIHER. We heard from a number of States on the 20th at the Commission meeting. California has a huge conservation program, a $2 billion conservation program, that is just very impressive.

Mr. WYNN. What does it do? How does it work?

Mr. KELLIHER. I can't say I am familiar with—we can supply that for the record, but we heard from New York, Massachusetts, Iowa, and California.

Mr. WYNN. If you would submit for the record, and also, if you would submit to me the State best practices, I think that would be very helpful.

Mr. KELLIHER. Okay.

Mr. WYNN. Okay. Thank you. I relinquish the balance of my time, Mr. Chairman.

Mr. SHIMKUS. The gentleman yields back, and the Chair thanks the gentleman. The Chair now recognizes the gentleman from Texas, Mr. Burgess.

Mr. MARKEY. Mr. Chairman. Mr. Chairman. May I? Before you do it, I have the statement of Administration policy on the bill that Mr. Maddox said the Administration doesn't state their policies on, that has now just passed the House, and I would like to have this inserted in the record, where Mr.——

Mr. SHIMKUS. Okay. If we could see it, and then, we will——

Mr. MARKEY. Okay. Sure.

Mr. SHIMKUS. Why don't you pass it down, and we will——

Mr. MARKEY. It is the statement of President Bush's position.

Mr. SHIMKUS. Well, if we could see it, and we will take a look at it.

Mr. MARKEY. Okay. Sure.

Mr. SHIMKUS. And we will make a ruling. The Chair recognizes the gentleman from Texas.

Mr. BURGESS. And I thank the chairman.

Chairman Kelliher, you mentioned that, and I apologize for being out of the room, so if I am asking anything that has already been covered, my apologies. But you mentioned that the Commission has jurisdiction over natural gas transmission rates, as well as petroleum pipeline products. You state that these costs are 6 percent of the delivered cost for natural gas, and 1 percent for the delivered cost of petroleum products. Can you tell us what accounts for that difference?

Mr. KELLIHER. Why is it 6 percent in one instance, and one in the other?

Mr. BURGESS. Why is it so much higher for natural gas?

Mr. KELLIHER. Sure. The 6 percent is a rough rule of thumb. I think 1 percent is a little bit more accurate barometer of the typical transportation component of oil and petroleum products. The 6-percent figure will vary, because the commodity price varies sharply, so it might be 6 percent on one gas pipeline; it might be 10 percent on another. It really is, in large part, a factor of the commodity price volatility.

Mr. BURGESS. Does storage factor in as being an issue in pricing, the cost of storage of natural gas?

Mr. KELLIHER. In that 6-percent estimate?

Mr. BURGESS. Yes.

Mr. KELLIHER. No. To my knowledge, no. No.

Mr. BURGESS. And what about the amount of storage capacity this year, as compared to last year?

Mr. KELLIHER. Storage levels, right now, are actually above the 5 year average. That is one of the few bright spots of the current picture, is that the amount of gas in storage was slightly above the 5 year average before the hurricanes, and it still is slightly above the 5 year average. So we are in fair shape when it comes to storage. But I personally think that there is a need to explore pricing reforms to expand total storage capacity.

Mr. BURGESS. Well, if that is the case, why were the prices higher before Katrina and Rita, and then even higher after the hurricanes hit, if we have more storage this year than last year?

Mr. KELLIHER. Well, we saw some of that last year. Last year, we saw record levels of gas in storage. We saw very high levels of volatility. I mean, to me, that suggests that the total gas storage capacity is inadequate, and should be expanded. At least, that is one inference.

Mr. BURGESS. The total storage capacity is inadequate, and should be expanded?

Mr. KELLIHER. Yes.

Mr. BURGESS. Okay. Thank you. With your Commission, what do you have at your disposal? What sort of stick do you have at your disposal to prevent people from taking advantage of price in markets when they are distressed?

Mr. KELLIHER. First of all, we now have, for the first time, some strong enforcement tools, something the Commission has lacked for 70 years. We asked Congress at the beginning of the year, for strong enforcement authority and penalty authority, something that other regulatory bodies, the CFTC has it, the SEC has it. We asked for comparable enforcement tools. For most violations of the Natural Gas Act, for example, we had no ability to impose a civil

penalty, and civil penalty really is the basic enforcement tool available to en economic regulatory body. We had no civil penalty authority whatsoever.

Now, we can impose a penalty of up to $1 million per day per violation. On October 20, we issued an enforcement policy statement to explain how we will seek to apply that penalty authority, and our approach is modeled on the SEC's approach, and the CFTC's approach, as well as Justice Department guidelines for prosecution of business organizations. So we have tried to study how other regulatory bodies and enforcement agencies use, exercise their penalty authority. But we do now have strong enforcement tools.

Mr. BURGESS. Well, and I am grateful for that. How many companies, or how many cases do you have under review right now?

Mr. KELLIHER. I don't know how many we have under review right now. Some may be nonpublic investigations that I shouldn't discuss. But we, even before this new grant of enforcement, we had, I think, a very impressive record on enforcement. We sent Congress a report in, I think March of this year, that detailed the Commission enforcement actions taken in recent years. Even though we didn't have penalty authority, we have secured very impressive settlements.

Mr. BURGESS. And what do those settlements look like for the last 6 months? Have they been even more impressive with the new tools that you have?

Mr. KELLIHER. We have only had the new tools since August 8, and I think there have been, well, there have been a number of settlements that have been announced since then, but we decided, you know, to be fair, we decided that it wouldn't be appropriate to impose civil penalties for violations that predated the enactment of the new law.

Mr. BURGESS. At some point in the future, can this committee expect that you will keep us up to date on——

Mr. KELLIHER. Yes, sir.

Mr. BURGESS. [continuing] on what these new tools have done for you, and——

Mr. KELLIHER. Yes.

Mr. BURGESS. [continuing] and where we have forced compliance, where before, it might have been much more difficult to do so?

Mr. KELLIHER. Yes.

Mr. BURGESS. Thank you.

Mr. KELLIHER. Thank you.

Mr. BURGESS. Mr. Maddox, the current Administration is often criticized for drilling, wanting to drill anywhere and everywhere. In 1999, the Clinton Administration issued 2,414 permits to lease in the Rocky Mountain States. In 2003, under the current Administration, that number was down to 1,479, in a time when supply is more important than ever. What is the Department doing to help the Department of the Interior in its effort to issue more leases?

Mr. MADDOX. As I stated earlier, we are working very closely with them to clarify the environmental impacts of different technology, trying to identify best practices that can be employed and used to expedite that process, as well as developing new processes going forward.

Mr. BURGESS. Thank you. Mr. Chairman, I am a little over. I will yield back.

Mr. SHIMKUS. The gentleman yields back, and per our previous discussion, we will accept the statement in the record that Mr. Markey requested, since it has Chairman Barton's co-signature, it made sense to do so.

The Chair now recognizes the gentleman from Texas—and apologizes for not recognizing him earlier—for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman, and I want to thank my colleague from Texas, Congressman Burgess, for getting rid of the myth that the Clinton Administration was anti-energy, because some of us tried to work on that for many years, and I am glad they allowed the 2,000 plus permits, as compared to 1,400.

I want to talk about economic dispatch. But before I get here, it seems like from your testimony, and a lot of the questions, is that right now, we are, you know, it is about $11 per million cubic feet, and if Congressman Wynn is correct that we have a 3-percent growth, you know, and it takes 3 years to get an LNG terminal, which is, again, not the panacea we wish it were, but it seems like we need to do everything. I mean, we need to drill more in the Rocky Mountains. We need OCS exploration and production, and the de-bottlenecking the chairman talked about, of course, the Alaska pipeline. I know in the refinery bill that the House passed, but it is not law now, there was some effort to encourage the companies to build that pipeline, but it seems like we need to do everything for gas supply, and that is what is frustrating.

Let me ask you about, Chairman Kelliher, about the economic dispatch, and you know, we have such high prices, and I have a strong interest in economic dispatch, because we hear the problems up here from those States that don't necessarily produce like Texas does. And therefore, I am pleased to hear that FERC is moving forward on that regional joint board that the States, to examine economic dispatch, as provided by our amendment that this committee accepted to the Energy Bill that passed this last July.

There is an issue for, that maybe even a lot of our committee members and our staff don't understand, that are familiar with, so could you lay out the basics of what economic dispatch is, and let us know what FERC and joint boards will be discussing on that issue. And on a separate issue, since again, it is a new law on the streamlined permitting process for LNG terminals, you have had all of 2 months now, what is happening with FERC on trying to permit new LNG terminals, to get them online? Again, 3 years may be the average, hopefully, we can shave a few months off that, not only for Mr. Markey's constituents in Massachusetts, but for my constituents who use natural gas to cool our homes during the summer.

Mr. KELLIHER. Well, first of all, on economic dispatch. Power plants have different costs. There are base-load plants and peaking plants, but base-load plants have varying costs, and normally, economic dispatch has been done for a long time. Typically, it has been done on a utility-by-utility basis. They dispatch the generation they own. They start with the lowest cost generation, and they, in a theoretical way, they start with the lowest cost generation, and add to it, each increment slightly more expensive than

the last, until the point where they actually satisfy demand. They are dispatching enough generation that they can satisfy demand.

That very simple model has gotten more complicated as independent power production has been added. Now, in some regions of the country, ERCOT, the organized markets in the Midwest and the Northeast, they dispatch, they have security constrained economic dispatch, where they will dispatch on a regional basis, not just on each individual utility system, but on a regional basis. In other parts of the country, they continue, they have economic dispatch, but on a system by system basis.

That is what the Commission will look at at the joint board meetings. Texas, I will be chairing the southern joint board meeting in about 2 weeks, well, less than 2 weeks, and we will hear from ERCOT on how ERCOT does economic dispatch.

And on LNG, since EPACT, I mean, one development since EPACT is the Commission, jointly with the California Public Utilities Commission, filed a motion to dismiss the litigation that inspired Congress to act to clarify the Commission's legal exclusive jurisdiction over authorizing LNG import facilities. I am not aware. Have there been filings? Oh, we did. Yeah, one of our first actions in the Energy Policy Act was within 60 days—we have a deadlines under the Energy Policy Act, something like 15—and the first one was issuing a final rule on LNG pre-filing process, and we issued that on the sixtieth day, which is not easy to do under the Administrative Procedures Act.

I am not aware. Have there been other LNG proposals filed? No new proposals have been filed. We expect there may be some filed soon, though.

Mr. GREEN. Okay. In what brief seconds I have left, Secretary Abraham, in 2003, recommended economic dispatch to State PUC chairs as a way to reduce natural gas prices. Has the Administration made this recommendation again going into this winter, which would have even, will have even higher prices than we did 2 years ago? If not, is this a good idea for the Department of Energy to do that?

Mr. MADDOX. As I noted earlier, this isn't actually part of my portfolio, so I would take that question for the record, and respond in writing.

Mr. GREEN. Okay. Thank you, Mr. Chairman, for the time.

Mr. SHIMKUS. I thank the gentleman. Now, the Chair recognizes the gentleman from Maine, Mr. Allen.

Mr. ALLEN. Thank you, Mr. Chairman. This is working, I gather.

Mr. SHIMKUS. I will hit the mute button in a minute.

Mr. ALLEN. Okay. When this light goes out, I will come back to you. First of all, Chairman Kelliher, I just had a question for you to begin with. I am sure you share my concern that as commodities supplies tighten, the potential for market manipulation increases. Can you give us any more detail about the market manipulation rules your Commission has proposed? Specifically, when will they be implemented, and will they be in place to prevent market manipulation on a real-time basis in the natural gas market this winter, if it occurs?

Mr. KELLIHER. Sure. And first of all, let me start with, this is something that I personally urged Congress to do in a letter to Mr.

Dingell last January. I thought that, given changes in the market, the Commission needed stronger enforcement tools. Something Senator Bingaman supported, Mr. Boucher supported, and it ended up getting into law. It was something I personally was committed to. So one of the first orders of business after the new law was enacted was to follow the path that Congress laid out for us. Congress told us to issue anti-manipulation rules modeled on the securities model, the model in securities law. We don't, at FERC, naturally have great expertise on securities law. It is not something we deal with, so we started with the model Congress gave us, understood securities law, and issued a proposed rule modeled on the securities approach. And we issued those rules on October 20, I believe. We approved them October 20, and we fill finalize them by the end of the year.

Mr. ALLEN. Okay. So they will be in effect.

Mr. KELLIHER. Yes, sir. This winter.

Mr. ALLEN. Before this winter.

Mr. KELLIHER. Yes.

Mr. ALLEN. Mr. Maddox.

Mr. KELLIHER. Oh, I am sorry. And can I clarify one thing?

Mr. ALLEN. Yes.

Mr. KELLIHER. We also did have other market manipulation rules that go back 2 years, the market behavior rules the commission issued 2 years ago. Those have been challenged in court. They are still good rules. They haven't been overturned by the court, but one reason we saw express prohibition of market manipulation was to guard against that legal threat, so there are market behavior rules in place until we finalize the new rules.

Mr. ALLEN. Okay. And you feel the new rules have cleared up the legal problems with the old?

Mr. KELLIHER. I think so.

Mr. ALLEN. To the extent there were legal problems.

Mr. KELLIHER. Yeah, I think it would be hard to challenge the essence——

Mr. ALLEN. Okay.

Mr. KELLIHER. [continuing] of the new rules, given Congress's action.

Mr. ALLEN. Okay. Mr. Maddox a couple of questions for you. In the formulation of the Administration's budget policy over the last 5 years, was it ever conceived that a major hurricane could strike oil and gas producing regions in the Gulf of Mexico? I mean did you take that into account in the formulation of the Department's budget? That risk.

Mr. MADDOX. That planning would undoubtedly go over to DHS. I can tell you we have done extensive work on energy assurance. We have created an Office of Energy Assurance. We staffed it. So yes, the Department has addressed that issue, and moved forward, and in fact, our Department had played a major role in helping restore some of the energy, working with the industry, DHS, the Department of Transportation, Coast Guard, to clear channels, and get electricity back to critical infrastructure. So it was contemplated. A program was set up to address these issues, and it was very effective throughout this process.

Mr. ALLEN. Okay. Coming back to the statement I made in my opening, I mentioned the fact that back in March, Secretary Bodman said that 95 percent of the Administration's energy policy had been implemented. What do you believe was left out? What do you believe we should be doing now? The related question is do you agree at this point, it might have been wise to have a little more of a conservation component to the energy policy? It was, I think, Mr. Kelliher, who said in his remarks that we are counting on State conservation plans to help us through the winter. Wouldn't it have been good to have a comprehensive, extensive Federal conservation plan in that energy policy?

Mr. MADDOX. First, you know, the Administration's policy during the Energy Bill was to support conservation and renewable energy efforts. I think we had $7.7 billion in spending and tax credits to support conservation. The Administration policy was not to support production credits. We felt like in the current price environment, that there was enough incentive to continue producing. Having said that, I would also note that, in October, Energy Awareness Month, the Secretary kicked off a campaign, our senior folks, the Secretary, Undersecretary, I think visited eleven cities. We have created a website, energysavers.gov, we have been out there talking about conservation for some time. We had this discussion, I think, in 2003. Secretary Abraham convened a group in July. So there has been extensive work on conservation.

What we really have got to understand is that turning a ship this size takes time. It takes time to insulate homes. It takes local building code changes. We can educate it. We are getting very aggressive now in creating the Energy Saver codes. Some of this has been bogged down in courts for years. So we are very quickly moving out, and have been trying to move out in this front. It still does not ignore the fact, though, that we still do need additional production. The United States is the third largest oil producer in the world and declining. We are at 5.5 million barrels today. Projections have at 4.5 billion barrels in the not too distant future, unless we bring on ANWR, unless we bring on some of these other reserves.

So it needs to be a combination. We are using energy much more efficiently than we did 10, 15 years ago. However, we have a huge hole in the residential area, which I think is a major problem going forward. Conservation from an industry perspective is pretty much a competitive necessity, and they are getting there. But we have a lot of work to do on the——

Mr. ALLEN. I see my time has expired, Mr. Maddox. I would just not belabor the point, but since 70 percent of all our oil goes into vehicles, it would have been nice, it seems to me, 4 years ago, to have done something serious about a policy, not just talking about a policy that would have driven down or improved the vehicle emissions, vehicle fuel efficiency as well.

But I see my time has expired, and I argue with Mr. Shimkus about this now and then. So we won't do it again today. Thank you.

Mr. SHIMKUS. The chairman thanks my colleague. If the Chair can dismiss this panel, and thank them for their testimony, and call the second panel to their seats.

Mr. MARKEY. Mr. Chairman, could I ask one question by unanimous consent?

Mr. SHIMKUS. If the Chair would limit it, we have already been here 2 hours, we have got two more panels. If the gentleman can assure me that we can do this expeditiously, I would be happy to.

Mr. MARKEY. No, I will. I just have——

Mr. SHIMKUS. Thank you.

Mr. MARKEY. [continuing] one question for Mr. Maddox.

Mr. SHIMKUS. I knew we wouldn't get out of here.

Mr. MARKEY. Well——

Mr. MADDOX. But first, may I acknowledge my error.

Mr. MARKEY. Okay. No, I appreciate it, Mr. Maddox. So what I would like to do, Mr. Maddox, is just for you to clarify, because in the Administration's letter to the committee on the bill, it says that they have concerns about certain provisions. I guess what I would like to know is first, do they have concerns about the bill having a provision which increases the reserve from 2 million to 5 million barrels? Is that one of the concerns?

Mr. MADDOX. I don't believe there is a fundamental concern over increasing the authorization to 5 million barrels.

Mr. MARKEY. Okay. And second, it says there are Constitutional concerns about the Barton bill. What are the Constitutional concerns that the Administration has about the Barton bill?

Mr. MADDOX. That I couldn't address, but I would be happy to take it for the record.

Mr. MARKEY. Okay. Thank you.

Mr. SHIMKUS. And as with Chairman Barton, if there is additional questions that any member would like to address, they can submit those to, and we want to thank you for your time and your responses.

And now, if we can get folks to expeditiously exercise their legs and move out of sight of the committee room, and have our second panel take their seats.

I would like to get the second panel moving as expeditiously as possible. I will do some brief introductions, and then, we will go to opening statements.

We have, in the second panel, and you can correct me if I butcher your last name. It is not intentional. Mr. Robert Stibolt.

Mr. STIBOLT. Stibolt.

Mr. SHIMKUS. Stibolt. Who is the Senior Vice President for SUEZ Energy North America. We also have with us Mr. Stephen Ewing, a Vice President of DTE Energy. Ms. Mary Ann——

Ms. MANOOGIAN. Manoogian.

Mr. SHIMKUS. Manoogian. Director of the New Hampshire Office of Energy and Planning. And Ms. Dorothy Tucker, from Medford, Massachusetts.

We welcome you. Your whole statements are submitted for the record. If you can summarize in 5 minutes, and we would like to start with Mr. Robert Stibolt.

STATEMENTS OF ROBERT D. STIBOLT, SENIOR VICE PRESIDENT, STRATEGY, PORTFOLIO, AND RISK MANAGEMENT, SUEZ ENERGY NORTH AMERICA, INC.; STEPHEN E. EWING, VICE CHAIRMAN, DTE ENERGY, INCOMING CHAIRMAN, AMERICAN GAS ASSOCIATION; MARY ANN MANOOGIAN, DIRECTOR, NEW HAMPSHIRE OFFICE OF ENERGY AND PLANNING; AND DOROTHY ELIZABETH TUCKER

Mr. STIBOLT. Thank you, Mr. Chairman. I appreciate the opportunity to be here today to discuss natural gas and home heating oil this year.

As you know, I work for and represent SUEZ Energy North America, which through its LNG division, owns and operates the liquefied natural gas terminal in Everett, Massachusetts. My written statement is fairly thorough, and I ask that it be entered into the record.

Mr. SHIMKUS. Without objection, so ordered.

Mr. STIBOLT. Beyond the written statement, I thought I might discuss just three things very briefly. First, I want to note that the Everett terminal is important to the energy supply in New England. We provide about 20 percent of all the natural gas supplied to that region. On the coldest days, our estimates indicate that as much as 40 percent of the gas used in New England flowed through our terminal.

We are justifiably proud of the role we play in keeping people warm and keeping the power on in New England. At the same time, we routinely take actions to keep the gas we sell economical to our customers. We typically sign long-term contracts with secure sources of supply. We then customarily hedge a significant percentage of the price risk carried within those contracts, which positions us to offer fixed price sales contracts to our customers, and positions our hedge counter parties to offer additional price hedging services. In short, we take prudent steps to keep prices in New England as modest as possible. We also, when possible, try to bring additional cargos into New England. Given the complicated logistics of bringing a ship into Everett, it would be difficult to do much this winter, but we are looking for those opportunities.

Second, there is a lot of talk about bringing new supplies online. While we are proud of what we are doing right now, we are not just talking about what to do next. Right now, we are investing significantly in two major projects. The first is an offshore facility located about 12 miles off the coast of Massachusetts near Gloucester. This facility, which will consist essentially of a hookup to a nearby underwater pipeline will require a special set of tankers that can regasify the LNG right on the ship, and feed directly into the region's pipeline system. When complete, this $1 billion project will give us the ability to supplement our cargos into Everett, increase the supply of natural gas being delivered into New England, and provide our customers with the most affordable natural gas in the region.

The second is a similar project in Florida, which will bring LNG into Florida via pipeline, either from the Bahamas, or from an offshore regasification facility. Right now, we are actively working on both options. Third, I think we need to keep things in perspective. It is wrong to claim that LNG alone can meet all of our growing

needs for natural gas. We view LNG as an important energy source in addition to other North American natural gas supplies, not as a replacement for them.

Policymakers cannot and should not allow our very sensible and successful approach to LNG to obscure the fundamental reality that we need to better access and develop our Nation's natural resource base.

Thank you again for inviting me to discuss these issues with you, and I look forward to any questions you might have.

[The prepared statement of Robert D. Stibolt follows:]

PREPARED STATEMENT OF ROBERT D. STIBOLT, SENIOR VICE PRESIDENT, STRATEGY, PORTFOLIO AND RISK MANAGEMENT, SUEZ ENERGY

Thank you, Mr. Chairman and members of the Committee for inviting me to present testimony regarding natural gas prices and, more specifically, the role of liquefied natural gas (LNG) in the larger marketplace.

My testimony today will concentrate on five important points related to LNG.

REGIONAL ENERGY SUPPLY

First, I think it is important to recognize that LNG can contribute substantially to a region's energy supply. For instance our terminal in Everett, Massachusetts meets 15-20% of New England's natural gas demand, and we are capable of meeting 35-40% of the region's demand on peak days. In addition we are supplying the fuel for a new 1,550 megawatt powerplant, which can generate enough electricity for approximately 1.5 million homes each year. If LNG resources were not available in New England, supplies would be far tighter and consumers would suffer.

In short, wherever there is a facility LNG keeps downward pressure on prices by helping to diversify and increase a region's energy supply. By competing openly and fairly with gas delivered via pipeline, LNG helps ensure that consumers get the best deal possible.

There are two other important advantages of LNG. First, LNG helps us access the ample supplies of natural gas around the world. Estimates of the total world supply of natural gas hover around 6 quadrillion cubic feet, and more reserves of natural gas continue to be discovered. Much of this natural gas is stranded a long way from market, in countries that do not need large quantities of additional energy. For purposes of perspective, U.S. natural gas reserves were estimated by the Energy Information Administration (EIA) at 193 trillion cubic feet as of the end of 2004. This represents only about 3% of the world total. Second, liquefying natural gas and shipping it is more economical than transporting it in pipelines for distances of more than about 700 miles offshore or more than 2200 miles onshore.

Consequently, there are 113 active LNG facilities in the U.S., including marine terminals, storage facilities, and operations involved in niche markets. Worldwide there are 17 LNG export terminals, 40 LNG import terminals and 136 specially-designed LNG ships.

NATURAL GAS SUPPLY

Second, even with our obvious enthusiasm for LNG, it is wrong and probably irresponsible to claim that LNG alone can meet all of our growing needs for natural gas. We view LNG as an important energy source in addition to other North American natural gas supplies, not as a substitute for them.

In short, LNG needs to be thought of as complementary to our current resource base. This is a very important point. Policymakers cannot and should not allow our very sensible and successful approach to LNG to obscure the fundamental reality that we need to better access and develop our Nation's natural resource base.

We believe that the U.S. must increase its domestic production of natural gas. Recent legislative, regulatory and market trends have placed greater demands on our gas supply without taking commensurate steps to increase production. Congress needs to take steps to create a climate in which we can develop adequate supplies, produced in an environmentally protective manner. Access to new reserves is necessary not only to meet new demands, but simply to sustain current production levels.

Currently, in the natural gas industry generally, many fields in the United States are getting more difficult to develop since most of the easy-to-access, highly produc-

tive reserves already seem to be accounted for. In Canada, key fields are also maturing while the country is experiencing its own increase in natural gas demand.

At the same time, natural gas demand is growing both overall in the U.S. and in our terminal's home base in New England. There is a significant increase in new natural gas-fired electric power plants, which, although they use less fuel than older, less efficient gas and oil powerplants, still place demands on the resource base. In addition, there is steady growth in demand for natural gas from residential and commercial customers.

More specifically, according to the Energy Information Administration (EIA), natural gas production in the U.S. is predicted to grow from 19.5 Tcf in 2001 to about 26.4 Tcf in 2025. At the same time, total natural gas consumption is expected to increase to about 35 Tcf in 2025. It is not complicated math to see that demand is outstripping supply.

We can talk for a long time about the reasons for higher prices, but when demand is increasing and supply is steady or dropping, it makes no difference whether you are buying and selling toast or helicopters or natural gas—prices are going to increase.

As a result of these factors, many are concluding that LNG represents an important part of the long-term natural gas supply solution.

We believe that because it provides unique flexibility, LNG will continue to grow as a resource for the United States. In our ongoing effort to diversify our supply of energy, LNG's exceptional and exclusive ability to transport what was once stranded natural gas from various sources can only help.

Additionally, as response to demand becomes more important, our ability to move natural gas to where it is needed, freed in part from the constraints of pipelines, will ensure that LNG is an increasingly important element in our Nation's energy supply portfolio. Simply put, LNG offers greater trade flexibility than pipeline transport, allowing cargoes of natural gas to be delivered where the need is greatest and the commercial terms are most competitive.

This trend can already be seen. As the Energy Information Administration has noted, LNG imports have increased by more than 30 times—from 18 Bcf in 1995 to 540 Bcf in 2003. Factors ranging from additional sources of supply to lowered costs for liquefaction and shipping have contributed to the increase. Currently, anticipated expansions on LNG facilities are expected to raise the United States' import volumes from 2 Bcf per day in 2005 to about 6 Bcf per day in 2010.

PROJECTS

Let me move onto my third topic and address questions about the development of LNG as an important source of energy for the United States. As you know, the Energy Information Administration has indicated that LNG might supply as much as 20% of the natural gas consumed in the United States in the future. Additionally, there are dozens of proposed LNG terminals on the drawing board right now. While I think we can all agree that not all of those facilities will be built, and it is unlikely that LNG will supply 20% of this Nation's natural gas anytime in the near future, it is safe to say that LNG can provide a growing fraction of the energy needed to power the world's largest economy.

We at Suez are confident in the future of LNG in this country. We are investing in two major projects to bring LNG into the U.S. We own and operate the terminal at Everett, and have some capability to deliver additional LNG supplies through both Cove Point and Lake Charles. A Suez subsidiary with direct access to LNG at the point of liquefaction is an important source of supplies delivered into Cove Point and Lake Charles. We are leaders in the worldwide LNG industry and are involved in the process from liquefaction through transportation right up to the point at which the gas is delivered into the pipeline.

Our two major projects are designed to bring more LNG into the markets in New England and Florida. These markets have constrained access to natural gas, in part because pipeline capacity is not robust in those areas. These projects make sense for us as a business and for the consumers of New England and Florida, who continue to demand the benefits brought about by a plentiful, affordable supply of natural gas.

The project in New England is an off-shore facility located about 12 miles off the coast of Massachusetts near Gloucester. This facility, which will consist essentially of a hookup to a nearby underwater pipeline, will require a special set of tankers that can regasify the LNG right on the ship and feed directly into the region's pipeline system. When complete, this $1 billion project will give us the ability to supplement our cargoes into Everett, increase the supply of natural gas being delivered

into New England, and provide our customers with the most affordable natural gas in the region.

The project in Florida will bring LNG from the Bahamas via pipeline. Right now, we are working with the regulatory agencies to determine our best options. Unfortunately, sometimes the regulatory agencies are not as interested in moving energy projects along as we are.

Let me offer our experience in Florida as an example. There, we have been working diligently to gain the appropriate regulatory authority to construct a pipeline between the Bahamas and Florida. Last April, FERC approved our EIS, the State gave its determination of consistency with respect to the coastal zone, and the local governments all approved the project. Unfortunately, the Corps of Engineers decided after all that to raise questions. The Corps representatives had participated in all the interagency meetings and discussions, but they waited until FERC had acted to raise their concerns, some of which included very fundamental elements of the process including potential pathways, tunneling, etc. Now, we find ourselves caught between a dramatic design change requested by the Corps of Engineers and the design that was approved by more than ten federal, state, and local agencies through the FERC multi-agency permitting process.

As a coda to this section, I would simply point out that permitting and other delays complicate the supply picture. LNG is a global commodity. If we can't move expeditiously to develop and secure supplies of it, other countries will.

INTEGRATED MARKETS

My fourth point is that we need to better integrate natural gas markets. I have attached a chart to my testimony outlining how this can be thought about. For reasons both physical and financial, we are experiencing something of a balkanized marketplace for natural gas in the United States. Much of the natural gas from the Gulf of Mexico flows into the Northeast, which appears to be the gas market most stressed in the event of a cold winter. More abundant supplies of natural gas from the Western United States and Canada flow into the Chicago and other Midwest Hubs, but because of physical constraints and financial realities, does not flow further eastward into New England.

This places us in a situation where New England is dependent on natural gas primarily from the Gulf, which, despite being a region rich in the resource, struggles to meet the demand. In this year, the hurricanes have greatly complicated the supply picture and placed New England in a position where supply, especially in February, may be problematic.

We need to do everything we can to see that supplies scheduled for delivery to both the Gulf of Mexico and the Northeast US can in fact be delivered.

SAFETY

Finally, let me address—and hopefully put to rest—the very important issues of safety and security.

First off, I want to note that LNG is as safe, if not safer, to transport and store than most other fuels. It is not explosive, corrosive, carcinogenic, or toxic. It does not pollute land or water resources. It is not transported or stored under pressure.

Like other fuels, LNG has risks associated with its improper handling; however, LNG has certain characteristics which minimize some of the dangers that may result from mishandling. For example, compared to other fuels, LNG is less likely to ignite in a well ventilated area.

With respect to the transportation, LNG ships, with their double-hull construction, are among the best-built, most sophisticated, most robust in the world. According to shipping expert *Lloyd's Register,* there has never been a recorded incident of collision, grounding, fire, explosion, or hull failure that has caused a breach to a cargo tank of an LNG ship. In fact, over the last 40 years there have been 33,000 LNG carrier voyages, covering more than 60 million miles without major accidents or safety problems either in port or on the high seas.

It is also important to note that in the extremely unlikely event that an LNG vessel were involved in an incident that ruptured a cargo tank, and the LNG vapor released met with an ignition source, the likely consequence would be a localized fire, and not an explosion as is often feared.

With respect to the storage of LNG, there has never been a report of any off-site injury to persons or damage to property resulting from an incident at any of the LNG import terminals currently in operation worldwide, including our terminal in Everett. This is due to excellent equipment and facility design, excellent safety procedures employed in the industry, stringent design and safety codes governing de-

sign, construction, and operation of storage facilities, and a well-trained, highly experienced workforce.

Finally, we live in a world of comparative risk. At Everett, we take about 80 shipments of LNG a year. Next door to us is a gasoline terminal that probably takes at least as many. Across the Nation there are thousands of such terminals and storage tank farms next to houses, schools, and businesses. I am not saying that because of this we need to pay less attention to the safety and security of LNG shipments. What I am saying is that we need to make sure that we are addressing real world risks in an appropriate and measured way.

Thank you again, Mr. Chairman and Members of the Committee for inviting me to present our thoughts on possible approaches to help moderate natural gas prices and, more specifically, the role of liquefied natural gas in the larger marketplace. I look forward to answering any questions you might have and working with the Committee on these very important issues.

Mr. SHIMKUS. Thank you. Now, the Chair recognizes Mr. Ewing. Your statement is in the record, and your are recognized, sir.

STATEMENT OF STEPHEN E. EWING

Mr. EWING. Thank you, Chairman Shimkus, and thank you, Ranking Member Boucher, and members of the committee.

I am here today in my role as Vice Chairman of the American Gas Association, which represents 195 utilities across the country that deliver natural gas to more than 63 million customers. I am also the Vice Chairman of DTE Energy, a combination electric and gas utility in Michigan. We serve 2.2 million electric customers, and 1.2 million natural gas customers.

Before I begin my comments, I would like to offer my sincere thanks to the members of this committee for all the work that you did to successful pass the Energy Policy Act of 2005, for your support for $1 billion of increased funding for LIHEAP, and most recently, I would like to thank you for conducting these hearing, which serve as an important forum to further explore the impact of high gas prices, and to consider policy measures that could be enacted.

As you already know, natural gas prices have reached unprecedented high levels, reaching a peak of $15.60 per thousand on October 5 of 2005. While prices have softened somewhat, they remain extremely sensitive to changes in weather, supply, and demand. Today, I would like to focus briefly on three things. First, the needs of low-income customers, who are the most vulnerable group to the impact of high prices. Second, the need for continued, effective communication measures that will do the following: warn customers about significantly higher heating bills this winter, and inform them of what actions they can take to reduce natural gas consumption, where to get help if they need it, and things they should not do, because they are unsafe. And third, the need for a long term solution, in the form of increased natural gas supplies.

Returning quickly to the first point, the increase in gas prices has caused a corresponding decrease in the purchasing power of LIHEAP dollars. Based on current prices, it is a reduction of almost 50 percent. At the same time, the number of households receiving LIHEAP assistance, essentially 20 percent of those eligible, has increased from approximately 4.2 households in fiscal year 2002 to more than 5 million households this year, the highest level in a decade.

The National Energy Assistance Directors' Association study, that was referred to by Congressman Wynn earlier, released its second annual survey detailing the effects of high energy costs on poor families. These circumstances, noticed by the Congressman, create an immediate need that can only be addressed by an increase in LIHEAP funding. AGA is advocating that LIHEAP funding be increased to the full $5.1 billion that was incorporated in the Energy Policy Act of July 2005.

To my second point, AGA and its member companies have embarked on extensive communication programs to our customers, warning them about higher heating bills this winter, and while this subject has been in the national media for some time, I believe it is only through repetition of the message that it becomes real for many people. And the message is simple: Prices are high; winter is coming; here are some things that you can do and some things you should avoid. The gist of the message? Act now. Don't wait until the situation becomes critical.

And while on the subject of communications, I think it is important to note that unlike the major energy companies who recently announced record quarterly earnings, natural gas utilities, like our customers, do not benefit from higher prices. We make our money on the delivery of the commodity, and those rates are regulated by each State.

Last, and in the long term, the most important action is to increase the supply of natural gas. To that end, AGA advocates opening restricted offshore areas for the environmentally responsible production of natural gas; providing adequate funding and staff for the Federal offices principally involved in the issuance of permits for drilling and production of natural gas; further expanding and expediting procedures for producers to access lands and production areas; and finally, to take advantage of the provisions that have already been adopted through Congress, among them, taking steps to increase U.S. capacity to receive liquefied natural gas to our LNG shipments. It has been talked about already this afternoon. And also, to follow through on the construction of the Alaskan pipeline.

Thank you very much for your attention, and again, thank you for the work that you have already done.

[The prepared statement of Stephen E. Ewing follows:]

PREPARED STATEMENT OF STEPHEN E. EWING, PRESIDENT & CHIEF OPERATING OFFICER, DTE ENERGY GAS ON BEHALF OF THE AMERICAN GAS ASSOCIATION

Thank you for the opportunity to testify before this Committee on behalf of the American Gas Association and the 56 million consumers served by its members. My name is Stephen Ewing, and I am President and Chief Operating Officer of DTE Energy Gas, a natural gas utility in Michigan that provides service to more than one million customers. I am also the Vice Chairman of the American Gas Association (AGA), which represents 195 local energy utility companies that deliver natural gas throughout the United States.

Energy is the lifeblood of our economy, and natural gas supplies about one-fourth of this country's energy. Natural gas also is America's most popular home-heating fuel, heating 52% of America's homes. As the purveyor of this home-heating fuel, natural gas utilities are a lifeline business—it is a responsibility they take seriously and, as you will see, it guides their actions.

Given the recent run up in natural gas prices in the wake of the warmer-than-normal summer and Hurricanes Katrina and Rita, this winter natural gas customers will likely face significantly higher energy bills. Local natural gas utilities as a whole have been consumed by planning for the winter heating season and seeking means to ease the burden that high gas prices will place on consumers.

Accordingly, AGA's focus is to pursue policies that will mitigate the high cost of natural gas for America's consumers this winter and that will, in the longer term, increase supply. It is distressing to consider that the $13 prices projected in the American Gas Foundation study, "Outlook to 2020," published in February of this year, have already been exceeded over the last few weeks. That study concluded that if policy makers and industry decision makers did not immediately address critical issues that will have a significant impact on the availability and price of natural gas (such as diversifying electric generation mix and increasing access to domestic supplies) then prices could reach $13 by 2020. No one imagined that a mere seven months later those prices would become a reality. Today's higher natural gas prices will, of necessity, lead to much higher bills for consumers.

Higher bills are harmful to consumers, harmful to the economy, and harmful to the natural gas utilities that AGA represents. More than 63 million Americans rely upon natural gas to heat their homes. Unexpectedly high prices are a serious drain on their pocketbooks. High prices also put the nation's industrial sector at a distinct competitive disadvantage, cause plant closings, and cause workers to lose their jobs.

Most observers readily understand why higher prices are harmful for consumers and the economy, but they fail to apprehend that they are also harmful for natural gas utilities. By law and regulation, natural gas utilities in almost all circumstances are not permitted to mark-up the price of natural gas that they acquire for their consumers and must instead sell the gas to consumers at exactly the same price they pay for it. This process is overseen by state public service commissions and is subject to review and audit. Rather. natural gas utilities earn their income by delivering natural to their customers. Under the most basic principles of economics, today's higher natural gas prices mean that customers will consume less natural gas. As a consequence, natural gas utilities will deliver less natural gas, thus diminishing the revenues paid to them for services performed for their customers. As a result, and contrary to the belief of so many, the interests of consumers and of natural gas utilities are aligned on this issue. Both want lower natural gas prices and reliable natural gas supply.

Recently the Department of Energy's Energy Information Administration (EIA) issued its *Short-Term Energy Outlook and Winter Fuels Outlook* (October 12, 2005). AGA does not issue its own natural gas price projections. As a result, I will be discussing in my testimony the prices projected by EIA. As has been widely reported, EIA projects that the average natural gas household's winter fuel expenditures will increase by 47.6% over last year.

It is important to remember, as EIA carefully notes, that the EIA projections are based on modeling results that depend on assumptions regarding several critical variables:

(1) A significant assumption is that there will be a "medium recovery" of energy operations in the Gulf of Mexico following Hurricanes Katrina and Rita. EIA assumes neither a best-case nor worst-case scenario in projecting the recovery of natural gas production, gas processing, and pipeline facilities in the Gulf. What if this assumption turns out to be off the mark?

(2) Another significant assumption is that the winter weather will be normal. A "normal" winter means weather somewhat colder than most parts of the United States have seen in recent years. What if we do not have a normal winter? EIA projects that a ten-percent-warmer-than-normal winter would cause average residential natural gas prices to rise 29.8 percent, while a ten percent colder than normal winter would lead to a 67.3 percent price increase. This is quite a price range, entirely without regard to best-case or worst-case Gulf of Mexico recovery scenarios.

AGA and its members are, on a national basis, facing *significantly higher natural gas prices in the best of cases and extraordinarily higher prices in the worst of cases.*

What are natural gas distribution utilities doing to help their customers this winter? Natural gas utilities are doing what they always do—whatever they must to serve their customers reliably this winter. Gas utilities are pursuing purchasing strategies that, while tried and true, have also evolved over the past five years with ever-rising natural gas prices. It is a building-block process that begins months ahead of the winter heating season as utilities begin purchasing natural gas during the spring and summer months and putting it into underground storage. Usually summer and early fall natural gas prices are lower than winter prices, and purchasing storage gas in the summer and early fall provides a natural, physical hedge against higher prices in the winter.

In addition to the basic building block of underground storage, natural gas utilities layer other supply and transportation services. Companies build and manage a portfolio of supply, storage, and transportation services, which may include a di-

verse set of contractual arrangements to meet anticipated peak-day and peak-month gas requirements.

Layered increasingly on top of that are financial tools to hedge natural gas costs and, hence, promote a greater degree of price stability. Financial hedging tools include options, fixed-price contracts, swaps, futures, as well as more exotic instruments. These tools help in reducing price volatility. Although natural gas distribution utilities have grown increasingly savvy in the use of these tools over the past few years, they still do not guarantee lower natural gas prices. They are, rather, designed to promote price stability. Lower prices and price stability can sometimes be competing objectives.

Natural gas distribution utilities must also help their customers to help themselves. To this end, customer education is critical for a number of reasons:

First, customers need to be aware of higher natural gas prices in order to have an opportunity to take action today to reduce this winter's bills. That is why the American Gas Association and its member gas distribution utilities are working urgently to communicate to customers regarding the higher winter bills that they can anticipate and to offer consumers some tools for protecting themselves.

One important tool is the use of budget (or levelized) billing plans that allow utility customers to spread out their natural gas bills so that they pay about the same amount each month year round. Consumers using these plans are charged the same total bill each month for 11 months, regardless of weather variations and regardless of unpredictable commodity prices. A reconciling adjustment is made during the twelfth month to reflect differences in actual versus projected costs and actual versus projected consumption.

Another important tool is assisting customers to increase their homes' energy efficiency and to conserve energy better. Energy efficiency and conservation can do much to reduce individual energy consumption and, therefore, lower customer bills. Indeed, one recent study indicated that aggressive energy efficiency and conservation measures could reduce natural gas prices by up to 25%.[1] While analysts may quarrel with the likely impact of an increased application of energy efficiency measures on natural gas prices, AGA and its members know that appropriate customer energy-efficiency measures can benefit their customers. Moreover, these benefits will be almost immediate in today's high-priced environment. In contrast, other measures to ameliorate the impact of natural gas prices require a considerably longer time frame.

AGA would like to thank the Committee for its work in encouraging greater consumer energy efficiency. AGA and its member companies will continue to encourage improved customer energy efficiency and conservation to help reduce the sting of higher natural gas prices.

Another significant utility effort to help customers struggling to pay high natural gas bills is utility programs that provide low-income customer assistance. Each year utility programs and rate structures provide about $1.7 billion in low-income customer assistance.[2] These programs are designed to augment the federal government's Low Income Home Energy Assistance Program (LIHEAP), which in recent years has been funded at approximately $2 billion per year. Much of the utility low-income assistance comes in the form of rate assistance, which may involve reduced rates for low-income households, waivers of fees, and arrearage forgiveness. Other utility programs include energy efficiency and weatherization programs that help reduce customer natural gas consumption.

What natural gas utilities seek to achieve from all of these approaches is to flatten out the highest peaks of natural gas prices and dampen somewhat the impact on customers of high and volatile natural gas prices. In neither the short run nor the long term, however, can these tools mask the impact of higher natural gas prices on consumers. Instead, other actions are necessary. They were necessary five years ago, they were necessary last year, and, even with the recent enactment of the Energy Policy Act of 2005, they remain necessary today.

Accordingly, AGA recommends the following actions to address both ends of the delivery chain—supply and demand.

First and foremost, LIHEAP funding should be increased to the fully authorized $5.1 billion level. We commend the committee for including an addi-

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[1] *Impacts of Energy Efficiency and Renewable Energy on Natural Gas Markets: Updated and Expanded Analysis,* R. Neal Elliott and Anna Monis Shipley, American Council for an Energy-Efficient Economy, Report No. E052 (April 2005) http://aceee.org/pubs/e052full.pdf (adoption of a portfolio of energy efficiency measures could reduce natural gas prices by 25% in the first year).

[2] *The Growing Need to Help Low-Income Energy Consumers: Government, Charitable, and Utility Programs,* American Gas Association Energy Analysis, EA 2005-3, (September 14, 2005).

tional $1.0 billion for LIHEAP in its budget reconciliation package. This would bring total LIHEAP funding above $3.0 billion. Without an increase in funding, the "purchasing power" of LIHEAP will be reduced by up to 50 % this winter. The expected rise in home energy costs hits low- and fixed-income individuals particularly hard. The National Energy Assistance Directors' Association (NEADA) just released its second annual survey of the effect of rising energy costs on poor families. Among the study's findings: 32 percent of families in the survey sacrificed medical care; 24 percent failed to make a rent or mortgage payment; 20 percent went without food for at least a day; and 44 percent said that they skipped paying or paid less than their full home energy bill in the past year. Furthermore, the number of households receiving LIHEAP assistance has increased from about 4.2 million in FY 2002 to more than 5 million this year, the highest level in a decade. LIHEAP applications are expected to increase significantly this winter. The nation should help customers who will be hardest hit by energy price increases for home heating and cooling.

Natural gas supplies must be increased. AGA supports policies that would increase the supply of natural gas in environmentally responsible ways. Demand responses can only go so far toward the goal of lower natural gas prices. And while a demand response will help us through this winter, in the long-term supplies of natural gas must increase if we are to reduce customers' bills meaningfully. Accordingly, Congress should support appropriate incentives and legislative changes that would increase the production of natural gas. These priorities have not changed over the last several years as AGA has testified before Congress. Nevertheless, I would like to briefly reiterate a few of the most important access issues:

- Opening restricted off-shore areas for the environmentally responsible production of natural gas;
- Providing adequate funding and staff for the federal offices principally involved in the issuance of permits for natural gas and production;
- Further expanding and expediting procedures for producers to access lands and production areas; and
- Taking steps to increase the U.S. capacity to receive liquid natural gas (LNG) shipments.

Energy efficiency programs should be supported that encourage the most efficient utilization of all energy forms through the matching of each energy task with the most appropriate fuel (e.g., running computers with electricity and heating homes and businesses with natural gas). Additionally, incentives should be incorporated for more efficient energy use through tax credits for the purchase of energy-efficient appliances and the construction of energy-efficient homes and commercial buildings. Congress should further accelerate the effective date of energy-efficiency tax incentives in the Energy Policy Act and fund energy awareness programs at the Department of Energy.

Fuel diversity should be the goal for electric generation facilities. In recent years, as a result of its lesser impact on the environment, natural gas has been the dominant fuel for new electric generation facilities. Electric generation remains the fastest growing sector of natural gas demand. This increase in demand has occurred while production has remained stable, thus driving prices higher. AGA supports the direct use of natural gas and encourages electric generators to seek greater fuel diversity, such as clean coal, nuclear, alternative and renewable fuels. AGA urges Congress to provide incentives for, and to reduce regulatory barriers to, electric generation facilities that use clean coal, nuclear energy and alternative and renewable fuels.

Consumer education should be the goal not just of natural gas distribution utilities but of all policy makers. AGA and its members will continue our efforts to educate our customers. But we also urge Congress to educate our customers—their constituents—so that every avenue to the customer is blanketed with information that will ease the potential cost burden that will be imposed this winter by natural gas bills.

CONCLUSION

For the past five years AGA members and their customers have been operating in challenging times—this winter will be no exception. While natural gas customers can do their part by embracing energy efficiency solutions, policy makers in Washington must do their part to balance supply and demand.

Mr. SHIMKUS. Thank you. The Chair now recognizes Ms. Manoogian, and your statement is in the record. You are recognized for 5 minutes.

STATEMENT OF MARY ANN MANOOGIAN

Ms. MANOOGIAN. Thank you, Mr. Chairman, and members of the committee. I am the Director of New Hampshire's Office of Energy and Planning in New Hampshire, and I am honored to be here today on behalf of Governor Lynch to testify on the critical energy situation we are facing this winter.

My office is also a member of the National Association of State Energy Officials and the National Energy Assistance Directors' Association, and in the 8 years I have been with New Hampshire's Energy Office, I have never witnessed such unprecedented increases in energy prices over a sustained period of time. Consequently, I have grave concerns about ensuring that our most vulnerable citizens, the elderly, people who are disabled, and working poor families, are safe and warm this winter.

When we look at the EIA projections for this upcoming winter, which average to be anywhere between 30- to 50-percent increases for home energy, there is a critical point that I want to highlight for you all, and that is that the projected increases are on top of significant price increases last winter. Energy prices, including gasoline, have been on a steady increase the past 2 years. For example, in mid-October, New Hampshire residents were paying, on average, 33 percent more for heating oil than they were for the same time period in 2004, an 105-percent increase from 2003. For gasoline, New Hampshire citizens paid 34 percent more than in 2004, and 62 percent more than in 2003. Consumers have had no respite from rising energy costs in the past 2 years.

This winter, with energy prices continuing to escalate, NEADA and NASEO members expect an enormous number of people having to face stark choices as they choose between heating and other necessities, such as food, medication, or the ability to pay their rent or mortgage. To put this in perspective, last heating season in New Hampshire, our community action agencies processed approximately 36,000 requests for heating assistance through the end of April. This year, our community action agencies have already processed over 20,000 applications. We are not even into the start of the winter season, and our State program has processed more than half the total applications taken last heating season.

To compound the problem, at current fuel prices, the average benefit of $575 will buy a LIHEAP recipient less than a full tank of oil. And like many other States, we know that sufficient funding does not exist to serve all LIHEAP eligible households. The U.S. Census Bureau estimates that approximately 146,475 New Hampshire households are under 60 percent of the State median income, and therefore, in accordance with Federal regulations, eligible for LIHEAP. We know that sufficient funding doesn't exist to serve all those households, but at this point, we don't even have a final Federal appropriation to be able to determine how many households we can serve. And although New Hampshire operates a winter heating program, I want to stress that LIHEAP is not simply a cold weather State problem. Next summer, with high prices expected to continue, the cost of air conditioning will likely increase dramatically, with similar impacts on low and middle income Americans.

In addition, rural America is facing a crisis with escalating propane prices. For many Americans who either pay heating or cooling

bills, the problem is further compounded by high gasoline prices. Again, I cannot underscore enough the need for LIHEAP assistance, and the fact that for those States operating heating programs, it is crucial to receive funds immediately. We need to assist our most vulnerable households, and discourage them from engaging in unsafe practices in an effort to stay warm. And according to our State's Fire Marshal, New Hampshire is the only State in the country where the No. 1 cause of fire-related death is the result of improper use of heating systems. Governor Lynch and other public and private officials are doing all we can to ensure that this alarming statistic does not increase this winter season. Immediate LIHEAP funding will serve to prevent needless tragedies this winter season.

And finally, I can't underscore enough the importance and the value that energy efficiency and energy conservation can play in the long term and, also, in the immediate short term effect. My written testimony identifies various opportunities that the States are already taking advantage of to implement much more aggressive energy efficiency programs, in addition to public education programs, in regards to low cost, no cost measures that consumers can undertake.

My written testimony also identifies other measures that the Congress can take, including implementing some of the recommendations in the Energy Policy Act of 2005, including full funding, as authorized for the LIHEAP program, full funding as authorized for the State energy programs, and full funding, as authorized for the low income weatherization programs, in addition to accelerating the rules and the start date for the tax credits to help both residential and business consumers.

Again, I thank you for this opportunity, and would be happy to entertain questions.

[The prepared statement of Mary Ann Manoogian follows:]

BEFORE THE

UNITED STATES
HOUSE OF REPRESENTATIVES

COMMITTEE ON ENERGY AND COMMERCE

SUBCOMMITTEE ON ENERGY
AND AIR QUALITY

TESTIMONY OF
MARY ANN MANOOGIAN
DIRECTOR
OFFICE OF ENERGY& PLANNING
STATE OF NEW HAMPSHIRE

And also on behalf of the
National Association of State Energy Officials
And the
National Energy Assistance Directors' Association

November 2, 2005

Summary of Testimony of
Mary Ann Manoogian
Director
Office of Energy and State Planning
State of New Hampshire

and also representing
the National Association of State Energy Officials
and the National Energy Assistance Directors' Association

- The price increases for natural gas, heating oil and propane are unprecedented and the impacts on low-income and middle income Americans this winter will be grave.

- Increases ranging from 30-70% over last winter are on top of enormous increases from the preceding winter. For example, in New Hampshire we are seeing 105% increases in heating oil from 2003.

- Low income Americans pay a far higher percentage of their income on energy costs than do median income citizens. With the increases in gasoline prices in addition to increases in heating oil, natural gas and propane, Americans are doubly hit with prices they can ill afford.

- Congress should fully fund the LIHEAP to the $5.1 billion funding level authorized in the Energy Policy Act of 2005 and do so immediately to ensure that low income Americans are *safe* and *warm* this winter season.

- Congress should fully fund the State Energy Program up to the authorized level of $100 million and the Low-Income Weatherization Assistance Program up to the authorized level of $500 million. These programs provide short-term benefits and long-term savings to consumers of all types.

- States are responding to the present emergency including educating the public on no/low cost measures to conserve energy. However, states cannot manage this emergency on our own, additional Federal funds are necessary.

Mr. Chairman, members of the Committee, my name is MaryAnn Manoogian and I am the Director of New Hampshire's Office of Energy and Planning. I am honored to be here today, on behalf of Governor John Lynch, to testify today on the critical energy situation we are facing this winter.

My office is also a member of the National Association of State Energy Officials (NASEO) and the National Energy Assistance Directors Association (NEADA). As the director of our state's energy office my responsibilities include oversight of the federal Low-Income Home Energy Assistance Program (LIHEAP), State Energy Program, the Low-Income Weatherization Program, as well as monitoring energy prices and supply for our state and ensuring energy emergency preparedness.

In the eight years I have been with New Hampshire's energy office, I have never witnessed such unprecedented increases in energy prices over a sustained period of time. Consequently I have grave concerns about ensuring that our most vulnerable citizens - the elderly, people who are disabled and working poor families - are safe and warm this winter season. Today I will discuss the winter fuels outlook and the impact of these high prices on consumers.

NASEO, NEADA, the National Association of Regulatory Utility Commissioners (NARUC) and the National Association of State Community Services Programs (NASCSP) all wrote to the President and the congressional leadership on September 15, 2005, suggesting specific actions which could be taken in terms of federal funding that could actually help this winter and reflect funding measures authorized in the Energy Policy Act of 2005. I have attached

this letter to my testimony for the record.

Higher Energy Prices and Consumer Impacts

In early October NASEO hosted the Winter Fuels Outlook sponsored by DOE's Energy Information Administration (EIA) and Office of Electricity Delivery and Energy Reliability. NASEO and DOE have conducted this Winter Fuels Outlook for many years, but this year, due to the significant increases in energy prices, media and public attention was far more pronounced. It seems that many people are looking for the silver bullet to resolve the energy problems confronting our nation. However, these energy problems were not created overnight and we cannot expect to solve them overnight. What we can do is ensure that consumers are well protected and have the resources necessary to stay safe and warm during the heating season.

As I review the EIA projections, which include almost a 50% increase in natural gas prices (approximately 70% in the Midwest), increases of approximately one-third for heating oil (mostly impacting the northeast and mid-Atlantic regions), and increases of approximately 30% for propane (impacting rural areas throughout the nation), I know that the ramifications for many American households and small businesses will be staggering.

A critical fact that I want to highlight is that this winter's projected price increases *are on top* of significant price increases last winter. Energy prices, including gasoline, have been on a steady increase the past two years. For example, in mid-October, New Hampshire residents were paying on average 33% more for heating oil than they were for the same time period in 2004; and a 105% increase from 2003. For gasoline New Hampshire citizens paid 34% more than in 2004 and 62% more than in 2003. Consumers have had no respite from rising energy costs.

I also want to recognize the difficult challenges EIA faces in making its projections. I say this not to question EIA and the important data the agency provides, but in recognition of the fact that the agency has no control over external factors such as weather conditions and geopolitical events.

For example, EIA's October 2004 projection for heating oil in the Northeast was $1.75 a gallon. Using data from the State Heating Oil and Propane (SHOPP) survey, New Hampshire's actual statewide average was $2.055 a gallon price. This 17% increase from the October '04 projection is an important fact to keep in mind as we continue to prepare for this winter season.

As you know, low income Americans pay a far greater percentage of their income for energy costs than do more affluent citizens. Many energy officials are legitimately concerned that lower-income Americans, including those who are elderly and disabled, will be at far greater risk this winter. Moreover, I regret to report that this is *the first year* that my office and our state's Community Action Agencies are hearing from an overwhelming number of households in the middle income category who are legitimately concerned that they will be unable to pay for their energy bills this winter. The increased costs last winter coupled with high gasoline costs have many middle income families concerned that when this winter is over, they will have fallen even further behind on their energy bills.

Low Income Home Energy Assistance Program (LIHEAP)

I appreciate the bi-partisan support for the Low-Income Home Energy Assistance Program (LIHEAP) over the years and want to underscore that given the rising energy prices in all energy sectors and the volatility of the market, it is imperative that states that operate heating

programs receive assistance as soon as possible.

With the FY'05 federal funding of approximately $2 billion, 15.6% of eligible households nationwide (federal eligibility is 60% of median income) were served, which equates to approximately 5 million families. The average benefit was approximately $313. States supplement these funds with state public benefit funds, in addition to other resources provided through private or utility networks. This winter, with energy prices escalating at hundreds of dollars per household, NEADA and NASEO members expect an enormous number of people having to face stark choices as they choose between heating and other necessities such as food, medication or the ability to pay the rent/mortgage.

To put this in perspective, last heating season in New Hampshire, the Community Action Agencies processed approximately 36,000 requests for heating assistance through the end of April. Between the base grant and supplemental emergency assistance, New Hampshire's LIHEAP total award was $18.2 million in federal fiscal year 05, resulting in an average benefit of $570 per household.

This year, our Community Action Agencies have already processed over 20,000 applications. We are not even into the start of the winter season and our state program has processed more than half the total applications taken last heating season. To compound the problem, at current fuel prices, the average benefit of $575 will buy a LIHEAP recipient less than a full tank of oil.

And like many other states, we know that sufficient funding does not exist to serve all LIHEAP eligible households. The US Census Bureau estimates that approximately 146,475 New Hampshire households are under 60% of the State Median Income and therefore, in accordance

with federal regulations, eligible for LIHEAP. Unfortunately, due to limited funds we have had to restrict eligibility to 185% of the federal poverty level. The pleas that my office and the Community Action Agencies receive to increase eligibility are alarming. And the funding we currently have under the Federal Continuing Resolution is not sufficient to serve the 84,000 New Hampshire households who are eligible at 185% of the federal poverty level – let alone those households which are LIHEAP eligible at 60% of the State Median Income.

Although New Hampshire operates a winter heating program, I want to stress that LIHEAP is not simply a cold weather state problem. Next summer, with high prices expected to continue, the costs of air conditioning will likely increase dramatically, with similar impacts on low and middle income Americans. In addition, rural America is facing a crisis with escalating propane prices. For many Americans who either pay heating or cooling bills, the problem is further compounded by high gasoline prices.

I cannot underscore enough the need for LIHEAP assistance and the fact that for those states operating heating programs, it is crucial to receive funds immediately. We need to assist our most vulnerable households and discourage them from engaging in unsafe practices in an effort to stay warm. According to our state's Fire Marshall, New Hampshire is the only state where the number one cause of fire related deaths is the result of improper use of heating systems. Governor Lynch and other public and private officials are doing all we can to ensure that this alarming statistic does not increase this winter season. Immediate funding for LIHEAP assistance will serve to prevent needless tragedies this winter.

Energy Efficiency and Conservation:

In addition to meaningful and immediate funding for LIHEAP, our experience has taught us that the State Energy Program and Special Projects grants as well as the low-income Weatherization Program are also critical components of a balanced national energy policy. Energy efficiency and conservation programs for years have been both under-valued and under-funded. However, as demonstrated in the 2001 California energy crisis, energy efficiency and conservation play a vital role in addressing price volatility and supply related issues.

As you are well aware, the Energy Policy Act of 2005 recognizes the valuable role that energy efficiency serves. On behalf of NASEO and NEADA, I encourage members of this committee to identify ways to accelerate the rules and the start-date for the tax credits to help consumers (Sections 1332 and 1333); full funding for the Low Income Home Energy Assistance Program; full funding of the Energy Star Program and other public information initiatives; full funding and support for the State Energy Program and the Weatherization Assistance Program; the state energy efficiency pilot program (Section 140 of the Energy Policy Act) and the Appliance Rebate Program (Section 124 of the Energy Policy Act).

If the State Energy Program was funded at the authorized level of $100 million, the states could implement a dramatically expanded program to reduce energy consumption for residential consumers, schools, hospitals, businesses and the agricultural sector. For every federal dollar invested in the program, over $7 is saved in direct energy costs.

In New Hampshire, one use of SEP funds is to support an ambitious public sector performance-contracting program: the Building Energy Conservation Initiative (BECI). This program has implemented energy efficiency measures in 151 state government buildings with an

annual savings of $1,175,440 (at 2004 energy prices). The program uses guaranteed energy savings as the equity to secure financing for building upgrades. Consequently, the State of New Hampshire has reduced its energy consumption by 79,399 mmBtu per year and greenhouse gas emissions by over 40,000 tons per year. In this example, SEP funds support a program that leverages as much as $11 million in financing. Furthermore the success of the BECI program has enabled us to expand the program to municipalities and schools.

If the Weatherization Program was funded at the authorized level of $500 million, approximately 230,000 homes could be weatherized in the coming year. Every home that is weatherized reduces its energy usage by approximately 25%. In a time of increased energy costs those reductions are significantly more valuable, and are long-lived. In addition to the meaningful energy conservation measures that help reduce energy bills, the program also addresses important health and safety measures for many families and vulnerable elderly and disabled persons. These investments will continue to help consumers meet their energy needs for years to come.

We recognize that the Weatherization Program is an essential long-term program that complements the critical, short-term assistance provided by the LIHEAP program, which is why in New Hampshire we use a single application that is utilized in both programs. Out of those that applied for LIHEAP assistance last year, at least 7630 households requested weatherization assistance. Unfortunately, due to limited DOE funding for the program, only 701 households received Weatherization Program assistance. In New Hampshire, we do leverage DOE Weatherization dollars with the electric and natural gas utilities' energy efficiency programs, however it still is not sufficient to meet the demand.

States Responses

At the state level, as soon as the scope of the problem associated with Hurricane Katrina became apparent, NASEO convened all the state energy offices by conference call to share situation reports and response procedures. NASEO members know that it is critical to coordinate our responses so that adjoining states do not take dramatically different actions than their neighbors, thereby exacerbating the situation. In addition to conference calls, which occurred on a daily basis in the immediate aftermath of Katrina, state energy officials shared model energy emergency declarations, executive orders, public service announcements, emergency response plans and accelerated energy conservation measures, etc. We also have regional conference calls. These calls have continued on an as-needed basis. NASEO appreciates the good cooperation from DOE's Office of Electricity Delivery and Energy Reliability. Representatives from that office, headed by Kevin Kolevar, have worked closely with the states.

Approximately one-half of the states are involved in the State Heating Oil and Propane Program (SHOPP), which involve real-time surveys of prices and supplies for heating oil and propane during the winter months. In this activity, NASEO works closely with EIA as do the individual states. I know that in New Hampshire, we rely upon EIA data and officials in our energy planning.

States across the country are engaged in a myriad of activities in an effort to combat increased energy costs. Many states are responding to this national energy crisis by implementing a variety of measures including but not limited to public information campaigns to reduce usage and take certain steps that can help, such as: 1) utilizing the most fuel-efficient

family car; 2) taking advantage of state and utility programs to implement energy efficiency measures; 3) increasing carpooling, vanpooling and telecommuting; 4) encouraging homeowners to add insulation, caulk, weather strip, replace furnace filters, and car tune-ups, etc.; 5) lowering the thermostat and insulating water heaters; and 6) installing programmable thermostats.

In New Hampshire, Governor Lynch will be posting a new website titled StayWarmNH as a tool for residential and business consumers to learn about energy conservation tips in addition to other assistance programs that can help with their winter heating costs. New Hampshire, as is the case in many states, is also monitoring home heating oil and gas prices and carefully checking for any signs of price gouging.

Finally, one additional matter of serious concern is that the now is not the time to eliminate the six regional offices operated by the Department of Energy. As we are attempting to deal with an energy emergency, we should not be eliminating the Department's outreach arm to the states, businesses, schools, municipalities and others. As a member of DOE's State Energy Advisory Board and a State Energy Official, I have found the regional offices can play a vital role when given the opportunity in helping states with the deployment of energy efficiency programs as well as technology. I have also found our regional office invaluable in times of an actual energy crisis.

Conclusion

LIHEAP, the State Energy Program and Weatherization Program are all deserving of bi-partisan support, and have generally received such support in the past. On behalf of NASEO and NEADA, we look forward to working with the Committee to ensure that our country's

consumers are well served in the near term and to aid in identifying actions to address the longer-term needs for secure, affordable, and environmentally responsible energy future.

If I can answer any questions now or at any other time, I would be pleased to do so. Thank you again for the opportunity to appear before you today.

September 15, 2005

The Honorable George W. Bush
President
1600 Pennsylvania Avenue, N.W.
Washington, D.C. 20500

The Honorable J. Dennis Hastert
Speaker House
U.S. House of Representatives
H-232 Capitol Building
Washington, D.C. 20515-6501

The Honorable Nancy Pelosi
Minority Leader
U.S. House of Representatives
H-204 Capitol Building
Washington, D.C. 25015-6537

The Honorable Bill Frist
Senate Majority Leader
U.S. Senate
S-230 Capitol Building
Washington, D.C. 20510-7010

The Honorable Harry Reid
Senate Minority Leader
U.S. Senate
S-221 Capitol Building
Washington, D.C. 20510-7020

Re: Energy Emergency Appropriations

Dear Mr. President and Members of the Congressional Leadership:

We are all deeply saddened by the devastation in the Gulf Coast and we are committed to working with our state brethren in that region to address both near-term and long-term problems. Our organizations represent the state officials in charge of delivering and regulating energy services to the public: the National Association of State Energy Officials (NASEO), the National Energy Assistance Directors Association (NEADA), the National Association for Community Service Programs (NASCSP) and the National Association of Regulatory Utility Commissioners (NARUC). Even before the recent natural disaster, energy prices had been escalating.. The results of Hurricane Katrina have obviously made the regional and national energy situation much worse. Immediate action at the federal level, to match ongoing and increasing state efforts, will help us address our near-term issues.

Our states have issued emergency declarations and are closely monitoring price increases and allegations of "price gouging." State energy officials have united to monitor the ongoing supply and price problems. They are also working closely with the energy industry to ensure sufficient supplies for the American public. We continue to urge the public to reduce unnecessary trips, improve the operation of their vehicles, increase carpooling and telecommuting, purchase more energy efficient products, etc.

Even with all that we are doing today, we have not been able to abate the impending impact of the present energy crisis. The facts are well known:

1. Gasoline prices late last week reached the highest levels ever, in both nominal and real terms;
2. Natural gas prices have increased by 143% since September 2004 to $11.77 per mmbtu based on pipeline supply projections; and
3. Heating oil prices have increased by 77% since September 2004 to $2.05/ per gallon in New York Harbor.

We remain concerned with this combination of increased volatility and limited supply. Federal actions releasing oil from the Strategic Petroleum Reserve, waiving driver hours for truckers delivering fuel, waiving certain environmental requirements for fuel types, waiving the Jones Act to permit domestic transfers of petroleum products on non-U.S. flagged tankers and coordinating release of oil from IEA participating countries are all helping, but are not sufficient. There are certain actions that the federal government can take immediately in the form of emergency energy appropriations to help us address this situation. The recently passed Energy Policy Act of 2005 provides a road map for some short-term measures that will have an impact, but only if emergency appropriations follow.

Low Income Home Energy Assistance Program (LIHEAP)

With extraordinary high prices, low-income Americans will be hard-pressed to make ends meet. The expenditure projections for the average family using natural gas this winter shows an increase of $611 over last year to a projected level of $1,568 in 2005-06. Heating oil increases for average families are projected to be $403 over last winter and $714 over the winter heating season of 2003-04. An increase in emergency LIHEAP funding by at least $3 billion is necessary to address problems this winter and next summer for both heating and cooling customers to help families pay their utility and fuel bills. LIHEAP was authorized at a level of $5.1 billion for FY'06 in Section 121 of the Energy Bill. The present program of approximately $2 billion serves only 20% of the eligible population with average payments of $311/family.

State Energy Program and Weatherization Assistance Program

The State Energy Program (SEP) will have an immediate effect on reducing demand. SEP was authorized in the Energy Bill at a level of $100 million (Section 123) and has a proven record of reducing energy consumption for residential consumers, as well as schools, hospitals, small businesses and agriculture. For every federal dollar invested in this program ($44 million in FY'05), $7 is saved in direct energy costs. Expanded loan and grant programs in addition to the existing activities could be implemented within the existing state structure. Examples of successful programs include the Texas "LoanSTAR" program, which has saved over $164 million in avoided energy costs. A similar program in Iowa, focused on schools, has saved $216 million in energy costs so far.

The Weatherization Assistance Program (WAP) was authorized at a level of $500 million in the Energy Bill. At the present time, with an appropriation of $227 million, Weatherization is

expected to serve 105,000 low-income homeowners this year, with an average reduction in energy use of approximately 25%. Obviously, as energy costs increase, the value of these reductions in energy use increases. Raising the appropriations level to the authorization amount will double the number of families served and reduce energy use for years to come in these homes, thereby saving money in the family's budget that can be used to pay for other essentials like food, clothing, and medicine.

Direct Disaster Recovery Initiatives

Section 125 of the Energy Bill authorizes $30 million for the development of Energy Efficient Public Buildings. This program could be aimed at expanding existing programs for schools, hospitals and local government facilities. It would enhance existing state programs and funds could quickly be provided for loans and grants. Section 128 of the Bill established a State Building Energy Efficiency Codes Incentive Program. The $25 million authorization could be appropriated on an emergency basis to get state and local energy codes updated and, most importantly, to train local code officials to implement the energy efficient portions of the code. This could be especially critical in the reconstruction of the Gulf Coast to ensure that the homeowners and businesses are reconstructed with the lowest future operating costs.

Two additional programs could be targeted to the three states most directly impacted by Hurricane Katrina:

1. Energy Efficiency Pilot Program (Section 140) targets 3-7 states for an expanded energy efficiency program.
2. Low-Income Community Energy Efficiency Pilot Program (Section 126) targets poor communities to expand the use of efficiency programs.

Section 140 is authorized at $5 million and Section 126 is authorized at $20 million. If at least this amount was appropriated it could be targeted to Louisiana, Mississippi and Alabama and the cities of New Orleans, Gulfport, Biloxi and Mobile.

Public Information Programs

In the present energy emergency, aggressive public information programs could make the difference to convince consumers and businesses alike to increase their use of energy efficient products, add insulation to their homes, utilize hybrid or ethanol-fueled vehicles, etc. A number of provisions of the Energy Bill would address this and could be funded immediately, again using present distribution mechanisms.

Section 131 of the Bill addresses the Energy Star Program, which is presently jointly operated by EPA and DOE. EPA received $50.5 million and DOE received $4.5 million in FY'05. The Energy Star Program is authorized in the Energy Bill at a level of $100 million. If emergency funding of $90 million could be provided to EPA ($40 million over FY'05 levels) and $10 million to DOE ($5.5 million over FY'05 levels), it could greatly expand these educational efforts.

A new program, the Energy Efficiency Public Information Program was authorized in Section 134 of the Bill. If it receives the $90 million requested, it could make a significant difference in reducing energy demand. A new program on Heating, Ventilation and Air Conditioning maintenance (HVAC) was established in Section 132 of the Bill. Since these appliances are frequently the biggest energy user, and are often poorly maintained in both commercial and residential applications, additional resources targeted in this area could dramatically reduce demand quickly.

If adequately funded, these public education initiatives would permit states to aggressively promote tax credits included in the Energy Bill, such as:

1. Energy efficiency in existing homes (Section 1333);
2. Residential energy efficient property (Section 1335);
3. Efficient commercial building construction (Section 1331); and
4. Promotion of the use of ethanol-fueled and hybrid vehicles to reduce gasoline consumption (Sections 1341-1348 and Title XV).

Another new program modeled after a preexisting state activity is the Energy Efficient Appliance Rebate Program (Section 124). It is authorized at $50 million and could be appropriated on an emergency basis at that level. It provides matching funds for states to offer incentives for energy efficient appliances. In the program operated by the New York State Energy Research and Development Authority (NYSERDA), a bounty was offered to individuals who turn in older, inefficient air-conditioners and replace them with efficient air conditioners. This led to the purchase of over 200,000 efficient air conditioners with a measurable reduction in peak summer loads. In addition to offering this as a nationwide program, it could be implemented in the three states directly impacted by Katrina without the state match requirement. This could significantly reduce energy demand as normal energy use resumes through the recovery.

State Technologies Advancement Collaborative (STAC)

In addition, a multi-state effort was authorized in the State Technologies Advancement Collaborative (STAC). Section 127 of the Bill reflects a program that has been implemented through appropriations for the past two years and is targeted to bringing near-commercial energy efficient and renewable energy technologies to the market immediately. The funds could be added to existing solicitations and could achieve immediate results, especially in the buildings, industrial and transportation areas. $20 million could be provided for this effort immediately.

Agriculture Sector Relief

In the agriculture sector, which has been hurt by this crisis, Section 9006 of the existing farm bill provides loans for farmers and rural small businesses for up to 25% of the costs of implementing energy efficiency and renewable energy measures. The $23 million provided for this program could be doubled to reduce costs for this hard-pressed sector. It could be especially helpful in the Gulf Coast. The State of Mississippi has been very successful in obtaining competitive funds under this program for biomass projects.

Summary

The funding requests for the proposals recommended in this letter involve activities in the Energy and Water Development Appropriations Bill, the Labor HHS Appropriations Bill, the Interior and Environment Appropriations Bill and the Agriculture Appropriations Bill. In summary, **additional** funding in an emergency bill should be set at the following levels:

1. LIHEAP - $5.1 billion - $3 billion in emergency funds above current funding levels;
2. SEP - $100 million - $56 million above FY'05 funding levels;
3. Weatherization - $500 million - $273 million above FY'05 funding levels;
4. Energy Efficient Appliance Rebate Program - $50 million (new program);
5. Energy Star Program - $45 million for EPA - $40 million above FY'05 funding level; and $10 million for DOE - $5.5 million above FY'05 funding level;
6. Energy Efficient Public Information Initiative - $90 million (new program);
7. State Building Energy Efficiency Codes - $34 million - $29.5 million above FY'05 funding level;
8. Heating, Ventilation and Air Conditioning Program- $5 million (new program);
9. Energy Efficiency Pilot Program (for the Gulf Coast states) - $5 million (new program);
10. Low-Income Community Energy Efficiency Pilot Program for the Gulf Coast cities of New Orleans, Gulfport, Biloxi, and Mobile - $20 million (new program);
11. Energy Efficient Public Buildings Program - $30 million (new program);
12. State Technologies Advancement Collaborative - $20 million - $13.5 million above FY'05 funding level; and
13. Section 9006 of the Farm Bill - $46 million - $23 million above FY'05 funding level.

In order for these programs to provide immediate relief, funds must be distributed to the states by October 15, 2005. Congress must include a specific directive in any emergency appropriations that the funds be released to the states or other recipients by this date. These specific directives can supersede the normal DOE procurement process which could delay the immediate delivery of emergency services up to a year or more.

Responding to the terrible tragedy in the Gulf Coast is obviously our top priority and deserves increased national attention. We must also recognize the toll that energy costs are taking on the Gulf Coast region and the country as a whole. We have an historic opportunity to act quickly and make a difference by October 15, 2005. We urge you to act now and we stand ready to cooperate in any way we can in this time of extreme national need.

Sincerely,

Peter Smith, Chair
National Association of State Energy Officials

Steve Tryon, Chair
National Energy Assistance Directors Association

Connie Greer, Chair
National Association for State Community Service Programs

Diane Muns, President
National Association of Regulatory Utility Commissioners

cc: The Honorable Thad Cochran
The Honorable Robert C. Byrd
The Honorable Pete Domenici
The Honorable Robert F. Bennett
The Honorable Herb Kohl
The Honorable Conrad Burns
The Honorable Byron Dorgan
The Honorable Arlen Specter
The Honorable Tom Harkin
The Honorable Jeff Bingaman
The Honorable Jerry Lewis
The Honorable David Obey
The Honorable David Hobson
The Honorable Peter J. Visclosky
The Honorable Henry Bonilla
The Honorable Rosa DeLauro
The Honorable Charles H. Taylor
The Honorable Norman D. Dicks
The Honorable Ralph Regula
The Honorable Joe Barton
The Honorable John D. Dingell
State Energy Officials
State LIHEAP Directors
State Weatherization Program Directors
State Public Utility Commissioners
National Governors Association
National Conference of State Legislatures

Mr. SHIMKUS. Thank you very much. Now, the Chair recognizes Mrs. Tucker, from Medford, Massachusetts. Welcome, and your full statement is in the record, and you have, for you, as much time as you would like.

Ms. TUCKER. Thank you. Good afternoon, Mr. Chairman.

Mr. SHIMKUS. I think we need to make sure your microphone is on. There is a button underneath, on the base there.

STATEMENT DOROTHY ELIZABETH TUCKER

Ms. TUCKER. Good afternoon, Mr. Chairman and members of the subcommittee. Thank you for the opportunity to share my testimony with you this afternoon. It is an honor for me to be here. I want to thank Congressman Edward Markey for inviting me to this hearing, and I want to thank Mr. Dan O'Leary from Mystic Valley Elder Services in Malden, Massachusetts for coming to Washington with me today.

My name is Dorothy Elizabeth Tucker, and my friends call me Dorothy Elizabeth. I am 83 years old, and I live in Medford, Massachusetts. I went to public schools and graduated from Boston University. The majority of my working life was with the Massachusetts Department of Mental Health and the Massachusetts Department of Mental Retardation until I retired at age 65. I am a divorced mother who has two wonderful children, and I live alone in my home in Medford.

I want to share with you what it is like to be a senior citizen living on a fixed income as winter approaches, and my heating bills are going up. While I might not be considered low income from the government's perspective, I still must make difficult choices when it comes to heating my home, taking my medicines, paying my property taxes, and living my life. For many of my friends and acquaintances, the choices are even more severe. And if the price of oil keeps going up, my choices will be severe, also.

I am on a payment plan with my oil company. In October, my bill increased from $400 a month to, now, $580 a month. That is $180 per month more that I will be paying. I keep my heat low, but I know I have to keep it on so that my pipes don't freeze. I have spent a lot of time figuring out where the warmest part of my house is, and it is a room on the second floor, because as you know, heat rises. When it gets colder, that is where I will spend all of my time. I have a sofa in that room, and I prepare my meals in the kitchen, bring them up to the second floor. My bedroom is a little colder, but that is okay.

I have also been planning on changing the way I manage my medications. Right now, I have one pill I am supposed to take once a week. My plan is to take it three times a month instead. On Monday 1 week, Wednesday the next week, and Friday the next week. That way, I can stretch it out.

A few years ago when my car broke down, I decided I couldn't afford to fix it, and I would try to get along without it to save money. I still get around pretty well, so that it is working out pretty good.

I have many friends who could use the local food pantry, but don't, because they are embarrassed to need help, and sometimes, they do go and say it is for one of their children. More often, they

use the senior meals program in town to stretch their food budget. While we struggle, we also want to maintain our independence and our dignity.

I think things are going to be pretty tough this winter. I guess if I had one message for Congress from me and my friends, as you consider these issues, it is that I just think it is totally unfair for people who have worked so hard all their lives to receive so little at the end of their lives. We just can't see why it is necessary for us to live this way. We know that people are making money off of us while we are struggling, and we don't like it a bit.

I do hope that my observations are helpful to all of you in Congress as you work on these important issues. I hope that you will be able to fund the fuel assistance program at a level that will allow us to heat our homes enough so that we will be able to safely live in them throughout this winter and in the years to come. Thank you again for inviting me to share my story.

[The prepared statement of Dorothy Elizabeth Tucker follows:]

Testimony of Mrs. Dorothy Elizabeth Tucker, Medford, MA

United States House of Representatives
Energy and Commerce Committee
Energy and Air Quality Subcommittee

"Natural Gas and Heating Oil for American Homes"
November 2, 2005

Good afternoon Mr. Chairman and Members of the Subcommittee. Thank you for the opportunity to share my testimony with you this afternoon. It is an honor for me to be here. I want to thank Congressman Edward Markey for inviting me to this hearing and I want to thank Mr. Dan O'Leary from Mystic Valley Elder Services in Malden, Massachusetts for coming to Washington with me today.

My name is Dorothy Elizabeth Tucker and my friends call me Dorothy Elizabeth. I am 83 years old and I live in Medford, Massachusetts. I went to public schools and graduated from Boston University. The majority of my working life was with the Massachusetts Department of Mental Health and the Massachusetts Department of Mental Retardation until I retired at age 65. I am a divorced mother who has two wonderful children and I live alone in my home in Medford.

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I think things are going to be pretty tough this winter. I guess if I had one message for Congress, from me and my friends, as you consider these issues, it is that I just think it is totally unfair for people who have worked so hard all their lives to receive so little at the end of their lives. We just can't see why it is necessary for us to live this way. We know that people are making money off of us while we are struggling and we don't like it one bit.

I do hope that my observations are helpful to all of you in Congress as you work on these important issues. I hope that you will be able fund the fuel assistance program at a level that will allow us to heat our homes enough so that we will be able to safely live in them throughout this winter and in the years to come. Thank you again for inviting me to share my story.

Mr. SHIMKUS. Thank you, and we are all pleased to have you. We get a lot of important people here, but I think you got all of our attention with your testimony, and we appreciate you being here.

Now, I would like to recognize myself for 5 minutes for a round of questions. I would like to start with Robert Stibolt. In your testimony, you talk about the balkanization of the natural gas markets, and this map depiction. When you talk about the balkanization, based upon the gasoline and the fuel market, which we know is disrupted. Is it disrupted the same way in the natural gas, and although I am from the Midwest, I am not sure if I would like to be shipping my natural gas east to, for them to take, you know, advantage of it. Can you talk me through that real quick?

Mr. STIBOLT. Yeah, I think the testimony makes the observation that we have seen this division of the continent really into two markets, effectively. There is one that I would characterize as the Gulf of Mexico to Northeast Corridor, and then, there is the other Western U.S. portion, which includes Chicago and Midwest hubs.

The current condition is, for example, in the forward markets, you see the Chicago city gate trading at $0.30 or $0.40 below Henry Hub in Louisiana, which is something we have never seen before. What it tells me is that we are relatively supply short in the Gulf of Mexico and the Northeast, relative to other parts of the country. So as you look at the Midwest, you have supplies coming from Canada, supplies coming from the Rockies and the mid-continent, which are relatively abundant and growing, but I think the real stress for the country is this Gulf of Mexico to Northeast Corridor, which tells me we need to not only get cargos into the Northeast, but into the Gulf of Mexico.

Mr. SHIMKUS. Thank you, and Ms. Manoogian, as you know, last week we, in the reconciliation bill, increased LIHEAP an addition $1 billion. Did you support that addition to the LIHEAP fund?

Ms. MANOOGIAN. Mr. Chairman, I would support additions, any additions to the LIHEAP fund that would just get it out the states as quickly as possible.

Mr. SHIMKUS. Great. Thank you. To a total now of $3 billion. It was the largest increase in LIHEAP funding that we have done in the history of this country, and we hope that it is going to be helpful.

Another question. It is always somewhat problematic, talking about my friends in the Northeast. Based upon your position as the Office of Energy and Planning, what is your state doing to increase their own ability for accessing natural gas supplies or other help in the supply equation of this debate?

Ms. MANOOGIAN. In 2001, our State actually sited two additional natural gas facilities in New Hampshire that brought on approximately 1,200 megawatts of natural gas energy. In addition, 2 years——

Mr. SHIMKUS. So that is like for electricity generation.

Ms. MANOOGIAN. For its electricity generation, yes.

Mr. SHIMKUS. Where is supply coming from?

Ms. MANOOGIAN. I don't remember right now, but I could supply that.

Mr. SHIMKUS. It is all right. Very good. Anything additional? Have you been involved in supporting locating LNG facilities in the State of New Hampshire?

Ms. MANOOGIAN. We haven't been directly involved right now. I don't know. To my knowledge, there is no interest in locating an LNG facility in New Hampshire.

Mr. SHIMKUS. Has the State made any effort to find out why, and encourage the development of that?

Ms. MANOOGIAN. We haven't aggressively entertained as to why, but I do know that we continue to try and find ways to site generation into New Hampshire, be it through the, again, the two electric natural gas facilities for electricity, or in the conversion of one of our coal-fired burners to a wood-fired burner.

Mr. SHIMKUS. I toured a refinery just on Monday, and 3 percent of the product of a petroleum refinery was natural gas. What about in the development of new refineries? Has your State been involved in encouraging refinery capacity?

Ms. MANOOGIAN. For our State?

Mr. SHIMKUS. Sure.

Ms. MANOOGIAN. Refinery capacity? We import the oil from, primarily from New York Harbor and it then comes to us via Portland. New Hampshire is a small enough State that, at this point, there has been no interest that I have heard of refinery capacity within New Hampshire.

Mr. SHIMKUS. The last question. If there was identified natural gas reserves off the coast of New Hampshire, would the State of New Hampshire be very supportive in pushing for access to those natural gas reserves?

Ms. MANOOGIAN. At this point, I am not, you know, I am not in a position—I don't know. I don't have enough information, and I——

Mr. SHIMKUS. But you are from the Office of Energy and Planning, is that correct?

Ms. MANOOGIAN. That is correct, but at least in terms of any interest in trying to generate any natural gas facilities off the State of New Hampshire, I would have to review the data and analysis to make sure that it was something that would be prudent both in the short term and also in the long term.

Mr. SHIMKUS. Thank you, and I would like to now recognize the gentleman from Virginia, Mr. Boucher.

Mr. BOUCHER. Well, thank you, Mr. Chairman, and I want to commend each of these witnesses for their testimony, and particularly, Mr. Ewing, Ms. Manoogian, and Mrs. Tucker for your very compelling testimony in support of full funding for the LIHEAP funding.

Mr. Ewing, let me begin with you. I am very pleased to note that the gas industry is supportive of full funding for LIHEAP, and my first question to you is whether other segments within the energy industry generally, perhaps electric utilities, or the coal industry, or the nuclear industry, or the petroleum industry, are doing what you are so boldly doing, and calling for the full $5.1 billion for LIHEAP. Do you know if others are doing the same thing?

Mr. EWING. No, sir. I don't. Historically, the distribution end, which AGA represents, has been the most vocal in its support of LIHEAP.

Mr. BOUCHER. Okay. The next question I have for you is this. You mentioned two ways in which the purchasing power for homeowners and home renters, with respect to heating costs, are diminishing this year. One of those comes from the fact that energy prices have gone up as much as they have, and they are anticipated to, and the other one is the fact that there are so many more people eligible for the Low Income Assistance Program now, as compared to a previous year.

Could you relate those numbers to me once again? You mentioned the 2002 number of eligibility, and then, you mentioned a later number. Could you tell us what those numbers are?

Mr. EWING. And this represents approximately 20 percent of those who are actually eligible, based on income guidelines. And the numbers I made reference to were 4.2 million households in 2002 fiscal year, moving up to more than 5 million households this year.

Mr. BOUCHER. Okay. Do you have a calculation as to how much, in percentage terms, the purchasing power for home heating has diminished this year, as compared to last year, based upon these two factors?

Mr. EWING. It would be more than 50 percent.

Mr. BOUCHER. A more than 50-percent reduction.

Mr. EWING. Yes.

Mr. BOUCHER. Do you know how much more than 50 percent?

Mr. EWING. No, I don't.

Mr. BOUCHER. I mean, for someone who heats with gas, just the increase in price alone approaches 50 percent, because that expected price increase is 48 percent, so it would obviously be higher for someone who heats with gas.

Mr. EWING. Yes, it would. The difficulty I have is that prices vary State by State, and the EIA, for example, has presented a range of increase ranging from 40 to 71 percent, depending on that part of the country. And as a consequence, clearly, it is more than 50 percent, it would be greater in those areas where prices have gone up at least 40 percent, and certainly much more in those areas where prices are at the high end of that spectrum.

Mr. BOUCHER. You are calling for Federal funding for the full authorization level for LIHEAP, which is $5.1 billion. Funding for last year was $2 billion, less than half of the full funding level. This committee, as part of a recent reconciliation package, had recommended a $1 billion add to that $2 billion, which would bring the level to $3 billion, but that doesn't even approach the $5.1 billion authorization level, and you are calling for funding of that. Could you talk a little bit about why you think the higher number is necessary, and why the $3 billion number, assuming that is passed into law, is not adequate?

Mr. EWING. Yes, sir. And there are two reasons in my mind. Both are economic. Both are quantitative. The first is if we were to increase LIHEAP funding from $2 billion to $3 billion, that simply offsets the increase in price, so it is a stay even situation, not an increase. So that is the first reason.

The second is that there is a material increase in the number of households, those who actually qualify for LIHEAP assistance based on economic guidelines. Current guidelines are a family of four making less than $19,000.

Mr. BOUCHER. Okay. Thank you very much, Mr. Ewing. Again, I want to commend the witnesses for illuminating us in such a thorough way this afternoon. Your testimony was compelling, and we appreciate it very much.

Thank you, Mr. Chairman. I yield back.

Mr. SHIMKUS. I thank the gentleman. The Chair recognizes my colleague from Texas, Mr. Burgess, for a round of questions.

Mr. BURGESS. I thank the chairman.

Mr. Stibolt, if I could ask you the price of natural gas generally tracks the price of crude oil. As the price of crude oil goes up, the price of natural goes up as well. But there are times, like the present time, when the price of natural gas per unit is actually markedly higher than crude oil. Can you give us any insight as to why that would be?

Mr. STIBOLT. Well, I think what you are observing lately is the effects of the two hurricanes. The gas market is a more continental market than the oil market, so we had a very significant loss of gas production as a result of the hurricanes. I have seen estimates of 700 billion cubic feet. Just to put that in perspective, that is more than three times the volume we deliver through the Everett terminal in 1 year. So you had a localized impact in the natural gas market. In the oil and oil products markets, we saw, and I think this was mentioned earlier, substantial imports coming from Europe, more adaptability in that system to a disruption than we have in natural gas, so it has created a spike. I think we see it now coming back closer to parity with crude oil.

Mr. BURGESS. We have heard a lot of this committee, and I mean a lot in this committee, about the potential dangers associated with liquefied natural gas imports, and there are people in this committee who are pushing the idea that liquefied natural gas import terminals should be located in remote sites away from major population centers, in order to decrease that risk. Can you tell the committee from purely a business perspective if there are benefits to remote siting, and what the costs are associated with remote siting, and how difficult would it be to site a terminal in an unpopulated area, and does it affect capacity when you move offshore?

Mr. STIBOLT. Well, there are a number of considerations I think you have raised there. The biggest challenge that I have seen is the infrastructure. Natural gas is a commodity that moves through pipelines. There is a constructed infrastructure today. One of the benefits, for example, coming into Boston is there is already that infrastructure in place, and we are helping to de-bottleneck constraints. When we do that, when you go to a remote location, there is often no infrastructure, so you can be talking about billions of dollars of pipeline investment, for example. And so I think that is one of the challenges.

That being the case, I think there are opportunities, maybe some attractive offshore locations. We have filed an application for one, for example. We are looking at another possibility off of Florida,

where you could, in fact, tie into existing infrastructure, with a relatively remote terminal.

Mr. BURGESS. How much at risk are these, if—I mean, Florida sometimes will have hurricanes. Does that impact your siting of these liquefied natural gas terminals?

Mr. STIBOLT. Well, in fact, that may be one of the advantages of a floating terminal, is that the ships are portable. You could, in fact, move them out of harm's way in the event of a severe storm. If you do have the terminal there, you want it to be on very solid grounded land, clearly, but you do have hurricane risk, yes.

Mr. BURGESS. Very well. Mr. Ewing, one of the more alarming points that you brought up was that the $13 prices projected by the American Gas Foundation study outlook to 2020, published in February of this year, have already been exceeded over the last few weeks. That study concluded that if policymakers and industry decisionmakers do not immediately address critical issues, they will have a significant impact on the availability of natural gas prices, and natural gas prices could reach $13 by 2020. What are some of the other critical issues that you feel that policymakers have not addressed since we passed the Energy Policy Act of 2005, and what hurdles do you see preventing them from happening?

Mr. EWING. The first is the one that I spoke to in relationship to LIHEAP funding. The Energy Bill provided for the $5.1 billion, and I think given circumstances as they exist today, we need to follow through on that commitment, and I think this committee has already taken a major step in that direction with the $1 billion increase that was proposed in the budget reconciliation process.

The second is the third point in my remarks, and that has to do with stimulating activities that will create more domestic supply. Some of those were provisions that were incorporated in the Energy Bill or previous legislation, like the Alaskan gas pipelines, and like the siting for LNG, and given the authority to the FERC. But things like permitting and recognizing, as was discussed earlier this afternoon, that 85 percent of the productive region in the Gulf Coast is off limits. I think it makes sense to look at that reserve, and bring that gas to the market.

So I think it tends to be restrictions on access, impediments to processing, and then, infrastructure approval.

Mr. BURGESS. Do government dictates have a role in that? Do they have a place in that?

Mr. EWING. Yes, they do.

Mr. SHIMKUS. The gentleman's time has expired.

Mr. BURGESS. Mr. Chairman, I actually was going to ask a medical question of Mrs. Tucker. You are taking a medication you take once a week, and presumably, that is to help you with bone health. Is your Congressional representative going to help you with the new Medicare Modernization Act, where you will have availability of prescription medicines next year?

I will yield back, Mr. Chairman.

Mr. SHIMKUS. The gentleman yields back. Now, the Chair recognizes the gentleman from Massachusetts, Mr. Markey, for 5 minutes.

Mr. MARKEY. I thank you. Mr. Chairman, we have two crises in New England this year. The first crisis is what are the Red Sox

going to do now that Theo Epstein is leaving. And the second crisis is how are we going to handle these high prices for natural gas and for home heating oil?

We keep talking, we keep hearing here discussions about putting LNG facilities in New Hampshire or Massachusetts. I don't know that any company has proposed to put one in New Hampshire. I don't know that Hampton Beach or Seabrook Beach or Rye Beach would be just the right location, especially since the Seabrook Nuclear Power Plant would be right there, that might really get complicated in the event of a real emergency. But you should also know that because of the Republican bill that was just passed and signed by the President, the State of New Hampshire now no longer has any say in where an LNG facility would go in New Hampshire. So the reason you don't know the answer is that you are not going to be asked or thinking of an answer. So you should feel very comfortable under this new bill. It is out of the control of New Hampshire. It would be in the hands of FERC, exclusively.

And Mr. Stibolt, you represent a French company, and this French company already has a huge facility in my Congressional district, an effort that is consistently referred to. And isn't it ironic—well, I won't ask you; although, the French do like irony—but I find it ironic that the French told us that invading Iraq would be a big mistake, and it could destabilize the oil and gas prices out of Iraq, and the Bush Administration went in because they thought that they could increase production, and now, the French, it turns out were right, and now, we are winding up with all the Republicans advocating that the French bring more natural gas into the United States at a very high price.

So it is kind of an interesting kind of reverse takedown that the French have done on the United States that we are here listening to you testify that we need more French natural gas to be imported into the United States, and I congratulate you on your perspicacity, from a public policy perspective.

I would say to you, Mrs. Tucker, that you gave eye-opening testimony, and you made the point that you have a Social Security check, and you have your retirement pension, that you are not considered poor, but that your home heating oil bill is skyrocketing.

Ms. TUCKER. I will be poor shortly.

Mr. MARKEY. You will be poor shortly. So where does the money come from? Where do you get the extra money for what could wind up, it sounds like to me, an extra $800 or $1,000 that you are going to have to pay for home heating oil this winter? Where are you going to get that money from?

Ms. TUCKER. Nobody knows when I don't eat, and a lot of people that have my income, we are proud, because we worked so hard. I remember working, and not taking my increases so I could save them for this time in my history. And now, it is like it is lost. And I perhaps will act like other people who are like me behave. We don't tell. We just don't tell, we just, as I say, nobody will know whether I am eating or not, and nobody will know whether my house is cold. In fact, we will make a joke out of it. We will put a whole lot of scarves and things on the clothes rack, and people come in, we will say come on in, and put on a jacket. I mean, this is our behavior. This is our style, when things get really tough.

I belong to an organization of people sort of like me, and it has already been announced that the room that we have in the special building, the heat is going to be up to, I think they said something like 68, it is lower than the average, and they are telling us if we are going to meet there, we are going to have to come with our overshoes, so to speak.

Mr. MARKEY. Well, how do you react, with your scarves and turning down the heat, and perhaps not eating as much during the winter, when you see that in the last 3 months, that Exxon made $10 billion, but nobody is saying we want to help you, Mrs. Tucker?

Ms. TUCKER. Well, I am very angry, but I was talking to a couple of my elder friends, and they just feel like victims. They sort of said, what can we do? That is just the behavior. They may be angry, but they don't express it. Actually, the younger people, that is my children, and that age, express the anger quite vividly, where people my age tend to express anger, but it is a little softer. We really feel more like victims.

Mr. MARKEY. Well, we thank you, Mrs. Tucker, for coming here today. And we wish that there was more that the Congress and the Bush Administration was willing to do, but it is not, and you should, unfortunately, prepare for a tough winter, because while the oil companies are reporting all these profits, there is no plan to increase the funding so that you would qualify, and people like you would qualify, to reap some benefit that could contrast with the windfall profits that all the oil and gas companies are reaping at your expense. This is all coming out of your pocket, Mrs. Tucker. You are the one, and all your friends, who are having their pockets emptied out and handed over to these oil companies, and I just think it is disgusting.

Mr. SHIMKUS. The gentleman's time has expired. The Chair would recognize the gentleman from New Hampshire, Mr. Bass.

Mr. BASS. Thank you, Mr. Chairman.

Mr. Stibolt, as I recall, your company's terminal in my friend from Massachusetts's district provides 40 percent of our region's gas supply on a peak day. Is that correct?

Mr. STIBOLT. Well, what I said is that 40 percent of what is supplied went through our terminal. Those resources are distributed to a number of regional storage tanks operated by different companies, so our company isn't specifically controlling 40 percent. It is really a much smaller number, but we think that provides about a 40-percent capability on a peak day, yes.

Mr. BASS. Do you think that an addition Northeast or New England LNG facility would have a—what do you think the effect it would have on our ability to meet tight supply days, meet our goals for tight supply days?

Mr. STIBOLT. Well, it will give you more flexibility, because you are downstream of the bottlenecks coming through the pipeline systems. On a cold day, it is really those pipeline constraints that set the price. So the more you can get supply into the region downstream of the bottleneck, the more adaptable you are to extreme market conditions.

Mr. BASS. So the Fall River, there is a proposal for an LNG plant in Fall River, that would probably double the supply for New England. Is that correct, or do you know the answer to that?

Mr. STIBOLT. I don't specifically know the answer, with respect to that project. Of course, we have our Neptune Project, that would significantly increase supply as well.

Mr. BASS. Thank you. I heard my friend from Illinois, Mr. Shimkus, mention that, talk to Ms. Manoogian about LNG supply, to only point out that New Hampshire actually is an exporter of electric energy, because of the construction of a very large nuclear power plant, Seabrook, which my friend from Massachusetts is also well aware of, yet we have, in New Hampshire, made significant sacrifices over the years to provide energy for not only our State, but other parts of New England.

Ms. Manoogian, I was wondering if you would be willing to address the issue of advanced funding of LIHEAP. Do you think that if we—there are certain programs, Public Broadcasting, for example, that are, to name one, that is advance funded. Do you think advance funding LIHEAP would be helpful to you in planning for consumptions and applications, and so forth?

Ms. MANOOGIAN. I know, for those of us that operate heating programs, that an advance funding mechanism would very much be helpful, and would also be a much more prudent use of their resources. We are, you know, going into the winter season right now. It is kind of hard when you don't know what a Federal appropriation is going to be, in terms of how to set your eligibility criteria, your benefit criteria, and also, for those of us who operate heating programs, essentially, the way the LIHEAP funding comes in, it precludes us from being able to take advantage of energy costs when they are lower. You know, with advance funding, we would be able to secure purchases of energy on behalf of low income residents and other consumers similar to Ms. Tucker, at a time when heating prices are lower, as opposed to getting us to, you know, at least in our State, the way that we operate our fuel assistance program, we are basically purchasing during the peak of the season, which doesn't, again, seem the most prudent way to operate a heating assistance program.

Mr. BASS. Other than the advance funding idea, do you have any other suggestions on the administrative side as to how we could improve LIHEAP?

Ms. MANOOGIAN. Well, again, I think, you know, with the advance funding, enabling those States that operate heating programs to be able to purchase when energy prices are low, for heating assistance, as opposed to during the peak of the season, it would be tremendously valuable. It also would permit us to, in a much more administratively efficient manner, operate our LIHEAP program, whereby our sub-grantees, the community action agencies, will know who they can put on staff, and how long they can have them on staff for.

Mr. BASS. One of the provisions that was added to the Energy Bill when it was in this committee would allow LIHEAP funds to be used for energy sources other than oil, gas, and I suppose, coal. There is also another provision that would allow weatherization funds to be used to install alternative energy systems in houses. Do you have any plans to take advantage of this new provision or not?

Ms. MANOOGIAN. Yes, in our State, we actually—our LIHEAP benefits can go to the purchase of cordwood, and now, we can also

go to the purchase of wood pellets. We are also working on the weatherization side, with our community action agencies, to explore ways to invest in renewable energy on the weatherization program, such as solar water heaters, and other renewable, and other opportunities for renewable sources in the weatherization program. And that was huge, to be able to open that door for the weatherization program, to take advantage of the renewable energy.

Mr. BASS. Ms. Manoogian, my time has expired. As a constituent of mine, and a resident of New Hampshire, I want to welcome you here to Washington, and I have very much enjoyed your testimony, and I think the committee will benefit from it, and I yield back to the chairman.

Mr. SHIMKUS. I thank the gentleman for yielding. I think that concludes the questioning of our second panel.

Mr. MARKEY. Mr. Chairman. Mr. Chairman.

Mr. SHIMKUS. I would remind the gentleman we have a third panel, who have been waiting very patiently.

Mr. MARKEY. I just have a couple of questions. Because two of my constituents are on the panel, and I would just appreciate your indulgence for a couple of minutes.

Mr. SHIMKUS. The Chair will yield for one question.

Mr. MARKEY. Mr. Stibolt, Mr. Bass just questioned you about the Fall River facility. As you know, there are four different proposals for Massachusetts, although there are none for New Hampshire, and he seems particularly interested in the Fall River project, but not particularly interested in your project. Perhaps you could enlighten the committee as to how much additional natural gas you believe you could bring in to New England by siting your facility offshore, rather than onshore, which is what the other facility is right now, and the Fall River facility would be as well, and why you think that that is a better way of going, having your offshore proposal be the one that is approved by the FERC?

Mr. STIBOLT. Yeah. I think the volumes we can deliver are comparable. I mean, these things are typically a 700 million cubic foot per day to as much as bcf per day. I don't have the exact number for that project off the top of my head, but that would be the order of it. They are going to be similar in terms of volume.

Mr. MARKEY. And would that be a doubling of capacity for everything?

Mr. STIBOLT. Yeah. Yeah, it would.

Mr. MARKEY. So in other words, when Mr. Bass was talking about 40-percent peak capacity, you are saying you might be able to increase that to 60 or 80-percent peak capacity, and so we have, right now, we have four different proposals in Massachusetts, but the FERC and this committee, by the way, seems to favor one project in Fall River, and that is on land, with the Governor and the mayor opposing it, whereas you are proposing something that would be offshore, that would provide the same amount of natural gas, dramatically increase the supply, and be in a location which is 10 miles or further offshore, just bringing it in in a pipe. So why do you think there is a continuing bias by the Bush Administration to put it onshore, when you are here testifying that you are ready

to do it economically offshore right now, with very little homeland security problems that would be attached to it?

Mr. STIBOLT. Well, I don't know. I won't comment on whether there is a bias or not. I think we like our project, clearly, as you well know. We think it is a very good project. It is relatively new technology, but we think it is very safe, very secure technology, so we are excited about it. We think there will be more opportunities to apply that technology.

Mr. MARKEY. Would it be theoretically possible for you to bring your pipeline right into New Hampshire, right into Hampton Beach or Rye Beach? Would that be an entry point that is possible?

Mr. STIBOLT. Well, I know with Neptune, we are tying into the Hub Line System, which is operated by Duke.

Mr. MARKEY. Right.

Mr. STIBOLT. And that serves the whole region. In terms of other locations off of New England where you could do this——

Mr. MARKEY. Right. I just——

Mr. STIBOLT. [continuing] I am not an expert on that.

Mr. MARKEY. It seems Mr. Bass wants——

Mr. BURGESS. Mr. Markey——

Mr. MARKEY. [continuing] and I would just suggest that—they are his constituents. Perhaps you could look at just bringing a pipeline right into New Hampshire, right into Hampton Beach or Rye Beach.

Mr. BURGESS. In fairness, I should recognize Mr. Bass for a follow-up question, if he has one. Does the gentleman seek recognition?

Mr. BASS. Yeah. Mr. Chairman, I just want to express my excitement about my friend from Massachusetts's endorsement of the offshore LNG facility, which I heard, and I want to thank him for that, because I, too, endorse that as well. So he and I agree that this a very high priority, and I would be very happy to see that built along with the Fall River project, because I do believe, as I believe he does, that it is very important to provide adequate LNG and natural gas capability for New England, so that we don't have these terrible gas shortages that we are faced with during the winter. So with that, I will yield back to the chairman.

Mr. BURGESS. And I thank the gentleman for yielding.

Mr. MARKEY. By the way, I do not include——

Mr. BURGESS. This concludes——

Mr. MARKEY. If I may, a point of personal privilege, Mr. Chairman.

Mr. BURGESS. [presiding] the gentleman is recognized.

Mr. MARKEY. I thank the Chair very much. I just want to make it clear that I do not endorse this gentleman's proposal. My only point was to make out that there are four separate Massachusetts projects, which Massachusetts should be able to decide what it wants. And by the way, there is also two additional Canadian projects.

Mr. BURGESS. Okay.

Mr. MARKEY. All of them would benefit New Hampshire, but it should be the decision—and those two projects have already been approved, which is additional natural gas. My only point is that that is a decision which should be made by the New England re-

gion, and not by the FERC, and it just seems to me that just focusing on the Fall River project obscures the fact that there are five other projects that could all serve the very same purpose, and I thank the Chair.

Mr. BURGESS. Very good. Thank you. Thank you, panel, and now, we are going to hear from our third panel. And I thank everyone for their indulgence, while we went a little long. I welcome the spirit of bipartisanship between New Hampshire and Massachusetts. I think that is a beautiful thing.

And we are very pleased to welcome our third panel this afternoon, and I again thank all of you for your indulgence. We are going to be hearing from Mr. Charles Davidson, from Noble Energy, Incorporated, from the great State of Texas, and welcome, Mr. Davidson.

We will also be hearing from Mr. Skip Horvath, from the Natural Gas Association. We will be hearing from Mr. Bob Slaughter, National Petroleum and Refiners Association. Mr. Phillip Wright, Williams Pipeline Company, representing the Interstate Natural Gas Association of America. And Mr. Brian Castelli, did I pronounce that correctly?

Mr. CASTELLI. Yes, you did.

Mr. BURGESS. Mr. Brian Castelli, the Alliance to Save Energy. Welcome all, and again, thank you for your patience today. We will begin with the testimony of Mr. Davidson.

All of your remarks, of course, are submitted, your written remarks are submitted for the record, and we will hear from you now. Thank you.

STATEMENTS OF CHARLES D. DAVIDSON, CHAIRMAN, PRESIDENT, AND CEO, NOBLE ENERGY, INC.; R. SKIP HORVATH, PRESIDENT, NATURAL GAS SUPPLY ASSOCIATION; BOB SLAUGHTER, PRESIDENT, NATIONAL PETROCHEMICAL AND REFINERS ASSOCIATION; PHILLIP D. WRIGHT, SENIOR VICE PRESIDENT, GAS PIPELINE, WILLIAMS PIPELINE COMPANY, ON BEHALF OF INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA; AND BRIAN CASTELLI, EXECUTIVE VICE PRESIDENT AND COO, ALLIANCE TO SAVE ENERGY

Mr. DAVIDSON. Thank you, Mr. Chairman. I am Chuck Davidson, Chairman, President, and CEO of Noble Energy, and also, I am the Chairman of the Domestic Petroleum Council, representing the largest U.S. independent exploration production company, and also today, I am testifying on behalf of the Independent Petroleum Association of America and the International Association of Drilling Contractors.

I am very pleased to be here to discuss the current natural gas supply and price situation, and how we might improve it for both the near as well as the longer term. I think we have to start out and remind ourselves that the current tight natural gas market should not, unfortunately, surprise us. Many of us have been warning about such a market for years. For instance, in 2003, the National Petroleum Council told us through their study that we needed to make policy changes to fulfill our gas supply potential. By and large, those detailed recommendations, of not only that study but others, until recently have been ignored.

Clearly, conservation on the near term is very important, and that could be an effective action to offset some of what we are seeing today's natural gas market, and certainly, we wholeheartedly support that. We also support increased Congressional appropriations to LIHEAP, which we have heard from a number of panelists today, as well. Our written comments include four recommendations. I will highlight them just briefly. First of all, industry and government must work together to restore as quickly as possible the production that has been shut in in the Gulf of Mexico from Hurricanes Katrina and Rita.

According to the Mineral Management Service, as of last Friday, they were still 1 million barrels per day of oil production, and over 5 billion cubic feet of natural gas production shut in in the Gulf of Mexico as a result of the hurricanes. This represents some 68 percent of the daily oil production and 55 percent of the daily gas production from the Gulf of Mexico.

As we look for additional supplies of natural gas near term, there can be no more obvious source than gas currently shut in as a result of the hurricanes. The industry knows this. We are investing unprecedented funds that may ultimately reach billions of dollars to repair and replace the damaged infrastructure. Second, I think our recommendation is to have immediate, visible, and responsible action by our land management agencies to improve and speed the processing of permits. On multiple use lands administered by the Department of the Interior's Bureau of Land Management alone, there is a backlog of over 3,000 drilling permits. An analysis for the DPC showed that just clearing out the first year of the backlog, we could see as much as 105 billion cubic feet of additional natural gas production in the Rockies. That is enough natural gas to supply 1.25 million additional households in that first year. I think that such action would certainly be recognized and understood in the natural gas markets.

Third, we would recommend immediate action by Congress and the Administration to see leasing of the remaining Sale 181 area in the eastern Gulf of Mexico as early as next summer. The original Sale 181 area was administratively reduced before bids were received in 2001. However, discoveries that were made in the area that was leased provide much better understanding of the energy potential of the unleased portion. First, production from what is expected to be, perhaps trillions of cubic feet of additional discovered reserves could probably begin flowing to the market within 18 months to 2 years of a lease sale.

Finally, we would recommend immediate action to be taken to allow selective removal of prohibitions against energy exploration, development, and production offshore. The natural gas resources in current moratoria areas that prevent exploration and production of approximately 90 percent of our coast outside of Alaska could be tremendous, and we must change our decades-old moratoria policy in view of not only our growing energy demand, but also, our 21st Century offshore exploration and production technology, that allows clean, safe extraction of oil and natural gas from deeper and deeper waters, with seabed wells and fewer facilities.

At a minimum, states should be allowed to opt out of moratoria off their coasts and share in the resulting revenues generated by

production. The House Resources Committee has taken bold action on such an approach by including the Ocean State Options Act in its budget reconciliation package.

I think one final point in conclusion, on prices. We in the exploration and production sector are price takers. We sell our oil and gas in the world and national markets, in which forces well beyond our control determine price levels. Higher prices do give us financial strength, and certainly, for the independent E&Ps, where we advance, we invest a substantial amount of our profits back into drilling. That is very important. But we are not served well by volatile prices, and so from that aspect, we are aligned with our customers and consumers. The volatility is not a healthy environment, and we clearly believe that increased supply in the future will help reduce that volatility going forward.

So I think we need to recognize this is as not only a short term, but a long term situation, and that we need to move forward in all these areas of recommendations that would assist in supply response for both near term as well as long term. With that, that concludes my summary comments, and I will certainly be available for questions later.

[The prepared statement of Charles D. Davidson follows:]

PREPARED STATEMENT OF CHARLES D. DAVIDSON, CHAIRMAN, PRESIDENT AND CEO, NOBLE ENERGY, INC. AND CHAIRMAN, DOMESTIC PETROLEUM COUNCIL ALSO ON BEHALF OF INDEPENDENT PETROLEUM ASSOCIATION OF AMERICAAND THE INTERNATIONAL ASSOCIATION OF DRILLING CONTRACTORS

Mr. Chairman, I am Chuck Davidson, Chairman, President and CEO of Noble Energy and the Chairman of the Domestic Petroleum Council (DPC) that represents the largest U.S. independent exploration and production companies.

Today I am testifying on behalf of my company and the DPC, and also for the Independent Petroleum Association of America and the International Association of Drilling Contractors.

I am very pleased to be here to discuss the current natural gas supply and price situation—and how we might improve it for the nearer, as well as the longer, term.

We—government and the exploration and production industry—have potential to improve even this winter's natural gas situation for our consumers. But we must have prompt action.

I will explain actions in four areas that can help, perhaps very significantly.

First, however, we need to remind ourselves that the current tight natural gas market should not surprise us. Many in our industry, in trade associations and in think tanks have been warning of such a market for years. In 1999 and again in 2003, for example, the National Petroleum Council told us in the most comprehensive studies of their times that we had to make policy changes to fulfill our gas supply potential and ensure the best future for consumers. By and large the detailed recommendations of those and other studies have, until recently, been ignored.

Now we have more attention to our natural gas supply situation that provides a solid basis for reaching consensus on overdue supply actions. Unfortunately that is because of current and projected high prices, industrial demand destruction and consumer hardship.

Clearly conservation is the most immediate and effective action that can offset some of what we see in today's natural gas market. We support it wholeheartedly. We are seeing increased efforts by governments and natural gas consumers across a broad spectrum to focus more attention on conservation. (And we support increased congressional appropriations for the Low Income Home Energy Assistance Program (LIHEAP) to aid our most vulnerable consumers while we work to ensure wise gas use.)

In addition, as this Committee and others have heard clearly, current and projected prices are causing businesses and industrial users to not only reduce gas demand by process improvements and fuel switching, but also by planning to make future investments overseas where natural gas costs less. These actions highlight that, while conservation is good and even necessary, it is not enough—and the more

dramatic forms of conservation can have economic effects as manufacturing and investment in the United States decreases.

The bottom line is that there must be a market recognition and understanding that more natural gas supply is on the way.

RECOMMENDATIONS

To provide that market recognition and understanding, we must see the following:

Industry and government must work together to restore as quickly as possible production that has been shut-in as a result of Hurricanes Katrina and Rita.

According to the MMS, as of last Friday, October 28, 2005, there was still one million barrels of daily oil production (1.0 MMBpd) and 5.5 billion cubic feet of daily natural gas production (5.5 Bcfpd) shut-in in the Gulf of Mexico as a result of Hurricanes Katrina and Rita. This shut-in production represents approximately 68% of the daily oil production and 55% of the daily gas production from the Gulf of Mexico.

As we look for additional supplies of natural gas near-term, there can be no more obvious source than gas currently shut-in as a result of these hurricanes. The industry knows this and is investing unprecedented funds that may ultimately reach billions of dollars to repair and replace damaged infrastructure. In the meantime, not only money, but also a lot of creativity is being expended to find ways to accelerate the return-to-production.

An example from my company relates to a new deepwater gas well that was about to come on production just as Hurricane Katrina hit. Even though the gas sales line to shore was intact, this well had to remain shut-in because damage to downstream oil pipelines resulted in there being no outlet for the liquid condensate that was to be produced with the gas. As a solution, we and our partners secured a barge and produced the condensate into the barge so that natural gas could flow from this high-rate well.

This is just one of many examples of creative actions being taken everyday as companies look for ways to accelerate the restoration of Gulf of Mexico production. In my view, nothing should have higher priority than these efforts.

Immediate, visible and responsible action by our federal land management agencies to improve and speed processing of energy permitting.

On multiple-use lands administered by the Department of the Interior's Bureau of Land Management alone there is a backlog of more than three thousand applications for permits to drill (APDs) that are awaiting final approval.

An analysis done for the Domestic Petroleum Council—and a similar analysis done for the Department of the Interior that has yet to be released—demonstrates that adequate funding and resources to process and clear out those backlogged pending APDs could increase natural gas reserves in the Rocky Mountain region by several trillion cubic feet—some of which would begin flowing soon and would make a difference in today's tight market.

The DPC analysis shows that in the *first year* of increased work to clear the backlog we could see as much as 105—billion cubic feet of additional natural gas production from the Rockies. That's enough natural gas to supply one and a quarter million additional households in that first year.

We know that the BLM has made significant progress in permitting—and is processing more permits than ever. That progress needs to continue, but the demand for permits to meet natural gas consumer needs continues to rise, so we must see further processing improvements, including reduction of permit restrictions that are not essential for environmental protection, and speed.

Other agencies, especially the Department of Agriculture's U.S. Forest Service, have even further to go and must follow the BLM lead.

The prospect of such action would be recognized and understood in the natural gas market.

Immediate action by Congress and the Administration to see leasing of the remaining Sale 181 area in the Eastern Gulf of Mexico as early as next summer.

The original Sale 181 area was administratively reduced before bids were received on the remainder in 2001. Discoveries in the portion that was leased provide much better understanding of the energy potential of the unleased portion. First production from what is expected to eventually be trillions of cubic feet of additional discovered reserves could probably begin flowing to market within 18-months-to-two-years of a lease sale.

Such a lease sale, based on appropriate congressional findings and direction, and based on the environmental work already done, could be held as early as next summer.

The prospect of such action—and more gas coming to market as additional Rockies supply also ramped up—would be recognized and understood in the natural gas market.

Immediate action should be taken to begin allowing selective removal of prohibitions against energy exploration, development and production offshore.

The natural gas resources in current moratoria areas that prevent exploration and production off approximately 90 percent of our coasts outside of Alaska could be tremendous.

In fact, Atlantic and Pacific natural gas resource estimates are approximately what we believed to be in the Gulf of Mexico in the mid-70s. But in the area of the Gulf in which we have been allowed to search for oil and gas we have produced three times the 70s' amount and we estimate five times more remaining. The more we explore, the more we know.

We must change our decades-old moratoria policy in view of both our growing energy demand and our 21st century offshore exploration and production technology that allows clean, safe extraction of oil and gas from deeper and deeper waters, with seabed wells and fewer facilities

At a minimum states should be allowed to opt out of moratoria off their coasts and share in resulting revenues generated by production. The House Resources Committee has taken bold action on such an approach by including the Ocean State Options Act in its budget reconciliation package.

Action by the Congress to approve such legislation—with its prospect of more natural gas supply coming to market in addition to more from the Rockies and the expanded Sale 181 area—would be recognized and understood in the natural gas market.

CONCLUSION

One final point—on prices. We in the exploration and production sector are price takers, selling our oil and gas into world and national markets in which forces well beyond our control determine price levels.

Higher prices do give us greater financial strength. This is essential in a business that may be somewhat less risky because of better technology, but in which much higher capital requirements (a billion dollars for one offshore project, for example) and operating costs make our risks every bit as important as theirs were to the wildcatters of bygone eras.

But, in common with consumers, we are not well served by volatile prices. Planning for future investment requires ability to reasonably assume or project prices to support that investment. The prospect of volatility clouds our view of what we can afford to prudently spend in the future for new supply. More supply reduces the volatility that we see in markets such as today's and is in everyone's interest.

While there is great concern for the current high prices for natural gas, we need to recognize that this is not only a short-term problem, but also long-term as well. Long-term natural gas prices as reflected in the futures markets have also risen substantially, implying that there is a market perception that natural gas supplies will be tight for a long time. There is currently an opportunity to change this perception by taking meaningful and visible action on the recommendations presented here today.

Working together on supply, as well as conservation, government and industry can make real differences in the natural gas outlook for our country.

But policy action such as I have outlined is needed now.

Thank you.

I would be glad to answer questions.

Mr. BURGESS. Thank you, Mr. Davison. We will now hear from Mr. Horvath.

STATEMENT OF SKIP HORVATH

Mr. HORVATH. Thank you, Mr. Chairman for this opportunity. I am Skip Horvath, President and CEO of the Natural Gas Supply Association, NGSA. We represent the major natural gas producers of the United States.

And let me be among those who commend this Congress for a successful, bipartisan effort to get the recent EPACT through over the summer. Since that time, my members have put forth quite a few billions of dollars worth of investment that will help bring new gas supply to this country, and that certainly has been helped by that act.

Let me talk about this winter for a little bit. The recent hurricanes have wreaked unprecedented havoc on the natural gas industry. Very unusual destruction in the Gulf of Mexico very recently. Full recovery will take roughly a year. We hope to beat that, but a year is realistic. However, we have seen enough of the recovery pace recently to be able to say with some confidence that residential and commercial customers served by local distribution companies holding firm transportation and gas supply agreements will continue to receive natural gas service sufficient to meet their requirements throughout the winter, even during periods of peak demand.

We do share concerns others have expressed about potential regional problems, especially in New England, where some electric generators may be relying on less expensive interruptible contracts, and they may, indeed, get interrupted this winter. We also acknowledge that bills will likely be high this winter, and we urge conservation efforts that will help lower the bills, and we also support LIHEAP.

Now, let me explain from a broad national perspective how this winter will work in terms of the number. The Gulf of Mexico is responsible for about 10 bcf a day of natural gas supply, and that is about 13 percent of the daily winter consumption. As of today, about half of that is still shut in, half of that, about five bcf a day is still shut in. Over the winter, we expect recovery to allow us to have only 2.5 bcf a day shut in.

Now, let us look at the overall demand picture and supply picture for the Nation. Demand is expected to be roughly, a little under 73 bcf a day for the winter. That is down a little bit. We expect about 60 bcf a day of supply from the following sources: domestic supply, Canadian producers, Canadian imports, and liquefied natural gas, LNG. Now, that is still short about a little less than 13 bcf a day. But we haven't factored in storage. Once you do take storage into account, we still have about 600 bcf that can be used in case the weatherman is wrong, and we do, indeed, have a colder than expected winter.

Now, the U.S. is blessed with a highly flexible natural gas network, and natural gas does find its way to where it is valued the most. While there may be some localized problems, and there is a potential for that every winter, not just this winter, we have enough supply to meet firm demand from a national perspective, and a market that will deliver the gas locally when it is needed and valued the most. The hurricanes that served as a wakeup call, to both natural gas customers and the industry. Without access to new natural gas resources, the diversification of supply sources, and relief from delivery constraints, the potential for localized natural gas disruptions and upward pressure on prices, as we may see this winter, will persist over the coming years.

That concludes my remarks. Thank you.

[The prepared statement of Skip Horvath follows:]

PREPARED STATEMENT OF SKIP HORVATH, PRESIDENT AND CEO, NATURAL GAS SUPPLY ASSOCIATION

Mr. Chairman and members of the subcommittee, my name is Skip Horvath and I am the president and CEO of the Natural Gas Supply Association (NGSA). Today, I am testifying on behalf of the major natural gas producers and marketers comprising our association. Thank you for the opportunity to participate in this timely forum.

The impact of the hurricanes was devastating in terms of natural gas production in the Gulf of Mexico. These shut-ins have exacerbated the tight natural gas supply and demand balance in the United States during the last several years. Today, I would like to share with you NGSA's winter season outlook and hurricane recovery updates, as well as provide some facts regarding market conditions.

First of all, we share legitimate concerns about regional natural gas constraints and costs that could impact customers, particularly during peak days, this heating season. These constraints could be most evident in those regions that rely heavily on supplies from the Gulf of Mexico.

To put the importance of the Gulf of Mexico into perspective, at pre-hurricane levels, the offshore region's production of 10 billion cubic feet per day (Bcf/d) represents approximately 13 percent of average daily winter consumption.[1] As of Monday, approximately 5.4 Bcf/d was shut-in in the offshore region. This represents approximately 7 percent of average daily winter consumption.

While sensitive to potential regional constraints, I want to clarify that I am here today to address market fundamentals from a broad, national perspective. In our fifth annual Winter Outlook, released September 28, we outlined the key supply and demand factors we expect to affect natural gas prices this heating season.

We anticipate upward pressure on wholesale natural gas prices as a result of public projections of relatively flat production, hurricane-related production losses, and an increase, relative to last winter, in seasonal heating demand in the residential and commercial sectors. Another factor in our assessment is that it cost more to put gas into storage this summer, and we anticipate those higher costs will be noticeable in customers' home heating bills in the coming months.

Today, we have further post-hurricane updates to some of the numbers in our Winter Outlook, as well as additional data that supports our assessment and demonstrates that the market is responding appropriately to temporary Gulf of Mexico production delays.

We have had a couple of macroeconomic changes since we last presented our Outlook. For example, GDP growth has been lowered for the winter, from 3.4 percent to about 3.3 percent, and manufacturing is down, from 2.9 percent to 2.7 percent, which indicates some demand coming off.

Weather is always the most critical factor in determining demand during the winter heating season; it is also the most difficult to predict. Using government weather data, we are predicting warmer than normal temperatures across much of the Western States, with near-normal temperatures in the East and East Central States. Based on this forecasting provided by the National Oceanic and Atmospheric Administration (NOAA), the winter is expected—in aggregate—to be slightly warmer than normal, but colder than last winter.

Given that weather scenario, and the decline in the GDP and manufacturing index, our revised estimate for U.S. natural gas demand this winter is now 72.7 Bcf/d, down 0.7 percent since Hurricane Rita.

On the supply side, prior to the hurricanes, the nation's 6,000 natural gas producers were on a pace this year to expand domestic production. Now, factoring in the effects of the hurricanes, despite increases in capital spending and rig counts, production is projected to be relatively flat this winter, due in large part to the decline rate in traditional basins. According to the consulting firm Energy and Environmental Analysis (EEA), post-hurricane data show that annual well completions, for example, are projected to increase to 26,100 from 23,400, and the rig count is forecast to increase this winter to 1,189, from 1,025 last heating season, indicative of an accelerating response to ongoing tight-market conditions.

Although we anticipate relatively flat production overall, there are additional amounts that may not make it to market early in the winter, due to the continuing recovery of processing plants from hurricane damage. Downstream issues continue to have a dampening effect on some supply—although we are still trying to assess the extent of that effect.

[1] Approximately 75 Bcf/d (Source: Energy Information Administration)

Any decline in traditional supplies, however, is being offset somewhat by an increase in unconventional production, as well as pipeline and LNG imports. Since our Winter Outlook—and in response to market conditions since the hurricanes—projected net pipeline imports have increased to 8.9 Bcf/d.[2] Imports as a whole will continue to play a critical role this winter to help compensate for some hurricane-related production losses, and to add further certainty to the marketplace. In fact, according to EEA, LNG imports are now expected to increase 28 percent from last winter. For this winter, however, our LNG and Canadian import capability will be limited by existing infrastructure, as well as competing worldwide demand for LNG.

Since our preliminary assessment of the effects of Hurricanes Katrina and Rita on natural gas supply, new data from EEA suggests that the total hurricane disruption will average about 2.5 Bcf/d during the official heating season, November 1 through March 31. In total, reflecting the shut-in supply in the Gulf of Mexico, domestic, Canadian and liquefied natural gas (LNG) supplies are expected to amount to about 60 Bcf/d.

Storage is the last piece of the supply puzzle needed to balance supply and demand. We are now at the end of the traditional injection season, and inventories are above the five-year average at more than 3.1 trillion cubic feet (Tcf). With one more reporting week to go, we are confident that storage will be healthy this winter, potentially even reaching the 3.2 trillion cubic feet (Tcf) mark. A storage inventory level at 3.1 Tcf translates to almost 21 Bcf per day on average. Coupled with the 60 Bcf per day domestic and imported production, it should be more than adequate to serve the U.S. firm-service demand requirements under at least normal winter weather conditions.

There are four scenarios that could impact the supply demand balance that I've presented for you today: 1) slower than anticipated rate of supply/infrastructure recovery from the hurricanes, 2) colder than normal weather conditions, 3) natural gas quality restrictions and 4) lower-than-projected levels of LNG or Canadian imports. Weather is probably the most critical factor this winter or any winter. Severe weather conditions can alter the supply-demand balance significantly and, as is the case anytime there is a heavy regional dependency on a single supply source, there is the risk of localized constraints.

Let me emphasize: under most weather scenarios (including those more conservative than the weather predicted by NOAA), supply and demand will balance, meaning there is no natural gas supply shortage. There are, however, access and infrastructure constraints. The industry's challenge this winter will be getting available supply to where it is needed, and we've been working hard to not only restore damaged facilities, but to reroute supply to bring it to market and address these regional issues.

While producers and the industry as a whole continue to work around the clock to ease potential constraints, customers can also play a critical role this winter. As we highlighted in our Outlook, end-use conservation will be a big help this heating season in offsetting the price impact of production losses. For example, recent statistics from the Department of Energy reportedly show that precautionary conservation to reduce demand by only 5 percent would amount to a savings of 3.5 Bcf/d—which alone would more than compensate for the projected Gulf of Mexico shut-ins. Conservation can be as simple as customers installing programmable thermostats, or turning their thermostats down by only two degrees from their usual setting. These measures will be the most effective, efficient and money-saving precautions customers can take to alleviate heating season impacts.

Altogether, urgent efforts by producers and the industry are focused on ensuring adequacy and reliability this winter. Although heating costs are still projected to increase—significantly in some regions—this data supports our view that ample storage, coupled with import and production responses, will likely mean sufficient overall supply for this winter. Ongoing conservation precautions also can help ease localized constraints, and all will help to protect the nation's firm-service customers this winter.

Importantly, under normal weather conditions, even with the affects of the hurricanes on the supply coming from the Gulf of Mexico, our market balances itself with the help of Canadian and LNG imports, and production from other regions in the U.S., such as the Mid-Continent. Allowing the market to work to move supply to address localized imbalances, and to facilitate needed infrastructure repairs, is the most important step government can take in the short-term. Additional government actions to expand future supply, as outlined by others in our industry, could also have a calming effect on the futures market.

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[2] Canadian 10.0 Bcf/d; offset by 1.1 Bcf/d export to Mexico (Source: Energy and Environmental Analysis)

Going forward, it is our sincere hope that this hurricane season serves as a national wake-up call with regard to natural gas and overall energy policy. Promoting the use of clean-burning natural gas should be coupled with access to new supplies to help fuel growing demand. The impact of the hurricanes on the market has underscored the importance of increasing supplies and resource diversity.

The Energy Policy Act of 2005 is a good first step, but more needs to be done. It is in our national interest to continue to expand supply resources, as outlined by other industry participants on this panel, both to help stimulate economic expansion and to reduce air pollution, creating a more secure energy future for America. Without additional and diversified sources of supply, the market will continue to be at risk for disruptions like Katrina and Rita, and the higher costs that inevitably result.

Thank you, Mr. Chairman, for this opportunity to outline our assessment of the challenges we face this critical heating season.

Mr. BURGESS. And thank you, Mr. Horvath. We will hear from Mr. Slaughter.

STATEMENT OF BOB SLAUGHTER

Mr. SLAUGHTER. Thank you, Mr. Burgess, Mr. Boucher. I am Bob Slaughter. I am the President of the National Petrochemical and Refiners Association, NPRA. Our members include those who own or operate virtually all U.S. refining capacity and petrochemical manufacturers.

Today's hearing focuses on two important and timely issues. The first is the cost and availability of natural gas. It presents a challenge for both refiners and petrochemical producers. Refiners use large quantities of natural gas, and petrochemical producers rely on natural gas supplies for use as a feed stock. NPRA urges Congress to take immediate action to increase domestic natural gas supplies by opening up OCS and onshore areas currently subject to moratoria and other restrictions on exploration and production.

The Nation can no longer afford to place off limits critical supplies of natural gas that are needed for residential, commercial, and industrial use. The U.S. is in the process of exporting its petrochemical industry, due to concerns about the availability and cost of future gas supplies. Action is needed in short order to protect the hundreds of thousands of jobs that depend directly or indirectly on the domestic petrochemical industry, a major contributor to the U.S., State, and local economies.

Second, the Nation's refiners and petrochemical manufacturers have made considerable progress in recovering from the effects of Hurricanes Katrina and Rita. Those storms, at one time or another, shut down roughly 30 percent of U.S. refining capacity. Hurricane Rita shut down about 16 major U.S. refineries. NPRA members joined other sectors of the oil and gas industry in working around the clock to bring as much of the affected supply back online as quickly as possible. A great deal has been accomplished. As of November 1, roughly 4 million barrels per day of refining capacity hit by the storms has returned to full operation. Most petrochemical facilities hit by the storms have also restarted.

The EIA has noted that gasoline supply has returned to pre-Katrina levels with the help of significant gasoline imports during recent weeks. As always, higher prices served as a magnet to attract additional supplies needed to address a temporary market imbalance. Now, with most of the refineries restarted, domestic production has ramped up, and import levels should eventually return

to normal volumes. EIA also announced yesterday a significant drop in U.S. average gasoline prices to pre-hurricane levels. Due to high crude costs, however, current gasoline prices do remain above those in 2004.

There is also positive news regarding distillates, which include home heating oil. During the key winter months of the winter heating season, heating oil demand is met by refinery production, imports, and inventory stocks. For much of 2005, refinery distillate production, which is indicated in this first chart, has been higher than the average during the past 4 years, which is good news. Distillate inventories were reaching relatively comfortable levels at the time of the hurricanes, but supplies were drawn down while refinery disruptions caused by the hurricanes were most severe.

The attachment two, or our board No. 2, will show you the magnitude of the storms' effect day by day on refinery operations. The good news is that as of last week, U.S. distillate inventories, including both home heating oil and highway diesel, were slightly higher than the stocks on hand at this time last year. Diesel prices have not yet returned to pre-Katrina levels, and diesel prices pretty much set the standard for the whole distillate curve. Strong worldwide demand for distillate has resulted in higher than normal prices for diesel, compared with gasoline, for much of this year. However, EIA did announce yesterday that average diesel fuel prices fell by over $0.28 in the past week.

At this very early point in the heating season, demand for home heating oil itself is roughly the same as it was last year, but as with most winters, actual demand for heating oil will be greatly affected by weather conditions. NOAA projects a slightly more severe winter than last year, but it remains to be seen whether that scenario will play out. If additional heating oil supplies are needed beyond those produced in domestic refineries, imports are likely to be available from Canada, the Virgin Islands, Venezuela, and perhaps Europe if winter conditions there are not severe.

Temporary price spikes can occur if suppliers are short, but those situations usually quickly react to the arrival of additional heating oil in response to market incentives. A lot of the discussion today has been about natural gas price supply and price concerns. This situation could significantly impact the heating oil market. If interruptible gas customers abandon the gas market because of high prices this winter, they will rely on heating oil supplies to replace their usual fuel. Many utilities are required to hold reserve inventories to address this eventuality, and it is hoped that this would act to mitigate the impact of additional, unexpected demand for home heating oil.

We would argue that this possibility of additional demand for home heating oil this year would help provide another good reason why Congress should not delay in taking action to increase domestic production of natural gas. As others who have testified today say, we are supporters of LIHEAP. We do, unfortunately, that bills will be higher this year, as predicted by the EIA and others. We think that conservation is important, as is adequate LIHEAP funding.

And so we want to thank you again for the opportunity to discuss these issues today, and we look forward to responding to your questions.

[The prepared statement of Bob Slaughter follows:]

PREPARED STATEMENT OF BOB SLAUGHTER, PRESIDENT, NATIONAL PETROCHEMICAL AND REFINERS ASSOCIATION

Mr. Chairman and members of the Subcommittee, thank you for the opportunity to appear today to discuss issues related to petroleum refining and the home heating oil market. My name is Bob Slaughter and I am President of NPRA, the National Petrochemical & Refiners Association. NPRA is a national trade association with 450 members, including those who own or operate virtually all U.S. refining capacity, and most U.S. petrochemical manufacturers.

Today's hearing focuses on important and timely issues. The cost and availability of natural gas presents a challenge for both refiners and petrochemical producers. Refiners use large quantities of natural gas and petrochemical producers depend on natural gas supplies for use as feedstock. NPRA urges that Congress take immediate action to increase domestic natural gas supplies by opening up to exploration and production OCS areas currently subject to moratoria. The nation can no longer afford to place off limits critical supplies of natural gas that are needed for residential, commercial and industrial use. The nation is in the process of exporting the U.S. petrochemical industry due to concerns about the availability and cost of future natural gas supplies. Action is needed in short order to protect the hundreds of thousands of U.S. jobs that depend directly or indirectly on the domestic petrochemical industry.

I have been asked to address my remarks today to trends in the home heating oil market. Given the tightness in refining capacity generally, the high cost of crude oil, damage caused by two major hurricanes and the strong pressure on the industry to continue to keep up gasoline production levels in light of consumer demand, challenging conditions have emerged for this winter's heating oil market.

A snapshot of current conditions

The nation's refiners and petrochemical manufacturers have made considerable progress in recovering from the effects of hurricanes Katrina and Rita. Those storms at one time or other shut down roughly 30% of U.S. refining capacity. Hurricane Rita shut down about 16 major U.S. refineries. At the same time, the effects of Hurricane Katrina still lingered, as four major refineries remained offline due to the impact of that earlier storm. The refining industry has joined other sectors of the oil and gas industry in working around the clock to bring as much of the affected capacity back on line as possible. A great deal has been accomplished. As of November 1, roughly 4 million barrels per day of refining capacity hit by the storms has returned to full operation. Most petrochemical facilities have also been returned to full operation after the storms.

Remaining offline at this date are four facilities: BP's Texas City refinery, which is shut down for repair; ExxonMobil/PDVSA's Chalmette refinery, which is expected to be fully operational later this month, ConocoPhillip's Belle Chasse refinery, and Murphy Oil's Meraux refinery, expected to start-up in the first quarter of 2006. The U.S. Energy Information Administration has noted that gasoline supply has returned to pre-Katrina levels with the help of significant gasoline imports during recent weeks. With most of the refineries restarted, domestic production has ramped up and import levels should eventually return to more usual volumes. EIA also announced yesterday a significant drop in U.S. average gasoline prices, returning to pre-hurricane levels. Due to continued high crude prices, however, current gasoline prices do remain above those in 2004.

There is also positive news regarding distillates, including home heating oil. During the key winter months of the home heating oil season, demand is met by refinery production, imports and inventory stocks. Refinery distillate production (as indicated in attachment one) have been higher than the average of the past four years for much of 2005. Inventories were reaching comfortable levels at the time of the hurricanes, but those supplies have been drawn down somewhat to provide supply during the time when refinery disruptions caused by the hurricane were most severe. (See attachment 2 for the magnitude of the storms' effect on refinery operations.)

The good news is that as of last week, U.S. distillate inventories, including both home heating oil and highway diesel, were slightly higher than the stocks on hand at this time last year. Strong demand for distillate worldwide has resulted in higher

than normal prices for diesel when compared with gasoline for much of this year. Diesel prices have not yet returned to pre-Katrina levels, but EIA announced yesterday that diesel fuel prices fell by over 28 cents in the past week.

As with most winters, demand for home heating oil will be greatly affected by weather conditions. NOAA is projecting a slightly more severe winter than last year, but it remains to be seen whether that prediction will play out as anticipated. If additional heating oil supplies are needed beyond those produced in domestic refineries, imports are likely to be available from Canada, the Virgin Islands, and perhaps Europe if winter conditions there are not severe. As always, a price spike can occur if supplies are temporarily short, but such situations are usually quickly addressed by the arrival of additional supplies in response to market incentives.

There has been much discussion at this hearing of concerns about natural gas supply during this winter. That situation could also impact the heating oil market. If interruptible gas customers abandon the natural gas market because of high gas prices this winter, they would rely on heating oil supplies to replace their usual fuel. Many utilities are required to hold reserve inventories of heating oil to address this eventuality, and it is to be hoped that this supply would act to mitigate the impact of additional, unexpected demand for home heating oil. The possibility that industrial natural gas customers might present additional challenges for home heating oil consumers is another good reason why Congress should not delay in taking action to increase domestic production of natural gas.

Refining and Home Heating Oil

Basically, our nation has two sources of heating oil: domestic petroleum refining and imports. For their part, refineries produce heating oil as a part of the "distillate fuel oil" product family that also includes diesel fuel. Distillate products are shipped throughout the United States by pipelines, barges, tankers, trucks and rail cars.

Past experience and EIA analysis confirm that refiners are limited in the amount of heating oil they can make during the winter to meet the demands of the October to March heating season. Some winter heating oil is produced by refineries in the summer and fall months and stored for winter use. During the coldest winter months, the inventories built in summer and fall are used to help meet the high demand. Refiners can increase heating oil production in the winter only to a modest degree.

As indicated previously, imports can make up the difference when distillate and heating oil stocks are low. Primary sources of imported distillate are Canada, the Virgin Islands, and Venezuela.

Whether imported or produced by domestic refiners, heating oil is then stored in a terminal that services a particular area served by retailers. For example, heating oil may be delivered to a central distribution area, such as New York Harbor, where it is then redistributed by barge to other consuming areas, such as New England. Once heating oil is in the consuming area, it is redistributed by truck to smaller storage tanks closer to a retail dealer's customers, or directly to residential customers.

Current Supply/Demand Picture for Home Heating Oil

According to the U.S. Energy Information Administration, about 8.1 million households out of 107 million total use heating oil to heat their homes. This fuel oil is primarily used for residential space heating, a fact that creates great seasonal variations in demand. Home heating oil is a seasonal product, with most consumed between the months of October and March.

Home heating oil demand is also limited geographically, with households in the Northeastern United States consuming about 78 percent of total U.S. demand. While total demand has stayed about the same over the last year, residential and wholesale prices are up by 56 and 39 percent respectively. The reasons for volatility are clear.

Refiners have been working hard to address the lingering impacts of the summer's storms. The industry faced unprecedented logistical, facility, and personnel complications with the impact of two major storms in rapid succession. The dedicated employees of these facilities deserve most of the credit for the rapid return to service of so much capacity, as do their employers. The refining companies in many cases provided for the shelter, safety and security of these workers and their families. Despite so great a loss of productive capacity in such a short time, it is important to note that the nation experienced only very isolated and short-lived transportation fuel shortages.

NPRA commends the federal government for acting quickly and decisively in the face of these supply outages. Several steps taken in the days and weeks following these storms helped refiners provide consumers with the products they need. The

Administration released crude oil from the Strategic Petroleum Reserve (SPR) to assist refiners who were short crude supplies as a result of hurricane damage. NPRA applauds this appropriate utilization of the reserve in a time of crude-oil supply crisis. The decisive steps taken to judiciously use crude oil from the SPR during this emergency enabled several refineries, otherwise unaffected by the storms, to receive the crude oil required to keep the refineries in production.

NPRA also notes that the Environmental Protection Agency provided temporary fuel waivers that made it easier to supply fuels to affected areas. The waivers pertain to both gasoline and diesel specifications. NPRA appreciates the efforts of EPA and commends the agency for its diligence in gathering the necessary information to protect both fuel supply and environmental concerns.

The Department of Homeland Security also deserves recognition for temporarily lifting Jones Act requirements in order to allow non U.S. flagged vessels to transport much needed refined products from one U.S. port to another. These actions provided additional flexibility to the marketplace and have helped refiners to continue to meet demand.

Other Factors Which May Lead to Volatility in the Heating Oil Market

There is no one single answer for why home heating supplies can be tight, although the market has historically been a volatile one. Among the reasons for this are the following:

1. Seasonality of demand. Because heating oil is essentially a winter product, the laws of supply and demand dictate that consumers feel the greatest pinch precisely at the time when heating oil is in the most need. While transportation fuels are somewhat seasonal (particularly gasoline), the demand curve is not nearly so biased towards one season as is the demand curve for heating oil. As a result, moderate changes in distillate inventories can have relatively profound impacts on the heating oil market.

Data collected over the last few weeks show that unusually warm weather in the Northeast has dampened demand for fuel oil and resulted in stable distillate supplies. These factors have resulted in futures price declines, as November contracts have given way to December trading, according to data reported by Bloomberg. However, heightened demand overseas, coupled with interrupted distribution attributable to this summer's hurricanes may create rather volatile conditions. Rapid changes in temperatures or prolonged storms can result in spikes in demand at the very time when some infrastructure (harbors, barge traffic, truck traffic, etc) are constrained for making deliveries at optimal rates.

2. Crude oil costs. Just as with gasoline production, one of the greatest cost factors affecting home heating oil is the cost of the underlying crude oil input. Crude prices are of course a product of worldwide supply and demand factors well beyond the control of the refiner or the heating oil vendor. In particular, heightened crude demand in India and China has affected the crude market. Crude input accounts for approximately 42 percent of heating oil cost.

3. Competition in local markets. While NPRA does not represent the retail sector, we can point out some obvious characteristics of retail markets. Some heating oil markets are served by multiple vendors, whereas others may have only one primary vendor. As a result, not all local retail markets are as competitive as might be the case under optimal conditions.

4. Differential overhead. The retailing of home heating oil is labor intensive and can be complicated from a logistical point of view. Some of the most significant markets for heating oil have a relatively high cost of doing business, and do not always react as quickly to market stimuli. EIA recently stated that ″Prices also are impacted by higher costs of transporting the product to remote locations. In addition, the cost of doing business by dealers can vary substantially depending on the area of the country in which the dealer is located. Costs of doing business include wages and salaries, benefits, equipment, lease/rent, insurance, overhead, and state and local fees.″ Distribution and marketing costs alone account for some 46 percent of the cost of a gallon of heating oil.

5. Fuel switching. Demand for home heating oil is roughly the same as it was last year at this time (4.293 mmb on 10/26/2005 compared to 4.368 mmb a year ago, a change of only -0.075). As previously mentioned however, with the price of natural gas substantially above its historic average, and with some homes in the Northeast capable of utilizing either gas or oil heating, there may be some switching from natural gas to fuel oil, but this is difficult to predict.

Addressing Volatility in the Heating Oil Market

Some policymakers have suggested that the federal government should adopt price control mechanisms on heating oil and other refined products, sometimes at

the wholesale level, to combat the current rise in fuel prices. NPRA urges Congress to reject this advice.

As previously noted, in the immediate aftermath of both Hurricanes Katrina and Rita, there were but a few reports of supply shortages or market distortion. Reliance on market forces provided appropriate market signals to help balance supply and demand even during these difficult times. Enactment of politically tempting but marketplace disrupting price controls is absolutely the wrong cure for the situation. President Reagan eliminated price controls on oil products immediately upon taking office in 1981. He was outspoken about the inefficiencies and added costs to consumers that resulted from America's ten-year experiment with energy price controls during the 1970s.

The energy price and allocation controls of the 1970s resulted in supply shortages in the form of long gas lines. Studies have shown that, although intended to reduce costs, controls actually resulted in increased costs and greater inconvenience for consumers. The benefits of market pricing became clear soon after the elimination of price and allocation controls in 1981. The U.S. Federal Trade Commission stated in an extensive study published this June that the price of refined products over the past two decades has been on average lower than any time since 1919. It is important to note that a "windfall profit tax" is merely another form of price control. Price caps and other forms of price regulation are no more effective in the 21st century than they were in the 1970s. Interference in market forces always creates inefficiencies in the marketplace and extra costs for consumers.

There are numerous, more market sensitive, strategies available to consumers and policy makers that can address heating oil volatility or at least somewhat ameliorate its consequences.

Some heating oil consumers, in recognition of potential price increases, may fill their storage tanks during lower demand periods. While most homeowners do not possess sufficient storage capacity for an entire winter, such behavior can address price increases during shoulder or transitional seasons. Consumers may, therefore, arrange to have their tanks filled in late summer or early fall when prices are generally lower.

In addition, many of the nation's 9300 heating oil retailers offer budget plans or fixed price protection programs to help stabilize monthly bills. Home energy audits can also ensure that furnaces and other appliances are running efficiently before the season begins. Conservation gains attributable to weatherizing (i.e., installing the proper insulation in houses and around hot water heaters) as well as caulking and weather stripping windows and doors to seal out cold air also help save energy. Installing a programmable thermostat is another way to reduce heating fuel costs.

For those living on fixed incomes or under other significant budget limitations, both Federal and State energy assistance programs are available. For example, the Low Income Home Energy Assistance Program (LIHEAP) is a Federal program that distributes funds to States to help low-income households pay heating bills. Additional State energy assistance and fuel fund programs may be available to help households during a winter emergency.

Thank you again for the opportunity to discuss this important issue of winter fuel supply with you today. I look forward to responding to your questions.

Mr. BURGESS. Thank you, Mr. Slaughter. Now, we will hear from Mr. Wright.

STATEMENT OF PHILLIP WRIGHT

Mr. WRIGHT. Thank you, Mr. Burgess and members of the subcommittee. I bring you greetings from the home of the National League champions. My name is Phil Wright, and I am Senior Vice President and General Manager for Williams Gas Pipeline Company.

I am responsible for the operation of about 15,000 miles of interstate natural gas pipelines, extending from the Rocky Mountains to the Pacific Northwest, and from the Gulf Coast into the Southeastern United States, Eastern seaboard, and ultimately, into the New York City metropolitan area.

I am here today on behalf of the Interstate Natural Gas Association, which I will refer to as INGA. INGA members transport over 95 percent of the Nation's natural gas through a network of

180,000 miles of pipelines. Following restructuring of the natural gas industry, gas pipelines are no longer in the role of buying and selling the commodity. Thus, the role of the interstate pipelines is similar to that of a trucking company. We provide the natural gas transportation services, including storage, that our customers need.

The Federal Energy Regulatory Commission regulates virtually every aspect of our business, including the rates we charge. Our costs, as Chairman Kelliher testified, is the smallest part of the delivered price of natural gas, typically less than 10 percent of the consumer's total bill, and we do not, therefore, benefit from higher natural gas prices.

At the outset, let me say that we agree with NGSA, in that our best judgment is that sufficient supplies will be available this winter to meet residential and commercial demand. Storage levels are good, ahead of the 5 year average, and production from the Gulf of Mexico, while significantly below pre-hurricane levels, is gradually returning.

Having said this, the industry faces very real challenges this winter that could require some regulatory allocation of deliveries to certain customers at certain times. As of early this week, about 55 percent of the daily production from the Gulf of Mexico, which accounts for roughly 20 percent of the Nation's supplies, remain shut in due to the storms. Complicating the situation is that a number of natural gas processing plants in the Gulf were damaged by the hurricanes. Several of these facilities may be out of operation during most, if not all, of the winter. And a certain amount of unprocessed natural gas can be accepted into the gas pipeline network, but if the quantity becomes too high, liquids in the unprocessed gas can cause safety and operational problems. And if this occurs, pipelines may have to limit the volume of unprocessed gas that we can accept, to preserve the operational integrity of the transmission and distribution network.

I would assure you that we are doing all we can to repair or bypass the hurricane damage to natural gas infrastructure in the Gulf. Despite heroic efforts, however, the damage is too widespread, and the amount of repair work too great for everything to be repaired in time for the winter heating season, which is upon us. To assess the potential damage, or excuse me, impact of the storm on supplies, INGA retained an economic consultant, EEA, to analyze the supply and demand outlook for the coming winter.

A key focus of the study was to assess the likelihood of scenarios which could result in regulatory allocation of supply to certain customers, primarily industrial users and electricity generators during certain times. The EEA analysis concludes that residential and commercial customers served by local distribution companies holding long term, firm transportation and supply entitlements, will continue receiving natural gas. Thank you. The study concludes that residential and commercial customers served by local distribution companies holding firm transportation and gas supply entitlements will continue receiving service throughout the winter, even during periods of peak demand. This will remain the case, even in situations where State allocation plans are implemented due to supply constraints.

These customers will receive natural gas this winter, albeit at a higher price. Clearly, the severity of the winter weather will be a critical factor in determining how natural gas markets will balance. If the weather is colder than normal, the probability of regulatory gas supply allocations becomes greater. Historically, this type of winter occurs one in every seven winters. New York and New England will be the most likely to have spot regulatory allocations under all of the scenarios analyzed in the study, although other States might also be affected should the winter be colder than normal. Should such a scenario occur, it would likely be near the end of the winter, after storage supplies have been depleted.

So what can be done? The short term imperative is repairing the infrastructure as quickly as possible. That means expediting permitting and approvals for repair work. It also means the various levels of government should consider the value of granting companies some forbearance from legal restrictions that might otherwise frustrate their ability to coordinate assessment and repair activities. Both the energy industry and the government must educate consumers in advance, so they are prepared for higher bills, and have the ability to implement strategies for conserving energy.

Funding of the Low Income Home Energy Assistance Program is critical in helping needy families cope. State regulators should be reviewing their allocation plans, and preparing to implement them, if necessary, including coordinating any plans with local electric generators, who would be some of the most likely customers to have supplies allocated. As well, large gas consumers should be in close consultation with their suppliers to ensure that the gas they are counting on can be supplied and delivered.

Some have complained about the environmental risks associated with expanding offshore energy to include waters outside the western Gulf of Mexico. Still, after three significant hurricanes in 2 years, it is time to concede that apprehensions about the environmental consequences of offshore energy development are greatly overstated. Production is growing in the Rocky Mountain region as several pipeline projects have been proposed to bring that gas east, but access to public lands, seasonal drilling restrictions, and the timely issuance of permits remain a problem in some areas.

To enable the financing and development of $61 billion of critical natural gas infrastructure this Nation needs by 2020, we urge State commissions to support more balanced supply and transportation contract portfolios for the utilities they regulate. Long term contract commitments are critical to enabling that infrastructure to be developed.

Some have questioned whether the energy industry is investing enough capital into the North American market to develop supply, to mitigate prices in the long term, and while I can only speak for the interstate gas pipeline sector of the industry, I want to assure you we are committed to this market long term, and are investing capital at a robust pace.

I will be prepared to respond to questions. Thank you.

[The prepared statement of Phillip D. Wright follows:]

PREPARED STATEMENT OF PHILLIP D. WRIGHT, SENIOR VICE PRESIDENT, GAS PIPELINES, WILLIAMS, ON BEHALF OF THE INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA

Mr. Chairman and Members of the Subcommittee: Thank you for the opportunity to testify on this important topic. My name is Phil Wright, and I am Senior Vice President for Gas Pipelines at Williams. Williams is the second-largest transporter of natural gas in the United States, transporting about 12 percent of the natural gas consumed. We operate three interstate pipelines which provide natural gas to major markets on both the east and west coasts including Atlanta, the Carolinas, Philadelphia, New York, Seattle, Portland and Florida. These systems total about 15,000 miles of pipe, transporting natural gas from the Gulf of Mexico, Canada, the Rocky Mountains and other production areas.

I am here today on behalf of the Interstate Natural Gas Association of America (INGAA). INGAA is a trade organization that represents the interstate natural gas transmission pipeline companies operating in the U.S., as well as comparable companies in Canada and Mexico. Its members transport over 95 percent of the nation's natural gas through a network of 180,000 miles of pipelines.

NATURAL GAS PIPELINE INDUSTRY

Before discussing the winter outlook for natural gas supplies, I first want to make a few points about the structure of the natural gas industry. The natural gas industry has never been as vertically integrated as the oil and electric power industries. Put differently, it is the exception and not the rule for a single company to be significantly involved in all segments of the industry. These segments can generally be broken down into the following categories: production, gathering and processing (also known as midstream services), interstate pipelines, marketing, and local distribution. Some of these segments are subject to economic (i.e., rate) regulation at the federal or state level, while others are not subject to any rate regulation.

The Federal Energy Regulatory Commission (FERC) regulates the rates, terms and conditions of service for the interstate pipeline segment. As part of the natural gas industry restructuring that occurred during the 1980s and early 1990s, the interstate pipeline industry gave up its merchant role as the provider of bundled wholesale natural gas services. Under the current industry structure, interstate pipelines transport and store natural gas, but do not produce, purchase or sell the commodity. An interstate pipeline is analogous to a trucking company that provides both transportation and warehousing services for goods, but that does not take title to the goods. The maximum rate an interstate pipeline may charge for transportation and storage is set by FERC on a pipeline-by-pipeline basis, based upon the costs incurred by a specific pipeline to provide such services.

Pipeline transportation and storage is the smallest part of the cost of natural gas delivered to residential and commercial customers—typically about 10 percent of the total retail cost of natural gas. (See Appendix 1) Pipelines earn their revenues by charging the regulated rates for transportation and storage set by FERC; since pipelines have no role in purchasing and reselling natural gas they do not benefit from higher commodity prices.

The shippers (i.e., customers) on interstate pipelines—who may be local distribution companies (LDCs), municipal gas companies, electric generators or industrial companies—are responsible for purchasing natural gas and arranging pipeline transportation and storage. Each shipper is responsible for its own portfolio of natural gas supply, transportation and storage. A customer's natural gas supply portfolio may include long-term and short-term contracts and spot market purchases, as well as financial instruments to manage price risk. In the case of pipeline transportation, a shipper can choose to purchase firm transportation that ensures year-round availability (including on the coldest days of the year) or a shipper can choose to purchase various types of non-firm transportation that may be interrupted during periods of greatest natural gas consumption. Non-firm capacity generally is sold at rates lower than firm service, but the shipper accepts the risk that this capacity will be unavailable during a peak period when firm transportation customers are fully utilizing their entitlement to pipeline capacity. Pipeline companies build additional facilities to add pipeline capacity if shippers are willing to sign long-term firm contracts for such capacity. Still, due to the time required to comply with new construction certification and permitting requirements and to actually construct the facility, there often is a multi-year lag between the inception of a pipeline project and when natural gas can flow through the newly-completed capacity.

While the business model for the natural gas industry is not vertically integrated, there are significant operational interdependencies between the industry's various segments. This is especially true regarding off-shore production in the Gulf of Mex-

ico, an important consideration in evaluating gas supply availability for the upcoming winter. Generally speaking, the chain of delivery is as follows: Natural gas is first produced at off-shore platform or wellhead facilities; it is then gathered and transported through smaller diameter gathering pipelines for redelivery to FERC-regulated transmission pipelines for transportation to onshore processing plants. There, the natural gas is processed to remove hydrocarbon liquids, such as propane and butane. Those processed liquids must be transported, via dedicated pipeline, barge or truck, to markets for those products, such as refineries and petrochemical facilities. Once the liquids are removed, the natural gas is fit for consumption and is redelivered into the interstate pipeline network where it is transported to end-use customers. These systems all must work together for natural gas to flow onshore, and from there to the millions of customers downstream. If any link in this delivery chain is disrupted, the remaining links in the chain will be affected in some way.

Hurricanes Katrina and Rita have highlighted these interdependencies. In cases where multiple links in the supply chain have been damaged, we cannot repair only a single link and expect natural gas supplies to return to pre-hurricane levels. All of the links must be working in order to achieve that result.

EFFECT OF THE HURRICANES

Mr. Chairman, two major hurricanes striking back-to-back at the heart of our nation's energy system have caused an unprecedented disruption in our Gulf-based natural gas infrastructure. The federal waters in the Gulf of Mexico account for about 10 billion cubic feet per day (bcfd) of natural gas production, which is about 20 percent of total U.S. production. As of early this week, about 55 percent of this daily production, or about 5.5 bcfd, remained "shut-in" due to the storms. To place this number in perspective, the United States typically consumes on average 61 bcfd nationwide. Given the tight supply/demand balance that the nation already was facing before the hurricanes, this loss of supply—even if only temporary—is cause for concern as we begin the winter heating season.

The media, and indeed most Americans, have focused most intently on how the twin hurricanes have affected the price and supply of gasoline. Gulf Coast oil production and refineries are a critical part of the nation's infrastructure for obtaining supplies of gasoline, jet fuel and fuel oil. Nonetheless, the United States imports almost 60 percent of its petroleum supplies from overseas. This means that a short-term increase in imports can mitigate some portion of the impact of the hurricanes on petroleum supplies. When it comes to natural gas, however, the United States still produces 85 percent of the total supplies needed to meet domestic demand. Most of the remaining supply comes from Canada. The United States' ability to import natural gas from outside North America is far more limited than with petroleum, given the small number (5) of operational liquefied natural gas (LNG) import terminals in the U.S. Therefore, even as the country remains focused on gasoline prices, the more profound and protracted impact of the hurricanes will be on natural gas prices and supplies.

I want to assure the Committee that we are doing all we can to repair or bypass the hurricane damage to natural gas infrastructure in the Gulf region. The dedication of our employees, in the face of losing their homes and possessions and having their families uprooted, has been phenomenal. Across the industry, people are showing up to work long hours even as they have no place to go home to. Supporting our employees with temporary housing within the region so they can continue to repair and operate critical energy facilities is crucial to speeding the pace at which natural gas supplies in the Gulf can be brought back online.

WINTER SUPPLY OUTLOOK

Let me now turn to our outlook for the winter heating season. There can be no doubt that, compared to last year, there will be less natural gas delivered from the Gulf of Mexico region this winter. The damage is too widespread, and the amount of repair work too great, for everything to be repaired in time for the winter heating season. The fundamentals of supply and demand in the North American natural gas market already were tight before hurricanes Katrina and Rita. Consequently, any loss of supply—even a relatively small one—can have a disproportionate impact on natural gas prices over the winter. This tight supply and demand balance places extra emphasis on natural gas storage.

While it is largely invisible to the public, the United States has a significant amount of natural gas storage scattered throughout the country. These storage facilities, typically located in depleted oil and gas fields, usually are filled during the warmer months when there is excess natural gas supply and pipeline capacity to

move it. Storage fills are generally completed by November 1st, which is the beginning of the winter heating season. During the coldest winter days, which typically are the days of peak natural gas demand, storage withdrawals meet more than 50 percent of the daily natural gas load in some market areas.

Prior to the hurricanes, storage fills were proceeding at total volumes above the five-year average. The hurricanes slowed storage fills somewhat, but volumes still remain ahead of the five-year average. On this first week of the winter heating season, the storage fill stands at about 3.1 trillion cubic feet—a robust number given the damage in the Gulf. The significant damage to industry and to homes and businesses in the Gulf region greatly reduced natural gas demand September and October. This loss of load partially offset the diminished natural gas production from the Gulf and freed up gas supply that could be diverted to storage in preparation for the upcoming winter.

Still, it cannot be emphasized enough that storage supplements' but does not replace—natural gas flowing through the interstate pipeline network. Many of the interstate pipelines serving the Midwest, Northeast and Southeast draw their primary supplies from the Gulf region. There are physical limits on how much natural gas can be drawn from storage on a daily basis and it is assumed that storage will be withdrawn at its full capacity on a peak day. Therefore, if supply constraints limit the volumes of natural gas available for transportation, peak day conditions could create deliverability challenges in some markets. While peak day conditions could occur at any point during the winter, the risk of deliverability challenges will become greater as storage becomes increasingly depleted during the late winter months. This could create significant operational challenges for pipelines in late winter, particularly if cold weather, limited supply availability, and low storage cause customers to attempt to take more gas from a given pipeline than has been delivered to the pipeline on their behalf.

I should also mention the importance of returning damaged natural gas processing facilities to service. As mentioned previously, natural gas processing plants remove the heavier hydrocarbons entrained within produced natural gas. These natural gas liquids include propane, ethane and butane. Once removed, there is a separate market for these liquids, principally in the petrochemical industry. Just as with oil refineries in the Gulf region, however, a number of natural gas processing plants were damaged by the hurricanes. Several of these facilities may be out of operation during most, if not all, of the winter.

This presents another operational challenge for pipelines. A certain amount of unprocessed natural gas can be accepted into the natural gas pipeline network. If the quantity of heavier hydrocarbons in the gas stream becomes too high, however, these substances can "drop out" of the natural gas stream as liquids and collect in pipelines and end-use equipment. This is a particular concern during the winter heating season when the lower ambient temperatures cause the temperature of the flowing gas to drop, increasing the volume of heavy hydrocarbons that will return to the liquid state. This phenomenon can cause safety and operational problems as slugs of liquids work their way through sensitive equipment. Therefore, as off-shore production facilities come back on line, it is also important to bring corresponding processing capacity back on line as well; otherwise, pipelines may be compelled to limit the volumes of unprocessed natural gas that can be accepted during the winter heating season in order to preserve the operational integrity of the transmission and distribution pipelines and protect end-users. Pipelines may be compelled to enforce their tariffs strictly (in this case, for gas quality) to protect system integrity, even if it means reducing the volumes of natural gas that can be delivered during peak demand periods.

WINTER SUPPLY ANALYSIS

Because of our concern about these potential winter supply scenarios, INGAA retained an economic consultant, Energy and Environmental Analysis Inc. (EEA), to analyze the adequacy of natural gas supplies (including gas storage) for the upcoming winter. **This study includes a detailed analysis of the effects on natural gas deliverability from Hurricanes Katrina and Rita.** The primary objective of the study is to analyze the likelihood that, due to the effects of the hurricanes, individual natural gas markets (i.e., consuming regions) within North America could experience difficulties that would lead to supply curtailment for certain customers (primarily industrial users and electric generators).

INGAA believes that the EEA study is noteworthy in several respects. First, the study is premised on EEA's Gas Market Data and Forecasting System, a model of the North American natural gas market that examines supply and demand balances at individual points within the natural gas infrastructure. This permits an analysis

of individual natural gas markets that takes into account the particular features of the infrastructure and gas flows, rather than just making assumptions based upon nationwide aggregate supply and demand. EEA's model has been used for three widely referenced natural gas market studies in recent years: the 2003 National Petroleum Council study; the 2004 and 2005 INGAA Foundation studies on natural gas infrastructure needs; and the 2005 American Gas Foundation study.

Second, the EEA study has benefited from broad participation by representatives from both government and industry. This has included natural gas industry representatives from individual pipeline companies, natural gas processing companies and natural gas producers. Trade association participants have included INGAA, the American Gas Association (AGA), the Natural Gas Supply Association (NGSA), the Independent Petroleum Association of America (IPAA) and the American Petroleum Institute (API). Federal agency participants have included representatives from the Department of Energy (DOE), the Energy Information Administration (EIA), the Minerals Management Service (MMS) and FERC. The input assumptions for the study represent the collective views of all these participants.

One key point in the results is worth mentioning first. The EEA analysis concludes that, assuming curtailment plans work as expected, **residential and commercial customers served by local distribution companies that hold firm transportation and gas supply entitlements will continue receiving natural gas service, sufficient to meet their requirements throughout the winter,** even during periods of peak demand. These customers will receive natural gas this winter, albeit at higher prices. The study, however, does not, and cannot, account for individual cases where a particular LDC, municipal utility or gas marketer may experience difficulties because it has not adequately secured transportation or supply for the winter. Still, should they occur, such situations would be isolated.

The EEA study examines three different hurricane recovery and supply scenarios this winter—a base case, a best case, and a worst case. These supply scenarios are then analyzed within the context of winter weather probabilities to determine the likelihood that particular consuming markets will experience stressed conditions as the weather turns colder. EEA assumes that an average of between 2.5 bcfd (best case) and 3.5 bcfd (worst case) of Gulf supplies will be missing from the market due to hurricane damage. This loss of supply is netted against supplies from other sources to determine an overall effect on gas supply. This will result in higher-than-normal gas commodity prices, even if the winter is relatively mild.

EEA's analysis makes an important point that should not be lost on policymakers. That is, even before the hurricanes, natural gas supply and demand were very tightly balanced and there already was some potential for supply challenges this winter. The hurricanes simply have increased the probability that both industrial and power generation customers in certain markets may experience supply disruptions.

The severity of winter weather will be a critical factor in determining how natural gas markets will balance. Industrial demand destruction, as a result of high commodity prices, will help maintain this balance to a point. Still, if the weather is colder-than-normal, the probability of gas supply curtailments becomes greater.

What do we mean by "gas curtailments?" For purposes of the EEA study, the term is defined as follows: a curtailment situation occurs when the analysis indicates that gas supply into a market will be insufficient to meet all demand even after all economic alternatives have been exhausted. As gas commodity prices move higher due to tight supply and high demand, many customers will scale back their consumption and the market will re-balance. In some limited circumstances, however, economic forces alone might not be enough to balance the market. In these cases, certain customers must be removed from service for short periods in order for the market to balance. Generally speaking, these curtailments affect industrial and power generation customers.

These curtailments would be localized. The likelihood of such curtailments would increase if winter weather is five percent or greater colder than normal. Historically, this type of weather occurs in one out of every seven winters.

Curtailments, if any, are likely to be concentrated east of the Mississippi River, with the likelihood being greatest in the Northeast. This is because the United States east-of-the-Mississippi region is far more dependent on Gulf Coast natural gas supplies than is the rest of the country, and because the Northeast (compared to other regions) has fewer natural gas supply alternatives. Therefore, New York and New England have the highest probability of gas curtailments in all the scenarios, although other states might also be affected should the winter be colder than normal. (See Appendix 2)

Delayed recovery of Gulf Coast supplies significantly increases the likelihood of curtailments as well, particularly on the East Cost. This is illustrated by the worst

case scenario in the EEA analysis and highlights the need to facilitate Gulf Coast energy infrastructure recovery as quickly as possible.

One final point about gas curtailments. If and when necessary, gas curtailments will not be a large percent of total winter natural gas load. Still, because such mandated interruptions would be concentrated within a particularly cold week or two, a significant part of the total industrial and power load within an affected market could be curtailed for that span of time.

SHORT-TERM RECOMMENDATIONS

What can be done? As previously mentioned, the short-term imperative is repairing the infrastructure as quickly as possible. That means expediting permitting and approvals for repair work. It also means the various levels of government should consider the value of granting individual companies some forbearance from legal restrictions that might frustrate their ability to coordinate assessment and repair activities. The twin hurricanes have resulted in extraordinary damage, and extraordinary measures are needed to get systems repaired on a timely basis

Also in the short-term, both the energy industry and the government must educate consumers in advance so they are prepared for higher bills and have the ability to implement strategies for conserving energy. This is important, because unlike the gasoline price that is posted at the local gas station, the consumer sees the price of natural gas after the fact when he or she receives a bill for the previous month's consumption. Many of you are already familiar with some of these measures, including weatherization of homes, regular inspections of furnaces and changing of filters, installing programmable thermostats and setting thermostat a couple of degrees cooler than normal. Funding the Low Income Heating Energy Assistance (LIHEAP) program is also critical in helping needy families cope with rising heating costs.

The EEA analysis also points to the need to review curtailment programs. The last time that natural gas supply curtailments were a major issue—during the 1970s—FERC regulated interstate pipelines played a major role in instituting curtailments. Due to the restructuring of the natural gas industry, however, interstate pipelines no longer are gas merchants and pipeline tariffs no longer address supply curtailment based on end-use priority. Such curtailments now are largely the purview of state public utility commissions, and state regulators should be reviewing their plans and preparing to implement them if necessary. This would include coordinating any plans with local electric generators who would be some of the most likely customers to be curtailed.

Wholesale natural gas customers should also be consulting with their suppliers about firm supply arrangements. This includes portfolios of storage, flowing supply, pipeline transportation and peak shaving. In the absence of such supply verification, wholesale customers—and in some cases, the retail customers served by such wholesale customers—may be in for some rude winter surprises.

LONG-TERM RECOMMENDATIONS

In the long-term, Mr. Chairman, we agree with many on this Committee that more must be done to diversify our supplies of natural gas. Hurricanes Katrina and Rita have clearly demonstrated the nation's high degree of reliance on the Gulf region to meet its energy needs. Other regions within the United States can, and should, be a part of the nation's energy supply and infrastructure development strategy. Yes, many groups have complained about the environmental risks associated with expanding offshore energy to include waters outside the western Gulf of Mexico. Still, after three significant hurricanes in two years, it is time to concede that apprehensions about the environmental consequences of offshore energy development are greatly overstated. The fact that we have not had significant environmental damage from off-shore production platforms after Ivan, Katrina and Rita must stand for something. Our national energy policy should not be premised on hypothetical problems or on assumptions based on incidents from 40 years ago.

In addition, the United States must build new liquefied natural gas import terminals to keep pace with our demand for this fuel. Most of the new terminals that recently have been approved by FERC have are proposed to be constructed in the Gulf of Mexico region. While there are good reasons why this region is attractive, such as access to an extensive pipeline network, it stands out that the Gulf has been attractive for energy infrastructure development because it offers the "path of least resistance" in terms of "Not in My Back Yard" type opposition. Perhaps the hurricanes, and the effects this winter on natural gas prices and the larger economy, will convince other regions in the United States of the importance of having a geographically diverse mix of these facilities.

For both supply and infrastructure development, a re-focus on long-term contracting is needed. When natural gas commodity prices were low due to excess supply, state public utility commissions discouraged their regulated gas LDCs from entering into long-term contracts for natural gas supply and transportation. Long-term contracts, however, are critical to financing and developing new supplies and infrastructure (pipelines, storage and LNG terminals). Long-term contracts also are an insurance policy against high prices and volatility. A joint task force representing the National Association of Regulatory Utility Commissioners (NARUC) and the Interstate Oil and Gas Compact Commission (IOGCC) recently produced a set of recommendations intended to encourage a return longer-term contracting in the natural gas industry; INGAA urges state commissions to review the NARUC/IOGCC report and to support more balanced supply and transportation contract portfolios for regulated utilities.

Finally, it is worth examining the factors that have precluded electric generators from installing dual-fuel capability when building a gas-fired power plant. Over the last decade, dual-fueled facilities—facilities that can operate on both natural gas and fuel oil—have been discouraged by emissions limits and by the difficulty in siting oil storage facilities on site. Also, the rules in some electric power markets provide such generators no assurances that the additional capital cost of such facilities can be recovered in the price received for electricity. These factors have compelled developers to build power plants totally dependent on natural gas. These same market rules have discouraged electric generators from contracting for firm natural gas transportation and storage service. Should natural gas supplies remain tight this winter, these facilities will face the choice of either paying huge fuel charges, or not running at all

CONCLUSION

Some have questioned whether the energy industry is investing enough capital into the North American market to develop supply and mitigate prices in the long-term. Mr. Chairman, while I can speak only for the interstate pipeline sector of the industry, I want to assure you that we are committed to this market long-term and are putting our capital into this market as a result. An INGAA Foundation report released last year suggested that the industry would need to invest approximately $61 billion between now and 2020 in order to keep pace with demand. This is for natural gas infrastructure—pipelines, storage and LNG terminals—in the United States and Canada. As an industry we are moving forward with that investment, and I am including a list of the proposed projects announced in 2005 as an example. (See Appendix 3)

Before I conclude, I want to suggest some public policy responses that should not be undertaken. During a crisis, it is easy to overreact in ways that are ultimately counterproductive. The first suggestion I would like to leave you with is this: please do not try to regulate commodity prices. This country actually did regulate natural gas prices for many years, resulting in artificial supply shortages and a misallocation of resources. Similarly, the government should not attempt to pick winners and losers in allocating scarce supplies among end-users. Some have debated limiting the use of natural gas for electric generation. This too was tried in the past and failed miserably. While it can be painful in the short run, the market really does the best job of efficiently allocating scare resources and sending the right price signals that will solve supply problems.

Mr. Chairman and Members of the Subcommittee, I thank you once again for the opportunity to testify, and I will be happy to answer your questions.

Mr. BURGESS. Thank you, Mr. Wright. Mr. Castelli.

STATEMENT OF BRIAN T. CASTELLI

Mr. CASTELLI. Thank you, Mr. Burgess. Thank you for inviting us here to testify today. My name is Brian Castelli. I serve as the Executive Vice President and Chief Operating Officer of the Alliance to Save Energy.

We are a bipartisan, nonprofit coalition of more than 90 businesses, government, environmental, and consumer leaders. The Alliance's mission is to promote energy efficiency worldwide to achieve a healthier economy, a cleaner environment, and a greater energy security. Representative Ralph Hall and Ed Markey of your committee are both on our board as Vice Chairmen.

I respectfully request that a full list of the Alliance's board of directors, and its associate members, be included in the record as part of this testimony.

Mr. BURGESS. Without objection.

Mr. CASTELLI. While some of you may find it odd to see an energy efficiency organization represented on a panel with supply side trade associations, rather than with energy consumers, the key message I want to leave with you today is that energy efficiency is our Nation's greatest energy resource.

Past energy efficiency measures produced more energy than any other single resource to meeting our energy needs of this Nation, including oil, natural gas, coal, or nuclear power. Energy efficiency is the quickest, cheapest, and cleanest way to balance energy supply and demand. Energy efficiency helps meet our energy needs without hurting the environment. Furthermore, it is not imported, it is invulnerable to supply disruptions, and generally costs much less than adding energy supplies.

The need to increase our energy efficiency resource has never been more clear. A typical Midwest or Northeast household may spend over $1,000 more for gasoline next year, and $700 more for winter heating fuels than it did a couple of years ago. I have three requests of you today to help energy efficiency address shortages of natural gas and heating oil.

First, immediate steps are needed to address winter heating demand and prices, and to help in rebuilding in the wake of the hurricanes. The fastest way to address an energy supply shortage, and probably the only way to have a significant impact on prices this winter, is consumer education. When a series of rolling blackouts and electricity price spikes hit California in 2000 and 2001, the State undertook a massive outreach campaign that reduced peak summer demand by 10 percent in less than a year, thus helping to avoid future shortages. The Energy Bill authorizes a similar national program. We need at least $10 million in immediate funding for outreach and education this winter, as well as additional funding for the Energy Star program.

In the wakes of Hurricane Katrina and Rita, hundreds of thousands of homes will be rebuilt with Federal aid. The most reasonable course of action is to build these homes so that they are extremely energy efficient. They should at least be required to earn the Energy Star label. If that course of action is chosen, the aid recipients will not have to turn around and ask for more help to pay high energy bills, and those houses then become part of the energy solution, not part of the problem. In addition, more Federal assistance should be provided to the Gulf States to update their building energy codes, and to train builders and inspectors, so that all the new housing meets minimum standards.

Second, we need to work on the Energy Bill that was enacted in August. That bill is really an important to-do list, rather than a completed product. The Energy Bill included important tax incentives for highly energy efficient new buildings, vehicles, and equipment. However, to make these incentives effective, we need the implementing rules out as soon as possible. We need to move up the effective dates, and we need to extend the incentives beyond the 2 years which most are scheduled to last.

The Energy Bill included 15 important new appliance efficiency standards, though we remain very concerned, since DOE is years behind in setting about 20 standards required under previous laws. This program requires effective and vigilant oversight, as well as increased funding. Other programs in the Energy Bill that need funding to have a major impact on natural gas and oil needs are detailed in the written testimony I have provided to this committee.

Let me quickly note here, though, for the record, that existing Federal programs also have a tremendous potential for cost effective energy savings. Yet, the 2006 budget request for energy efficiency is down 14 percent just since 2002. For these policies and programs to have an impact, they need implementation, oversight, and funding.

Third, although I am hesitant to broach this subject, we need a new Energy Bill. In the Energy Policy Act of 2005, there is a gaping hole where transportation policy should be. The Alliance estimates that the Energy Bill will save virtually no oil. We cannot afford to wait 13 years for another Energy Bill to fill this hole. The economic, environmental, and national security costs of our insatiable oil demand are too high.

The Alliance recommends consideration of two policies that could be as effective and as straightforward increase in CAFE standards, and we hope will be much more politically palatable. First, is to close a number of the loopholes that weaken existing CAFE standards. Several reforms are needed to bring actual fuel efficiency closer to current standards. One, base CAFE on realistic testing of fuel economy. Two, treat SUVs and minivans like the passenger vehicles they are. Three, include heavier SUVs under CAFE. And four, treat dual fuel vehicles based on actual alternative fuel use.

Second, a new, innovative approach to efficiency of cars and light trucks could be a national feebate system. Such a system would impose a national security surcharge, or fee, on inefficient vehicles, and then use those funds collected to provide a rebate to fuel efficient vehicles. There would be cost to the Federal Government, and it would not be a net tax increase. A feebate would create an incentive for automakers to use fuel efficient technologies in the vehicles they produce, and create an incentive for consumers to buy more efficient vehicles.

A number of policies to save natural gas also should be reconsidered in light of the sharply higher natural gas prices. Energy efficiency is our largest energy resource, and it should be our first energy priority. We hope you will both work to ensure the fine energy provisions of the last Energy Bill are fully funded and implemented, and use the increasing pressure for action to fill the gaping hole in that bill.

I would be pleased to answer any questions.

[The prepared statement of Brian T. Castelli follows:]

PREPARED STATEMENT OF BRIAN T. CASTELLI, EXECUTIVE VICE PRESIDENT AND COO, ALLIANCE TO SAVE ENERGY

INTRODUCTION

My name is Brian T. Castelli and I serve as the Executive Vice President and Chief Operating Officer of the Alliance to Save Energy, a bipartisan, nonprofit coali-

tion of more than 90 business, government, environmental and consumer leaders. The Alliance's mission is to promote energy efficiency worldwide to achieve a healthier economy, a cleaner environment, and greater energy security. The Alliance, founded in 1977 by Senators Charles Percy and Hubert Humphrey, currently enjoys the leadership of Senator Byron Dorgan as Chairman; Washington Gas Chairman and CEO James DeGraffenreidt, Jr. as Co-Chairman; and Representatives Ralph Hall, Zach Wamp and Ed Markey and Senators Bingaman, Collins and Jeffords as its Vice-Chairs. Attached are a list of the Alliance's Board of Directors and its Associate members, which I respectfully request be included in the record as part of this testimony.

THE TIME IS NOW FOR ENERGY EFFICIENCY MEASURES

The startling and immediate effects of Hurricanes Katrina and Rita on energy prices have dramatically highlighted our need to bring energy supplies and energy demand into balance. In the immediate wake of Katrina, gasoline prices nationwide shot up over $3 a gallon for the first time. While they have since dropped slightly, they are still almost double prices at the beginning of 2004. Heating oil prices have risen similarly. Natural gas prices have gone up even more. Spot natural gas prices doubled between 2002 and the beginning of this year, doubled again by the end of August, and are still rising to record highs.

These prices are causing real hardship for the American people. At current gasoline prices, a typical two-car household would spend over $1,000 more for gasoline than it did in 2004. And with winter approaching, the squeeze on American wallets will only increase. The U.S. Energy Information Administration expects natural gas heating costs for a typical Midwestern household to rise $500 (61 percent) this winter compared to last year and $700 (107 percent) compared to the 1999-2004 average. Northeastern heating oil costs are expected to rise $400 (31 percent) compared to last year, and $700 (80 percent) compared to the 1999-2004 average. Some households already living on a tight budget will not be able to pay these costs and still have adequate funds to pay for food and rent. At the same time, natural gas prices are forcing chemical and fertilizer companies to shut down plants in the United States and move those jobs overseas.

While the hurricanes have highlighted the problem, the fundamental causes are not going away so quickly. Energy prices are soaring because America's gluttonous energy consumption is outstripping supply. The United States has only 2 percent of the world's known oil reserves, and 5 percent of the world's people, but uses 25 percent of the world's oil. And now the same pattern is being repeated with natural gas.

Although measures to increase energy supplies are necessary, we must not fool ourselves into believing that we can produce our way out of the problem. U.S. production of oil and of natural gas is lower than it was in 1970, while our energy consumption has steadily risen. Even the National Petroleum Council has concluded that natural gas supplies from traditional North American production will not be able to meet projected demand, and that "greater energy efficiency and conservation are vital near-term and long-term mechanisms for moderating price levels and reducing volatility." It is time to turn serious attention to the demand side of the equation, to reducing our energy use.

ENERGY EFFICIENCY IS AMERICA'S GREATEST ENERGY RESOURCE

Energy efficiency is the nation's greatest energy resource—efficiency now contributes more than any other single energy resource to meeting our nation's energy needs, including oil, natural gas, coal, or nuclear power. The Alliance to Save Energy estimates that without the energy efficiency gains since 1973 we would now be using at least 39 quadrillion Btu more energy each year, or 40% of our actual energy use. Much of these savings resulted from federal energy policies and programs like appliance and motor vehicle standards, research and development, and the Energy Star program.

Energy efficiency is the quickest, cheapest, and cleanest way not only to tackle our current energy cost issues, but also to meet the anticipated future growth in energy demand in the U.S. The enormous contribution of energy efficiency to meeting our energy needs is achieved with little or no negative impact on our wilderness areas, our air quality, or the global climate. Energy efficiency enhances our national and energy security by lessening requirements for foreign energy sources. Further, energy efficiency is invulnerable to supply disruptions; is rarely subject to siting disputes; is available in all areas in large or small quantities; and generally costs much less than it would to buy additional energy.

Energy-efficiency and conservation measures have a proven track record of balancing demand and supply much faster than drilling, constructing power plants, or new import facilities. When a series of rolling blackouts and electricity price spikes hit California in 2000-2001, the state undertook a massive electricity efficiency outreach campaign that reduced peak summer power demand by 10 percent and reduced overall electricity use by 7 percent in less than a year, thus helping avoid further shortages. The cost was just 3 cents per kWh. The American Council for an Energy-Efficient Economy estimates that a small decrease in natural gas demand (2-4 percent) could result in a decrease in wholesale natural gas prices of as much as 25 percent over the next few years, with vast savings for consumers and energy-intensive industries.

THE TIME IS NOW TO MAKE THE ENERGY BILL REAL

Many of the policies needed to increase use of energy efficiency as a major energy resource are enacted, and many of the programs are in place. But these policies must be carried out, and the programs must be funded, or they will do no good. In particular, the recently enacted energy bill (the Energy Policy Act of 2005, P.L. 109-58) is really an important "to-do list," rather than a completed product. The Alliance to Save Energy estimates that the new energy law could save 5 percent of all U.S. energy use by 2020, and a higher percentage of natural gas—if it is fully implemented and funded. If the law is widely ignored, the savings will be a fraction of that amount.

Existing federal programs also have a tremendous potential for energy savings. A 2001 National Research Council report found that every dollar invested in 17 Department of Energy (DOE) energy efficiency research and development (R&D) programs returned nearly $20 to the U.S. economy in the form of new products, new jobs, and energy cost savings to American homes and businesses. Environmental benefits were estimated to be of a similar magnitude. DOE itself estimates that its efficiency and renewables programs will result in major savings, including $134 billion in energy bills, 157 GW of avoided new conventional power plants, 1.9 quads of natural gas, and 213 MMTC of greenhouse gas emissions in 2025. Yet the fiscal year 2006 budget request for energy efficiency is down 14 percent after inflation just since 2002, and core research and development funding (excluding grants and the fuel cell FreedomCar program) is down 31 percent in those four years.

Following are some key implementation and funding needs for programs that have the potential to save large quantities of natural gas and, in some cases, oil. Note that one of the most effective ways of reducing natural gas consumption is to reduce electric demand, as most peaking power plants and most new power plants are fueled by natural gas. Similarly, any reduction in the consumption of oil products (gasoline, jet fuel, etc) helps reduce the stress on heating oil supplies.

Consumer education: As was demonstrated in California, the fastest way to address an energy supply shortage, and probably the only way to have a significant impact on prices this winter, is consumer education and associated incentive programs. In particular, there is an immediate need for funding for the energy efficiency public information campaign authorized in the energy bill section 134. This important program was authorized by the Congress at $90 million per year, from fiscal year 2006 through fiscal year 2010. It is intended to provide consumers with energy saving tips like maintaining and repairing heating and cooling ducts and equipment, insulating and weatherizing homes and buildings, properly maintaining tires and cars, and purchasing energy-efficient products and equipment. Importantly, the program could ensure that consumers and businesses are made aware of the important energy-efficiency tax incentives included in the energy bill (see below). It also could be coordinated with, and could support, other programs, including the appliance rebate program and state demand-side management programs. Coupling such efforts would optimize use of federal funding and ensure the greatest impact in terms of changing consumer behavior.

Additional funding is equally important for the Energy Star program. Energy Star is a successful voluntary deployment program at EPA and DOE that has made it easy for consumers to find and buy many energy-efficient products. Energy Star is the best demonstration of how effective government consumer education can be. For every federal dollar spent, Energy Star produces average energy bill savings of $75 and sparks $15 in investment of new technology. Last year alone, Americans, with the help of Energy Star, prevented 30 million metric tons of greenhouse gas emissions—equivalent to the annual emissions from 20 million vehicles, and saved about $10 billion on their utility bills.

Tax incentives: The energy bill included important tax incentives for highly energy-efficient new homes, improvements to existing homes, commercial buildings,

heating and cooling equipment, appliances, and hybrid vehicles. These incentives for consumers and businesses have the potential to help transform markets to embrace energy-efficient technologies and thus to help the best buildings, vehicles, and equipment become mainstream.

However, there are several immediate needs to make these incentives effective. First, IRS, with the assistance of DOE, must get the implementing rules out as soon as possible. Many important details and interpretations were left to the agencies. We also hope these rules will make determining eligibility and applying for these incentives as simple as possible. Without clear rules and procedures, only "free-riders"—those who were going to buy the products anyway—likely will take a chance on the incentives, and the opportunity for meaningful and sustainable market transformation will be lost.

Second, we need to move up the effective date of the incentives from January 1, 2006. Under current law consumers that want to put in a better furnace or new windows need to wait until next year, well into the winter heating season, if they want to take advantage of the incentives. We already have begun consumer education programs aimed at winter heating; however, we are reluctant to inform consumers of the "soon-to-be available" incentives, as purchases that are important to managing energy use and costs this winter may be delayed until the current effective date of the incentives. This creates a conundrum, as the incentives are an important tool to change consumer behavior, but represent a potential barrier to immediate action, which is what we are seeking to encourage.

Third, we need to extend the incentives beyond the two years most are scheduled to last. It is almost impossible to plan and build a commercial building in two years, so large segments of the market are effectively excluded from the incentive by the short time horizon. For the best-selling hybrid vehicles, the tax incentives may have an even shorter horizon, as the law includes a per-manufacturer phase-out triggered by the sale of 60,000 eligible vehicles. The incentives were mostly planned to last four to five years, and their effectiveness will be multiplied if the eligibility is extended and the manufacturer vehicle volume cap is removed or increased.

Appliance standards: National appliance and equipment efficiency standards provide an efficiency baseline that American consumers can trust, provide uniform national rules for manufacturers, and slash wasteful energy consumption with one broad and effective stroke. The federal appliance standards program has been among the most effective of all efficiency measures. The program already has saved an estimated 2.5 percent of all U.S. electricity use and saved consumers billions of dollars in energy bills.

The energy bill includes a package of fifteen new energy-efficiency standards that were negotiated between energy-efficiency advocates, product manufacturers, and states. DOE is required to set standards for additional products, as well as to update many of the standards set in law.

The Alliance is pleased that DOE recently codified the legislated standards in rules. However, we remain very concerned that DOE is years behind the statutory deadline for setting about 20 standards required under previous laws. For example, an updated standard for residential furnaces and boilers was due in 1994. This is one of DOE's highest priorities as it is one of the most effective ways to save natural gas. The most recent delay, announced last December, means that DOE will not set this standard until late 2007 at the earliest, and that the standards will not go into effect until at least 2010. According to the American Council for an Energy-Efficient Economy, each year of delay in just three of these national standards—residential furnaces and boilers, distribution transformers, and commercial air conditioners and heat pumps—has locked in $7.1 billion in higher energy costs for consumers and businesses.

Largely due to the delays in the DOE program, a number of states are setting state standards on products not regulated by the federal government in order to reduce the cost, reduce the environmental impact, and increase the reliability of their energy systems. In addition, the work on state standards has been a key incentive to reaching agreements on federal standards.

The new energy bill adds additional standards to DOE's list of responsibilities. Even the legislated standards require test procedures that were not included in DOE's recent rulemaking. This program requires effective and vigilant oversight. In addition, as establishing standards requires a rigorous, time consuming, and costly rulemaking process, increased funding to the DOE standards program is critical to ensuring that the enormous potential of this program is achieved.

We are disappointed that this committee recently amended the budget reconciliation bill to preempt all state standards on digital television adaptors, opting instead for very weak efficiency criteria on those DTAs subsidized by the federal government. This action, which preempts effective state DTA standards that already

are in place or are under consideration by states, would establish a terrible precedent as well as increasing energy use and costing consumers millions of dollars. I hope the committee will reconsider its support.

Building codes assistance: While residential and commercial building codes are implemented at the state level, the states rely on DOE for technical specifications, training, and implementation assistance. Full adoption of and compliance with up-to-date building codes could save almost as much energy as appliance standards. The energy bill includes an authorization of $25 million per year for building codes assistance to states. Part of the funding increase would be for a new program to encourage states to adopt the latest codes and then assist them in achieving high rates of compliance. Such assistance is especially critical in the Gulf states to ensure that the massive rebuilding in the wake of the hurricanes is performed at least to minimally acceptable efficiency standards. We urge funding for this program.

In addition, we are concerned that DOE is significantly behind in providing information and guidance to the states on both residential and commercial building energy codes. DOE is required within one year of a residential or commercial model energy code update to make a determination on whether that update save energy; however, DOE still has not made the required determinations on the 2003 residential IECC, the 2004 Supplement, the newly adopted 2006 IECC, the 2001 ASHRAE commercial standard, or the 2004 ASHRAE standard. DOE must apply the necessary human and financial resources to ensure timely determinations on the codes.

State and utility energy-efficiency programs: Over the last two decades, states worked with regulated utilities using "Integrated Resource Planning" and demand-side management programs to avoid the need for about 100 300-Megawatt (MW) power plants. However, utility spending on public benefit programs nationwide has been cut significantly since the mid-1990's. In recent years some states have adopted innovative policies to rebuild these programs, including public benefits funds, energy efficiency performance standards, incentive rate structures, and priority in infrastructure planning. But the benefits of these programs have not spread to many other states.

The energy bill requires a study by DOE along with the National Association of Regulatory Utility Commissioners (NARUC) and the National Association of State Energy Officials (NASEO) of "best practices" among the states in demand side management (DSM) and other energy efficiency resource programs (Sec. 139). In addition, it authorizes $5 million per year for an innovative new pilot program to provide funding assistance to several states (3 to 7) to assist in the design and implementation of energy efficiency resource programs designed to lower electricity and natural gas demand by 0.75% a year. Again, funding is needed for this program.

Federal energy management: America's largest, single energy consumer is the federal government. According to the 1998 Alliance to Save Energy report, *Leading by Example: Improving Energy Productivity in Federal Government Facilities*, the federal government wastes $1 billion in taxpayer dollars each year on its buildings that use energy inefficiently.

DOE's Federal Energy Management Program (FEMP) is a rare example of a program that actually saves the government money. At an average cost of $20 million per year, FEMP has helped cut federal building energy waste by nearly 21 percent from 1985-1999—a reduction that now saves federal taxpayers roughly $1 billion each year in reduced energy costs. However, much more can be done, and the added targets, standards, and authorities in the energy bill will help.

We are especially pleased that the energy bill extended authority for Energy Savings Performance Contracts (ESPCs) through FY 2016. This unique program allows federal agencies to contract with the private sector to upgrade the efficiency of federal buildings. The contractors put up the money for the improvements and are paid back out of the utility bill savings. By law the payments can be no more than the savings. The agency saves energy at no additional cost, the companies build their business and create jobs, and the government saves money and pollution. Unfortunately, the ESPC program is still trying to get back on its feet after its authorization lapsed for a year in 2004.

The advice and assistance of FEMP is critical to the success of this program. FEMP support also is necessary for successful implementation of other federal energy management provisions in the energy bill—to provide guidance on building metering ("You can't manage what you can't measure"), help agencies comply with the product procurement rules, and help agencies meet the overall energy reduction targets. Without FEMP's support, the federal energy management title probably is not worth the paper it is printed on. More funding is needed to ramp up ESPC use and to undertake these other activities.

THE TIME IS NOW TO MOVE BEYOND THE ENERGY BILL

Although the energy bill includes a number of programs with the potential to save natural gas, of course many other effective policies were not included. And even though the major authors of the bill all cited high gasoline prices as a key rationale for the bill, there is a gaping hole where transportation policies should be. The Alliance estimates that the energy bill will save virtually no oil—small savings from the hybrid tax credit and other policies will be roughly canceled out by the extension of the fuel economy standard loophole for "dual-fueled" vehicles. This hole was noted by virtually every major editorial page in the country, and even noted by the authors of the bill as gasoline prices jumped even higher in the wake of Hurricane Katrina.

We cannot afford to wait thirteen years for another energy bill to fill in this hole, or another thirty years for an effective transportation policy. The economic, environmental, and national security costs of our insatiable oil demand are too high. While the Alliance recognizes that politically this is one of the most difficult areas to address, we must act now to bring our oil use under control.

ADDITIONAL OPPORTUNITIES FOR OIL SAVINGS

The Alliance recommends consideration of two policies that could be as effective as a straightforward increase in Corporate Average Fuel Economy (CAFE) standards, and we hope will be more politically palatable:

Close CAFE loopholes: CAFE standards passed by Congress in 1975 led to a 70 percent increase in America's gas mileage over the subsequent decade. However, CAFE standards have remained static for almost two decades due to political gridlock. The current standards of 27.5 miles per gallon for automobiles and 21 mpg for light trucks are roughly the same as in the mid-1980s. Furthermore, real on-road fuel economies are much lower than those numbers would suggest—the average fuel economy of cars and light trucks is only around 20 mpg. And as the sales of SUVs have exploded, average vehicle fuel economy has actually declined since 1988. Even if the political will to raise CAFE standard numbers does not exist, there are several reforms that could close major loopholes and thereby bring actual fuel economies closer to standards already required under existing law:

- *"Truth-in-testing" loophole:* By law, CAFE is based on the fuel economy tests that were used for model year 1975. EPA recognized that those tests are inaccurate, and in 1984 started reducing reported fuel economies by about 15%. Because driving patterns have changed, real gas mileage is likely 20-25% below CAFE numbers. Testing procedures for CAFE need to be updated to reflect increased congestion, higher speed limits, use of air conditioning, more powerful vehicles, and other changes.
- *"SUV" loophole:* When light trucks were given a lower standard, pickup trucks and vans were used primarily for businesses and farming, and represented only about 20% of vehicles sold. Today, about half of all light-duty vehicles sold in America qualify as "light trucks" for CAFE. Most of those are SUVs and minivans, most are used as passenger or family vehicles, and they average roughly 40% more fuel for each mile driven than the average passenger car. SUVs and minivans should be reclassified as what they are: passenger vehicles.
- *"Hummer" loophole:* CAFE standards only apply to vehicles under 8,500 pounds (gross vehicle weight). In fact, EPA does not even test or report the fuel economy of larger vehicles, yet their mileage is generally much lower. Manufacturers are selling more and more of these super-large SUVs and pickup trucks, such as GM Hummers and Ford Excursions. CAFE standards should cover these heavier vehicles.
- *"Dual fuel" loophole:* Automakers that produce vehicles that can run either on gasoline or on an alternative fuel, usually ethanol, can claim CAFE credit as if the vehicles ran on the alternative fuel one-half of the time. Unfortunately, dual fueled vehicles today run on gasoline 99% of the time. With only a few hundred ethanol fueling stations, the infrastructure does not exist to supply these vehicles with ethanol. This credit has allowed manufacturers to put more gas guzzlers on the road, and thus increases gasoline use. It should be modified to require actual use of the alternative fuel.
- *Vehicle fuel use "feebate":* A new, innovative approach to efficiency of cars and light trucks is a national "feebate" system. Such a system would impose a national security surcharge, or "fee" on inefficient vehicles, and then use the funds collected to provide a "rebate" to fuel efficient vehicles.

How would a national feebate work? In one approach, a fee or rebate would apply to manufacturers of all new light-duty passenger vehicles—including SUVs and minivans. The amount would be based on 25 cents per gallon of gasoline estimated

to be used over the lifetime of the vehicle. The fee or rebate would then be determined relative to a mid-point fuel economy. This dividing line between fees and rebates would be set each year such that the total fees would just pay for all the rebates, so there would be no net revenue or cost to the government.

A feebate would create an incentive for manufacturers to use fuel-efficient technologies in the vehicles they produce, and hence should increase the availability of efficient vehicles, as well as creating an incentive for consumers to purchase more efficient vehicles. As fuel economies increased, the mid-point fuel economy would be ratcheted up, creating an incentive for continual improvement, but never out of line with the existing market.

ADDITIONAL OPPORTUNITIES FOR NATURAL GAS SAVINGS

As I mentioned, there also are a number of other policies to save natural gas that should be reconsidered in light of sharply higher natural gas prices. The Alliance recommends consideration of two additional sets of policies.

Federal building codes: Although the energy bill requires new, stricter standards for energy efficiency in buildings owned by the federal government, it passed over several opportunities to improve standards for buildings regulated by or paid for by the federal government. These standards could help transform the housing market and make the federal government into a market leader rather than a market laggard. They include:

- *Manufactured housing:* Even before the hurricanes, "mobile homes" accounted for 131,000 buildings last year, about one in twelve new homes. Because they are manufactured in central factories, they are regulated not by the states but by the federal Department of Housing and Urban Development (HUD). Like many states, HUD is years behind in adopting up-to-date building codes—their standard has not been modified since 1996. These buildings are used like site-built homes. There is no reason they should not meet the same current model energy code. Setting this floor would reduce the energy bills of mobile home owners, many of whom are low income and many of whom rely on federal LIHEAP assistance, by 9 percent.
- *Federally subsidized housing:* New public housing and new housing with federally assisted mortgages also must meet a federal standard, currently the 1992 Model Energy Code as set in the Energy Policy Act of 1992. This standard should be updated to the most recent model codes. Rebuilding with federal subsidies in the wake of the recent hurricanes and other natural disasters also should be subject to a federal standard to ensure recipients receive high-quality homes and that neither the victims nor the federal government pay for unnecessarily high energy bills. To ensure cost-effective energy savings based on criteria with which local builders and manufacturers are already familiar, both manufactured and site-built homes built with federal disaster assistance should qualify for the Energy Star label.
- *Privatized military housing:* About 37,000 units of housing are being built each year with federal assistance in order to move service members out of the barracks and into newer private housing. The federal government indirectly pays the energy bills through an energy allowance. We should require that this housing too qualify for the Energy Star label.

State and utility energy-efficiency programs: As described above, a number of states are implementing innovating energy-efficiency policies and funding mechanisms. Several states have recently passed an energy efficiency resource standard (EERS), requiring electricity utilities to meet customer needs in part through demand-side management (energy efficiency and load reduction) programs rather than by constructing new facilities and purchasing energy. An EERS sets a specific target for demand or use reduction due to DSM programs, and requires monitoring and verification of the program savings. The programs have generally been found to save electricity much more cheaply than it could be generated and delivered. Several of the states are now implementing an EERS as part of or alongside renewable electricity generation standards.

The Senate bill included a requirement that state PUCs consider this and other energy efficiency policies. This directive also was included in the Energy Efficiency Cornerstone Act (HR 3263), sponsored by the Alliance Vice-Chairs in the House, Reps. Wamp, Hall, and Markey, and by a number of other members including Reps. Allen, Sherrod Brown, Gonzalez, Green, Murphy, and Heather Wilson. This provision could be an effective tool to save natural gas around the country. We urge its renewed consideration.

CONCLUSION

Energy efficiency is our largest energy resource, and it should be our first energy priority. American consumers need a balanced energy policy that takes aggressive steps to save energy wherever and whenever it is cost-effective and feasible.

Many of the policy options identified by the Alliance, such as standards, tax incentives, and federal energy management, have been proven effective on the national level. Federal programs that support research, development, and deployment of energy-efficient technologies also have proven effective and deserve greater funding. Other policies, such as those targeted at the transportation sector, are sorely needed to ensure a secure and sustainable energy future in the U.S..

The Alliance to Save Energy applauds the fact that this committee is willing to wade back into the rough waters of energy policy. With respect to energy efficiency provisions, which must be a cornerstone of any such energy policy, we hope you will both work to ensure the fine provisions of the last energy bill are fully funded and implemented, and use the increasing pressure for action to fill the gaping holes in that bill. Additional administrative and legislative action to save natural gas and oil is the only way to assure that we give the American people immediate, cost-effective and sustainable assistance in addressing spiraling energy costs and an ever-less secure energy future.

Mr. BURGESS. Thank you, Mr. Castelli, for your testimony. With the 4 hours that we have spent on energy efficiency for ceiling fans here in this committee earlier in the year, I don't look forward to another Energy Bill, but you know what, you may get your wish.

Mr. Davidson, I asked a question of one of the members of the other panel earlier, about the over, you know the Bush Administration drill anywhere, any time, on anything. But in the Clinton Administration, they had over 2,400 drilling permits in the Rocky Mountains. In the Bush Administration, under 1,500. So at this point, when supply is more important than ever, can you kind of help us understand why that would be?

Mr. DAVIDSON. I think clearly, drilling has been increasing in the Rocky Mountains, and it is an area that has demonstrated great resources for our country. And so clearly, the rig activity is at very high levels, but we continue to build a backlog of permit requests. And as I noted in the testimony, we now have some 3,000 permits in backlog.

Clearly, at today's prices, the industry sees tremendous opportunity, particularly in some of these new areas that have tighter gas, but a lot of gas potential, and we have a great desire to continue to pursue the drilling programs. They have made progress. There has definitely been some progress in trying to speed up permit processing. But I think it, in the case of the Federal agencies, in some instances, they have needed additional funding and resources to be able to handle the volume of activity.

Many of these are short duration wells, so they end up being very high volume. We are in the midst now of drilling shallow wells that sometimes will only take a week to drill, and so it results in a high volume of activity.

Mr. BURGESS. Very well. You described the industry as being price takers. I always thought that was doctors and farmers, but Congress, I would expect, would have a difficult time seeing a powerful industry like yours as a price taker. Can you expound on that, and explain the nature of the natural gas or oil marketplace, so we can understand that statement a little bit better?

Mr. DAVIDSON. Well, I think it is, when it gets to oil, it is perhaps even simpler, because oil is a global market that we supply and demand, and it is actually a very diverse industry. And cer-

tainly, when we look at it from the independent sector, which is basically companies that explore for, find, and produce, we basically just produce in the pooling points. And as the market sees supply and demand at those points, and prices are established through supply and demand, we basically just sell into that market.

I would also add that the financial markets do play an important part, particularly with the smaller companies, such as what I represent, because in our case, where we have perhaps not as strong a balance sheet as others, and we invest a very high percentage in many years, in fact, in the most recent full year, 2004, over 150 percent of the E&Ps cash-flows were reinvested into the business. We have to go into the futures market in many instances and hedge future prices, so that we can eliminate some of the volatility, because we cannot simply afford to see the ups and downs of prices, so in that case, we are very dependent on what is established in those markets, and we do not have the ability to affect that. Our job is to find and produce natural gas and oil as efficiently as effectively as we can.

Mr. BURGESS. We have heard a lot on this committee about how pernicious the high profits are in the energy industry, and yet, at the same time, it seems to me with all the discussion of what is shut in in the Gulf of Mexico, you are going to have to make substantial capital outlays in the very near future. Can we expect that type of investment from the energy industry? Can we expect investment in siting refineries in this country, as we tried to encourage with Energy Bill II?

Mr. DAVIDSON. Well, I think I can best speak for the exploration and production side of the business. I really can't speak for the downstream refining, since I don't represent integrated companies. But from the exploration and production side, the independents, we have traditionally been major drillers in this country, and again, investing a substantial or more than all of our cash-flow back into the business. I can speak clearly for my own company, where we carry a substantial debt. We invest in a capital program that is more than our earnings, and we are building for the future.

And so I am very confident, with the markets that we are in, that certainly, my company sees great incentive to make future investments in new areas, as well as the existing areas that require repair from the hurricanes.

Mr. BURGESS. Very well. I will recognize the gentleman from Virginia.

Mr. BOUCHER. Well, thank you very much, Mr. Chairman. Mr. Horvath, I have several questions for you. First, I was pleased to hear you indicate that you are a supporter of the Low Income Home Energy Assistance Program. You didn't say in your oral testimony very much more than that. Do you support funding for that at the full authorization level, which is $5.1 billion?

Mr. HORVATH. Yes, we do, and we also support the DOE's weatherization program, which is the other side of LIHEAP, so we don't have to use LIHEAP quite so much in the future.

Mr. BOUCHER. Do you know how much that program is funded at, the one at DOE?

Mr. HORVATH. I am sorry. I don't know the current level.

Mr. BOUCHER. Okay. Are there others on the panel who would like to comment with regard to LIHEAP? I believe, Mr. Davidson, you had indicated your company's support for it.

Mr. DAVIDSON. Yes. The organizations I represent supported the full funding of LIHEAP.

Mr. BOUCHER. At $5.1 billion?

Mr. DAVIDSON. Full funding, yes.

Mr. BOUCHER. Okay. Mr. Wright, would you care to comment?

Mr. WRIGHT. We are, as well, supportive, but we have not addressed as an association just yet at what funding level. We would probably defer to others in that debate.

Mr. BOUCHER. Okay. That is fine. Mr. Castelli.

Mr. CASTELLI. Yes. We supported the $5.1 billion level for LIHEAP, and we have also supported a doubling of the weatherization program, which is also very critical.

Mr. BOUCHER. Okay. Do you know the level of funding for weatherization?

Mr. CASTELLI. I believe the current level of funding is around $220 million a year.

Mr. BOUCHER. It is a far smaller program.

Mr. CASTELLI. Far smaller program, but it has much longer term effects.

Mr. BOUCHER. Right. Okay. Thank you. I only have one other question, and I will address this initially to Mr. Horvath, and Mr. Wright, you may also want to comment on this.

I understand that while the projections for home heating costs for this winter, for people who heat with gas are approaching a 50-percent increase, 48 percent, I think, is the exact number, and for people who heat with oil, something on the order of a 32-percent increase is expected. But for people who heat with electricity, the increase is really expected to be only in the single digits. In fact, 4-percent increase over the previous year comes to mind.

But I am wondering if that is going to be the situation for all people who heat with electricity. And the reason I ask the question is this. I have been told that depending upon how the utility that serves them acquires natural gas, assuming the utility is fueled with natural gas, that there could be a dramatic difference in end user cost, the cost to the consumer, based upon that gas acquisition charge. I have heard testimony from several of you that you will have adequate gas supplies to accommodate the needs of those who have firm contracts. The non-firm contracts, I gather, will be a different situation. Perhaps you will have adequate supplies when needed. Perhaps, I think, Mr. Wright, you made some reference to having to reallocate deliveries schedules, or something to that effect, and I am wondering what the situation might be with regard to those non-firm contracts.

So several questions. First of all, do you know what percent of the total gas demand at this time is non-firm? Second, are you going to have adequate supplies this winter to serve all of the non-firm customers? Third, do you anticipate any disruption of those supplies, based on scheduling or other factors? And then, I will come back to where I started, what possible effect would there be, in terms of price for electricity purchase by the consumer, particularly the one who heats with electricity, depending upon whether

or not the utility that supplies him has firm or non-firm contracts for gas delivery? And if you could translate that into a projected price for the guy who is served by a utility that has non-firm contracts, that would be very helpful.

So there are a number of questions there. Mr. Horvath, do you want to begin with that?

Mr. HORVATH. I will start. I don't believe anybody knows how much non-firm gas there is. There is no real way of recording that, because there are so many gas customers. I will defer to Mr. Wright, who may have a little more information on that, through a recent study that they have done.

On the adequate supplies for non-firm, I think I did address that, and we would concur with Mr. Wright and INGA that that is problematic for this winter. We are geared toward a firm customer base, in terms of long-term infrastructure, because that is what it takes, long-term contracts, and for those who choose to go interruptible, they pay less for that, and they get less service for that.

Mr. BOUCHER. So there is some doubt as to whether there will be an adequate amount of gas for the non-firm customer, is that right?

Mr. HORVATH. There are interruptions every winter for those who have not paid for firm delivery, and this winter should be no different. Some would say it might be a little worse. We are saying we will get through it for the firm contracts. The interruptibles will be interrupted to some extent, and we tend to agree with INGA that the Northeast is probably the most problematic.

Mr. BOUCHER. While we are on this point, let me ask you one other question. I am told that a number of merchant plants operate on a spot market purchase procedure, and really choose not to have firm contracts for gas delivery. Is that generally right?

Mr. HORVATH. Well, it is true that some do. I don't know the percent, but some do operate on a spot basis. That is correct.

Mr. BOUCHER. And to the extent that electric utilities, then, are acquiring their generation from these merchant power plants, they could be at risk, in terms of the price to them.

Mr. HORVATH. They could be, and that gets to your last question, which was the effect on electricity. Nationally, about less than 20 percent of electricity is generated by natural gas. That is why the increase for electricity will be lower to those who heat with electricity than for natural gas or oil.

Mr. BOUCHER. But for an electric utility that happens to be primarily gas-fired, and depends on merchant generation to acquire its power, where there are not firm contracts, the end customer for that utility could be at risk of very major price increases this winter. Is that correct?

Mr. HORVATH. It is possible. And again, it just depends on how much their portfolio is fueled by natural gas.

Mr. BOUCHER. Yeah. Okay. Mr. Wright, would you like to comment?

Mr. WRIGHT. Generally, I concur with Mr. Horvath's comments. We do not have a percentage of the non-firm either, but in the written testimony that I submitted to the subcommittee, we have detailed several scenarios, a base, a worst, or a best case for the recovery of Gulf Coast supply, which is the driver we analyzed in de-

tail as to pressure on gas prices. And we did see, for a number of days, and as Mr. Horvath noted, this has occurred every winter, you will have some level of allocation that has to occur, where people who don't hold firm contracts have to be interrupted, but only for a matter of days, and only for a short period of time, based on the scenarios that we analyze. So we are not looking here for a major sort of a dislocation. A lot turns on how cold the winter will be.

And finally, with respect to the effect on the prices for those who heat their homes with electricity, much has to do with what the mix of fuels are for that generation.

Mr. BOUCHER. I understand. Okay. Gentlemen, thank you very much. My time has long expired. Thank you, Mr. Chairman.

Mr. BURGESS. If the gentleman would like to continue his questioning, we can have, we have time for a second round. The panel seems a little thin up here. Then if I could have the indulgence of the panel for just a couple of follow-ups.

Mr. Wright, you talked about gas into the pipelines that was perhaps had impurities. Who makes the decision of who gets in and who has to stay out? Who decides what gas is put into the pipeline?

Mr. WRIGHT. The impurities to which I am referring are really gas liquids, and those are removed from the gas stream near the production area, and become the building blocks for petrochemicals, ethane, propane, butane, and heavier. Generally, pipelines publish, well, all pipelines publish tariffs that have standards within them, and some are more explicit than others as to the entrained level of liquid allowed, but generally, it is pretty dry gas, gas that has been substantially removed, that is transported. And the reason for that is interstate gas pipelines use large compressor stations, and liquids are highly incompressible, gas is highly compressible, and it can actually damage the equipment. As well, if it gets very cold, the liquids will drop out, and so it is somewhat of an operational call on a given pipeline system, to manage its operations and reliability and stability, and so while there is not today a hard number standard that I could quote to you, I can tell you that generally, the assumption for most gas interstates is that liquids have been removed to a substantial extent.

Mr. BURGESS. Very well. Thank you. And Mr. Castelli, I would just make the observation, if $3 a gallon gasoline doesn't drive people into more fuel efficient vehicles, I don't know what the government can do that will make that happen.

Mr. Horvath, I have one last question, and if I could do the math right, and bear with me for a minute. In your testimony, you indicate that currently, 5.4 billion cubic feet of natural gas from the Gulf of Mexico is shut in as a result of the hurricanes. The State of Louisiana reports another 1.3 billion cubic feet of natural gas shut in as a result of the storms. Based on your testimony, this would represent a total of about 8.6 percent of average daily winter consumption. Did we do that math right?

Mr. HORVATH. I am not sure those two are additive. I don't think the second number is—maybe there is some double counting there.

Mr. BURGESS. Very well. But in the absence of the hurricanes, would there have been, then, a 5- to 8-percent increase in the natural gas supply this winter?

Mr. HORVATH. We would have that, all that hurricane gas back on the market right now.

Mr. BURGESS. And if we had that gas back on, would we have an additional 5- to 8-percent supply? Since we have got that percentage shut in, in the Gulf of Mexico, if the hurricanes hadn't happened——

Mr. HORVATH. We would have that gas now, so on top of what we have now, yes, that extra 5 or 8 percent.

Mr. BURGESS. So we would have 105 percent to 108 percent of what we had last year.

Mr. HORVATH. There would be some Canadian imports that would be displaced. We are scrounging this year for extra supplies, so you can't just subtract numbers, because those wouldn't otherwise have been here.

Mr. BURGESS. Where is the additional gas, if there is additional gas, where would it be coming from?

Mr. HORVATH. Some of it is from Canada. They have increased their amounts from last year. And we have additional LNG as well this year, this winter——

Mr. BURGESS. Very well.

Mr. HORVATH. [continuing] we might not have otherwise seen.

Mr. BURGESS. I thank everyone for their indulgence today. I know it has been a very, very long day, and thank you for your testimony. It has been very helpful, I know, to Mr. Boucher and myself, and I am sure the rest of the committee as well. So thank you very much for your testimony.

This subcommittee is adjourned.

[Whereupon, at 5:05 p.m., the subcommittee was adjourned.]

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