

EIA'S REPORT ON SHORT-TERM ENERGY OUTLOOK AND WINTER FUELS OUTLOOK

HEARING

BEFORE THE
SUBCOMMITTEE ON ENERGY AND AIR QUALITY
OF THE
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COMMERCE
HOUSE OF REPRESENTATIVES
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WEDNESDAY, OCTOBER 19, 2005

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

The subcommittee met, pursuant to call, at 10:00 a.m., in Room 2123 of the Rayburn House Office Building, Hon. Ralph M. Hall (chairman) presiding.

Members present: Representatives Hall, Norwood, Shimkus, Shadegg, Radanovich, Walden, Otter, Murphy, Burgess, Barton (ex officio), Boucher, Ross, Markey, Wynn, Green, Allen, and Solis.

Staff present: Mark Menezes, Chief Counsel for Energy and Environment; Maryam Sabbaghian, Counsel; Peter Kielty, Clerk; Bruce Harris, Professional Staff; and Sue Sheridan, Senior Counsel.

Mr. HALL. Okay. Thank you. The subcommittee will come to order. Without objection, the subcommittee will proceed pursuant to Committee Rule 4(e), which—hearing no objection.

Prior to the recognition of the first witness for testimony, any member, when recognized for an opening statement, may defer his or her three minute opening statement, and instead, have three additional minutes during the initial round of witness questioning.

And I recognize myself for an opening statement. I first want to welcome our witness today, Mr. Guy Caruso, Administrator of the Energy Information Administration, and thank him for sharing this time, the time it took for him to get over here today, the time it took for him to gain the knowledge that he has, and I look forward to his testimony. I have had a brief discussion with him and enjoyed it, and learned a lot in five minutes. And I know we are going to get a lot of—B.S. in business administration, an M.S. in economics from the University of Connecticut, and earned a master's of public administration from Harvard University. And he has worked here, domestically, he worked at the Paris-based International Energy Agency, IEA, first as a head of the Oil Industry Division, and later, as Director of the Office of Nonmembers Countries, so we have, we are really blessed with good testimony, and we have a witness that will give us testimony.

Just to give him some comparison of how we value his input, it took, I think, 15 the last time we had a hearing, to provide us the information we needed. So, Caruso, we are looking forward to hearing from you, and so you are, of course, you are welcome. And it is trite to say that the United States is facing an energy crisis.

Even before the hurricanes, the prices for oil and natural gas were on the rise, and in response to that, and after years of trying, Congress passed a comprehensive energy bill, H.R. 6, and our chairman, in conjunction with both Democrats and Republicans, worked through some hard times during the hearing of H.R. 6, and for the first time in 10 years, we did get a bill to the President's desk, and he signed it.

After the hurricanes, Congress responded, again, with the GAS Act, which built on the first bill and focused more on increasing our supply of refined oil. Now, we are faced with the winter heating season, that is forecasted to cost people an average of, I think, the testimony is going to show 40 percent more than last year, and if the weather is colder than expected, the number could reach 70 percent for those that heat their homes with natural gas.

It has been said by many of us, and we have made speeches and written articles, the papers have reviewed it, how unfortunate it is that such a tragedy as Katrina had to happen, but actually, it served us the purpose of opening our eyes to the country's energy vulnerability, and pushed the discussion of our current energy infrastructure and future energy needs to the forefront, where it needs to be. We can no longer put off to tomorrow what needs to be addressed today, or actually, should be addressed yesterday.

We are holding this hearing to discuss EIA's short-term energy outlook and winter fuels outlook, which tells us that it is going to cost more to heat our homes this winter, and that prices for petroleum products and natural gas will remain high, and that the price for crude oil is going to remain high. So, I hope as a result of this hearing we can all get a good understanding of what to expect this winter, what our constituents can expect as well. I hope that all of my colleagues will then join me in trying to find a way to ease the burden on them, because I for one feel that they have had enough of the high energy costs, and deserve a break. I want my constituents to be able to spend their disposable incomes however they want, not on having gas for their cars and heat for their homes.

Mr. HALL. With that, I yield back the balance of my time, and I recognize Mr. Allen for the time he chooses to take under the rules, and I thank you for your opening statement.

Mr. ALLEN. Thank you, Mr. Chairman, and thank you, Mr. Caruso, for being here today.

The numbers that you are presenting to us are shocking. Gas prices continue to be at near record highs, and you estimate that the average price of gasoline nationwide will be \$2.68 per gallon, and will not drop significantly in the near future. EIA also estimates natural gas costs to increase, on average, by 48 percent nationwide, with areas in the Midwest to increase nearly 61 percent. New England, where I am from, doesn't fare any better. Home heating oil costs are expected to rise more than 32 percent nationwide, and prices in the Northeast are expected to average more than \$2.55 per gallon. My constituents are very, very worried about that price. I will come back to that in a moment.

Now, what was not in your report, but was reported yesterday by the Bureau of Labor Statistics, is that the Producer Price Index increased by 1.9 percent in September, mostly because of soaring energy prices. It was the single largest jump in 15 years. Last

week, BLS reported that consumer prices rose 1.2 percent last month, and 4.7 percent in the 12 months that ended in September. That was the largest monthly advance since March of 1980, and the steepest annual rise since May 1991. Clearly, energy prices are affecting our economic competitiveness.

How do we get here? What has this committee and this Congress been doing? I do have a different view than my friend, Chairman Hall. We passed an energy bill this summer that would do nothing to help consumers cope with higher energy prices. In fact, your agency, Mr. Caruso, estimated that legislation similar to the Energy Policy Act would actually increase gasoline prices. In the last month, this committee rushed to the floor a bill, the GAS Act, that would also do next to nothing to help consumers. Like the Energy Policy Act, it provided huge subsidies to already incredibly profitable industries. It also gutted environmental laws for no apparent reason, other than that the oil industry wanted it done.

We have done next to nothing for development of renewable fuel technology, at least on the scale that this crisis calls for. We have stubbornly refused to consider raising fuel economy standards, and we have balked at even the most modest conservation measures, such as labeling and rating replacement tires for efficiency. And now, we have a report from EIA which should surprise nobody. Fuel is going to be very expensive this winter. Small businesses will suffer. Consumers will suffer. The poor and the elderly will suffer.

This is just one example. The average LIHEAP benefit in Maine is about \$440, if the program's funding levels remain constant. The average oil tank in Maine is 200 to 250 gallons. You estimate the price of oil to be at \$2.55 per gallon. That means the LIHEAP benefit won't even buy one tank of oil for my constituents who qualify. During an average Maine winter, most households use four tanks, and many use considerably more than that. So, increasing the amount of money that is appropriated for LIHEAP is one short-term fix that Congress must consider. Another is, through the Tax Code, to find some way to help small businesses. I have introduced legislation, H.R. 3944, the Small Business Fuel Cost Relief Act, to give small businesses a tax credit for fuel costs above the Labor Day 2004 price. Now, I know that tax legislation is not under the jurisdiction of this committee, but the committee's bill, the Energy Policy Act, contained robust tax credits for the oil, gas, and nuclear industries. I believe, simply, small businesses and family farmers and fishermen deserve the same attention.

Mr. Chairman, we need to find innovative solutions to the immediate energy crisis while developing a long-term energy plan to wean us away from foreign oil, to promote cleaner alternative energy sources, and reduce costs to consumers and control pollution in the air. If we do not act soon, our economic competitiveness and our children's future will suffer.

Mr. Caruso, thank you again for being here. Mr. Chairman, I yield back.

Mr. HALL. I thank the gentleman. I would like for the record to reflect that you used the word next to nothing several times, and that it is the opinion of the chair that next to nothing is better

than nothing, and that is what we have had, and that it is what this hearing is about.

The chair recognizes the chairman, Mr. Barton.

Chairman BARTON. Thank you.

Mr. HALL. For whatever time he takes.

Chairman BARTON. And I will yield to Mr. Allen time to answer me whenever he wants to.

Mr. ALLEN. Thank you, Mr. Chairman.

Chairman BARTON. I, too, want to thank Mr. Caruso for being here. I wish that this hearing room was full. You know, it is odd to me that we are going to face some of the highest energy prices we have ever faced as a nation this winter, especially in the Midwest and the Northeast, and as those Congressman and Congresswomen go to their districts, they are going to be besieged by constituents, rightly so, asking what we are doing or not doing about it, yet one of the most important hearings we are going to do in the next two months. As far as I know, there is no television coverage of this, and there is no great media coverage. This is very important, what we are going to talk about. I have reviewed the EIA outlook, and I have taken a glance at your testimony, and I am sure that you are going to tell us that winter fuel prices are going to be higher this year because of supply constraints. And that is a true statement.

Two weeks ago, we passed on the House floor the GAS Act, which is intended, and I think would increase the supply of gasoline. It passed 210 to 212. Not one Democrat voted for it. Not one. It is a disappointment to me. That act would give the Federal Government the authority for the first time to investigate price gouging. That act, for the first time, would make it easier for governors of states that were willing to build new refineries to get an expedited permitting process without changing one environmental law that is currently on the books. And that is only if that governor and the constituents of his or her state were willing. If they don't want to do it, they don't have to ask for the expedited procedure. Would reduce the number of boutique fuels, make it easier and more fungible for fuel gasoline to go around the country. Most people think that is a good idea, not a bad idea. Yet we didn't get any of our friends on the minority side to vote for that bill.

Today's hearing, we are going to look at winter fuels like natural gas and home heating oil. It is expected that households that heat with those fuels are going to pay about \$350 more a year this winter for fuel, depending on the fuel source that they are using. That is a real price increase, approximately \$100 a month, that is real money. They are going to hit real Americans. These price increases carry a message. We need less politics and we need more energy policy, which results in more fuel. Today, and this winter's high energy prices are driven by the need for supply. Do we really want to tell the American people that the way to solve the energy problem is to freeze to death by lowering your thermostat? I don't think so.

And it is with great concern that I review the list of energy projects, and these are real projects, folks. These aren't make believe. These are real projects that have been delayed, killed, postponed, in the very areas of the country where the prices for winter

fuels are expected to be the highest. And let us go through some examples. In the West, 62 percent of all the households rely on natural gas. California, the largest state by population in the Union, is the second largest natural gas consuming state in the country. There are at least two liquefied natural gas projects that would have brought significant LNG supply to California, but they have been delayed. One is in Long Beach. It is delayed by the California Public Utilities Commission. The other is at Cabrillo Port, and again, it has been held up by the state of California regulatory hurdles. In the Northeast, where the winters are somewhat colder than they are in California, 51 percent of the households rely on natural gas. That is over half. Again, projects that would have provided more natural gas to heat Northeastern homes have been stopped cold. To name a few, the Islander East Gas Transmission Pipeline Project, from southern Connecticut across Long Island Sound to western Long Island, and to New York City. Initially, Connecticut denied the CZMA approval. After the project sponsors overcame that hurdle, Connecticut denied the project its Clean Water Act permit, and that dispute is dragging through the state court. The Broadwater Energy Offshore LNG Terminal Project, located nine miles north of Long Island in New York state waters, both New York and Connecticut Congressional delegations have come out in opposition to this project. These projects don't help Texas. They don't help Oklahoma. They help New York. They help Connecticut. They help New England. And yet, their own areas are opposing them. The Weaver's Cove LNG project in Fall River, Massachusetts. This project showcases the lengths opponents will go to stop a project. After the Federal FERC approved the application, the opponents slipped a provision in the highway bill to prevent the demolition of the Brightman Street Bridge in order to block LNG tankers from using the river to get to the project.

Now, we know who is going to complain about high gas prices this winter. And they should. I am not saying we should support higher natural gas prices. The real conspirators seem to be the very people we are trying to help, the people of New England and places like Fall River, Massachusetts. I give a direct quote from the mayor of Fall River, Massachusetts. I have never met the person. I am going to state that he or she is probably a very decent human being, so I have got absolutely no animosity towards this individual. But here is what the mayor of Fall River said about a project to bring more fuel to that, to his or her own town: "I will make it bleed with a thousand paper cuts until its investors lose interest and go away."

Increasingly, energy policy of some states and localities in the Northeast seems to be let us freeze in the dark. For the most part, Northeastern homes that don't use natural gas use home heating oil instead. In the Northeast, 30 percent of the households use heating oil as their primary heating fuel. However, 50 percent of the Northeast distillate consumption, which is where home heating oil comes from, must be brought in from other areas or overseas. When Northeast constituents raise concerns about the prices, and again, rightfully so, that they will be forced to pay for home heating oil, the need for increased domestic refining capacity should be clear.

And yet, even as we face dramatic price increases at the beginning of what is likely to be a cold winter, no refinery seems likely to ever be built in the Northeast, ever. Why is that? In my Congressional district of Texas, it will produce, this year, over a trillion cubic feet of natural gas. My district doesn't use a trillion cubic feet of natural gas. I have natural gas drilling rigs within 10 miles of my backyard, about a half a dozen of them, and I wish I had a dozen. My Congressional district, at one time, was the eighth largest oil producing country in the world, if it were a country instead of a Congressional district. My district is going to do its part on the supply side. And a lot of the natural gas, and a lot of the oil that we still produce is going to go all over this great Nation, as it should, so it really, really upsets me when I look around the country, and we see these high prices, and we have a clamor to do something about it, but when we try to do something about it, the very people we are trying to help say no.

So, Mr. Chairman, I am looking forward to this hearing. I hope we can put on the record the facts about what the price situation is going to be, and the supply situation is going to be, and then I hope we can work together on a bipartisan, bicameral basis to really try to do something about it. I don't want to do this kind of a hearing every year.

Thank you, Mr. Chairman.

Mr. HALL. Thank the chairman. The chair recognizes Ms. Solis for three minutes.

Ms. SOLIS. Thank you, Mr. Chairman, for holding this important hearing this morning, and I want to thank Mr. Caruso for also being here and appearing before us to testify on the Energy Information Agency's winter fuel report.

And I have to tell you, just briefly reading, I concur with much of what your statement, that you will be presenting to us, in terms of rising costs. And I, too, am very concerned, because I realize that in the state that I represent, California, one of the most populous in the country, the gasoline prices have been way, way high, for the last, almost I would say year. So, we have seen prices of gasoline, in my district alone, \$3 and above for I would say a steady six month, at least. And we know that folks out there are looking for relief, and the last two energy bills that came through this committee, in my opinion, have not provided any sort of immediate relief. California also has some very high standards, in terms of environmental regulations that protect our environment, and those have been put in place many years before I got here to Congress, and I can see that there is a slow erosion that is occurring here in terms of support for those regulations.

When our own attorney generals are stripped of the ability to protect our communities and our local governments, who are helping to enforce protections. It is not to say stop all these processes and projects that need to be developed, but I think communities of interest have to have a say-so in where these projects are placed. And as the chairman of our committee stated, Long Beach, California, yes, there is a proposed plan to put a liquefied natural gas facility there, but the community residents in the area do not want it. They still do not believe that that is the most efficient way of providing support in that local area, and their input has been very

loud and clear to many of the elected officeholders there in that region.

So, I for one am for having a discussion, but let us be very clear about who that discussion includes. In many cases, those witnesses that are opposing those kinds of efforts are not allowed to come and testify before this committee. So, I think that we have to call it for what it is. And I am very concerned that, again, this last energy bill did not do enough to provide relief to consumers, working families, that right now, as a last resort, are still trying to pay their bills from last year, their winter bills. In California, we are having very unseasonable weather. Right now, I mean, we are having some tremendous rainstorms and flooding that is occurring. We have had some brownouts in Los Angeles with the DWP there, and so we know we have to do something, and we are not about saying no. We are saying about let us have a discussion that is inclusive, and that includes all of the diversity of our communities.

So, I want to thank you, Mr. Caruso, for being here, and I do intend to be a part of the discussion, so that my community has representation at the table. Thank you very much.

Mr. HALL. Thank you very much. The chair recognizes Dr. Norwood, the gentleman from Georgia, for three minutes.

Mr. NORWOOD. Thank you very much, Mr. Chairman, and I want to say to my friend, Mr. Allen, I think that the chairman laid it out pretty clear. I would like to just add a little bit to it, maybe be a little more blunt.

You have made a case that you have considerable concerns for your constituents this winter, and we are all in sympathy with that, but you know, we had an energy bill three or four years ago. It got stopped by the Democrats in the Senate. You voted against the LIHEAP provision, where the Southern states were trying to have just a little share of that LIHEAP money, because more people are killed from heat than cold. You voted against the energy bill. You voted against the GAS bill.

Now, I want to tell you, Mr. Allen, with all respect, it makes me a lot less concerned about your concerns when you do things like that. I yield back.

Mr. HALL. The gentleman yields back. The chair recognizes Mr. Green, the gentleman from Texas.

Mr. GREEN. Thank you, Mr. Chairman. I ask unanimous consent for my full statement to be placed into the record.

Mr. HALL. Without objection.

Mr. GREEN. I want to welcome Mr. Caruso, and having read your statement, I think, you know, those of us who lived through the energy bill and the GAS bill two weeks ago understand that that was happening. Let me follow up on what my colleague from Georgia said. Our committee had a chance to reform LIHEAP during the energy bill, and we voted down an amendment that would have made it based on need, for people who need energy assistance. I find it amazing, the last two weeks, I see the New York Times, the Boston Globe, Chicago Trib, the New Jersey Leader, they have headlines talking about how high fuel heating costs and natural gas costs.

Well, in my home state of Texas, from May to September, and we have 90 degree temperatures this week, we could get no sym-

pathy from the folks because of the formulas weighted for the Northern states. And so, I follow up on my colleague from Georgia, that you know, I guess it is location, location, location, that those newspapers are only in the North, but we were trying to reform LIHEAP to make it fair, based on need. We could not get the votes in this committee. We did get a study on the energy bill, but again, I have more people die and suffer from heatstroke and heat-related than they do from cold, and this Congress, because of something that happened years and years ago, will not change it.

The LIHEAP formula is ancient, and now, I hear that my colleagues from the North are asking for additional emergency funding. Well, we tried to get additional funding in the authorization for LIHEAP, simply because that would then put us on par with the certain level, but if emergency funding is approved, that doesn't benefit those of us, the half of the country that lived south and have heat problems. So again, I know we need to do better on conservation, but I couldn't tell my constituents this summer that I am sorry you are paying high gas prices because you want to cool your home, or you want to turn on your attic fan, but you better check the air in your tires to make sure you are efficient. I don't think that is the way to work, and I think this Congress needs to look at exploring for more domestic sources for natural gas. And it is interesting. It is not Congress that is keeping some of that off the table. It is a Presidential moratorium in the eastern Gulf of Mexico, in Section 181, that we might have more natural gas that would lower the prices, because you bring in more supply, but we are not doing it. So, there is blame enough going around both for Congress and the President that we need to have more domestic production of natural gas. So, maybe we can lower the heating costs in the Northeast. At the same time, maybe lower our cooling costs in the South from May to September.

And again, I yield back my time.

Mr. HALL. I thank the gentleman. The chair recognizes Mr. Shimkus, the gentleman from Illinois, for three minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman, and Mr. Caruso, welcome. And you can hear the frustration. We are going to hear sobering numbers from you, and we are struggling, obviously, with this. I believe an ideology, and I believe how you view government, and my frustration is those who would try to control the free market, to prohibit it from providing the goods and services at the lower cost, then claim and cry for government subsidies to either the individual consumer, who now is hurt because of high costs, or the individual small businesses.

It is really counterintuitive, unless you get a competitive market, and that is what an energy bill does. Part of our natural gas problems is because we had no energy plan. We have shifted electricity to natural gas. I mean, what a terrible use of natural gas. We could no longer put it in caverns and save it over the summer. We are using it to generate electricity. So, as the demand goes up, the importance of the energy bill, these are all interwoven. The problem with natural gas is also a problem with our electricity generation issues, and that is why it is important to diversify.

So, you are getting all of the frustrations of our public, as we are trying to shift out how to do this. The natural gas is of a major

concern for much of the home heating and also manufacturing. When Russia is paying \$0.95 per million BTUs, and we are paying \$14 for BTUs, we are competitively disadvantaged. You want to talk about the damaging to the manufacturing base, that is the damage to the manufacturing base. China is paying \$4.85 per million BTUs, \$10 less than we are for natural gas.

Now, here is a map of the United States. We are the only developed nation in the world without access to our outer continental shelf. All the OCS on the West, all the OCS on the East. As Mr. Green said, all the eastern Gulf, off-limits. Look at my friend John Shadegg's area. Off-limits. I think the public, if they would understand that here we are complaining about subsidizing people because they can't afford heating, and we can't allow people to have access to these natural gas reserves. It is criminal negligence, and it has to stop, and that is why it is important.

We need to hear these sobering numbers, because we are going to hear it from our constituents. And what I am going to say is, we do not have access to our OCS reserves. We do not have access to our facilities, and we are continuing to work on this issue. Thank you for being here, and I look forward to asking a few questions with respect to that. And I yield back, Mr. Chairman.

Mr. HALL. I Thank the gentleman. The chair now recognizes Mr. Ross, the gentleman from Arkansas, one of my favorite BRAC fighters, for three minutes. Mr. Ross.

Mr. ROSS. Thank you, Mr. Chairman, members of the committee, for holding this hearing in an effort to address natural gas and home heating oil prices that are, and have been, and will continue to adversely impact Americans, especially as we enter into the fall and winter seasons.

Our country was experiencing record fuel costs before the hurricane season, and in their aftermath, our Nation's domestic energy production and distribution infrastructure encountered significant damages, causing fuel prices to increase even more. I am hopeful the efforts to reestablish energy operations in the Gulf of Mexico will move swiftly, as both demand and price continue to increase.

I am extremely concerned that energy and winter fuel prices will be unbearable for many Americans during the 2005-2006 heating season. In fact, in Arkansas' Fourth Congressional District, the average household income is about \$29,000 a year. One of the 29 counties I represent has an average household income below \$9,000 a year, one of the poorest counties in America. The people I represent cannot afford \$3 gasoline, and they certainly cannot afford \$12 or \$15 per thousand cubic feet for natural gas. Natural gas is the primary heating fuel for most of the households in my district, and 55 percent of them in America. This means families who heat their homes with natural gas are expected to spend about \$350 more, which is about a 48 percent increase this winter on their gas bills, 48 percent increase on their gas bill, and yet, the minimum wage in this country has not been raised in a very long time, and has the buying power that it had back in 1980. And for those of you that want to believe that minimum wage is something paid to high school and college students, I have got constituents, I have got working families in my district trying to get by on \$5.15 an hour.

This significant price increase will cause considerable negative impact on all Americans, especially the working poor, the elderly, the disabled, and also, industries that rely on natural gas. My Congressional district in Arkansas ranks fourth among all Congressional districts in America in poultry production. Poultry producers depend on natural gas to heat poultry houses during the winter months, and these outrageous natural gas prices will make it impossible for many of our farm families. The electric power sector's reliance on costly natural gas to produce electricity will translate into increased electric costs, and nearly 30 percent of all households in this Nation rely on electricity as their primary heating fuel.

I am hopeful this committee will continue to increase funding authorizations for programs such as LIHEAP, Low Income Home Energy Assistance Program, and rethink and address the discrepancies and the funding formula that surrounds LIHEAP, a program that truly helps those families in need. These are serious issues that will seriously impact the citizens of our Nation, and I hope my colleagues on both sides of the aisle will join me in researching all options, and taking the necessary actions to provide relief to our constituents in the coming months.

Mr. Chairman, thank you for allowing me to use up all of my time, plus 35 seconds of somebody else's.

Mr. HALL. I thank the gentleman. The chair now recognizes Mr. Murphy from Pennsylvania, three minutes.

Mr. MURPHY. And thank you, Mr. Chairman.

I just want to follow up on a couple elements here that we know are part of this, as we look at and lament the high cost of natural gas. I hope that our discussion just doesn't go in terms of there is a high cost, and we need to look at other ways of subsidizing this. We have made several efforts in this committee, which as the chairman pointed out, ended up being not bipartisan, and that is tragic, because we could have benefited greatly from bipartisan input and influence on this. In the coming weeks, I hope we can deal with some of the aspects that are driving up natural gas costs.

These include the issue of our energy plants, which could be using clean coal technology, which we included in the energy bill, continue to move more towards natural gas use. That increases demand and increases price. If we are able to sincerely look at new source review, and how that punishes plants who are wanting to combine maintenance with some cleaning up, and instead, telling them that they have to do everything, and so, the plants choose to do nothing. We would be able to use our abundant coal energy instead of continuing to deplete our natural gas resources. We also note that that would increase jobs. That would increase jobs for boilermakers and teamsters and carpenters and laborers and sheet metal workers, and all the folks who could be rebuilding our infrastructure of our energy power plants, which are so inefficiently continuing to use a system now.

If we are going to use this, and really look at this carefully, about natural gas costs, we also have to look at the costs on jobs. We are losing our petrochemical industry. We have lost 90,000 jobs in the chemical industry alone. It drives up fertilizer costs. That affects our agricultural costs, our farmers, and ultimately, the meals

that we put on our tables. These are the kind of things we all need to put in perspective, and working together on comprehensive energy bills means doing all the parts for this. This also means that when we are looking at such things as the GAS bill we passed a week ago without any votes from the other side of the aisle, it is unfortunate that the only option offered was to have the Federal Government design, construct, and mothball until we need it, oil refineries. That is not the way we have a comprehensive energy policy, and we are much better off all coming together and say how do we have further exploration, diversification, and conservation of our resources together. That has to be part of the package.

And so, I hope that what comes out of this hearing is not just more political talk, but real policy that allows us to come up with some plans for the American people, who are going to be paying a lot more, and it will be sad if all we can tell them is that more bills were blocked, more progress was stopped, we are still not using coal, we are not using nuclear, instead using more and more natural gas in less effective ways. And that is what we need to be working on, Mr. Chairman, and that is what I hope comes out of this with some sound legislation as well.

I yield back.

Mr. HALL. The gentleman yields back. The chair now recognizes the gentleman from Massachusetts, Mr. Markey.

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

Last Thursday, for the first time since its creation, the Northeast experienced sustained levels of home heating oil prices high enough to trigger the exercise of your discretion to protect heating oil consumers by releasing product from the Northeast Home Heating Oil Reserve.

This is, without question, an opportunity for us to begin to discuss when the Bush Administration is, in fact, going to exercise that authority. The report right now, from the Department of Energy, is that home heating oil prices are likely to rise 31.5 percent this winter, for the average consumer. That will be an increase of \$378 per consumer across the whole Northeast for this winter, and that is if it is a normal winter. If it is an above normal winter, it would be \$774 per family for this coming winter.

So, what we are seeing is a dramatic spike. It is occurring on a sustained basis, and we need a plan. The plan that we have heard thus far from the Republican side is that we will build new refineries in the years ahead. Unfortunately, we have already heard from the President of Shell Oil, who says that his company has no plans of building new refineries, even if the bill became law, and we also have a word from the Senate that they don't intend on passing legislation to that effect.

So, what are we left with? Well, we are left with the existing Home Heating Oil Reserve in the Northeast. Now, I must point out that the chairman of this committee, Mr. Barton, was good enough when he was chairman of the Energy Subcommittee, to make that possible, and it sits there, its existence, largely because of his support for it, in partnership with me. The question now is, when will the Administration use it? Because that, ultimately, is the only time and place in which the facility will make any sense.

Conversely, the Bush Administration, the Republicans in general, are opposing increases in the funding for LIHEAP, the program which is used in order to help people with higher home heating oil bills. So, if we release the Home Heating Oil Reserve, prices will go down. If we don't release it, then prices go up, and we need more LIHEAP money for the people who will suffer from these higher prices. But we can't have a black hole here, where neither one of those avenues is, in fact, used. And that is where we are right now, and that is why I believe that this hearing is so important, and I yield back the balance of my time.

Mr. HALL. I thank the gentleman. The chair recognizes Mr. Otter, the gentleman from Idaho, for three minutes.

Mr. OTTER. Thank you, Mr. Chairman.

Mr. Chairman, some wise man once said that insanity is doing the same thing over and over again, and expecting different results. And as I have served on this Energy Committee, I am reminded of that often, that one side of the aisle says no, let us let the marketplace work. Let us incentivize the system to build new plants and drill new holes and lay new pipelines, and create more, rather than get the government in the business, as the other side of the aisle continues to suggest. No, let us get the government in the business of passing out and distributing the scarcity, and that is basically where we find ourselves today.

As I look back over the energy history of this committee and of this Congress, I find very little effort on the side of those who wish the government to be in the business of distribution and drilling and separation, and then, of course, passing out favors, and passing out heating oil, in order to keep the folks happy. I see they actually have created an environment in which the big boys can exist, the big boys they now decry as making way too much profit, and actually taking advantage of the market. Yet, it has been their handiwork at regulations, whether it is the EPA or the ESA or the lack of an energy bill that has, quite frankly, created an environment for the big boys to exist, and the little folks to pass out of existence. They are thereby restricting competition.

I was in the oil business in the early '80s. I had a company called Kyn-Ten Drilling Company, and we drilled over 500 oil wells in Kentucky, Tennessee, and Ohio. And when I was running that little company, I was pretty excited when we went into the business, because oil was about \$30 a barrel, and all I needed to turn out was about four or five barrels a day, in order to actually amortize the system, and amortize my costs of getting into the business.

But then, I found out I couldn't sell the oil, and I found out one of the reasons I couldn't sell the oil is because there wasn't a distribution, there wasn't a way, there wasn't a pipeline. There wasn't a way to get it there, and so we said, well, that is easy, let us build a pipeline. And then, we ran into the restrictions of having to go across government land, and nobody wanted to build a pipeline across government land. And nobody wanted to build a grid system across government land.

And so, I find it just a little ironic, in fact, economic, perhaps, economic ignorance, for those who would spend \$700 million a year, a year, on the West Coast, for environmental purposes, and \$2 billion, and then ask for another \$2 billion a year for LIHEAP. I find

it a little disingenuous, in fact, because they, in fact, have created the environment in which we have restricted supply. It put me out of business. It put all the little companies out of business. There is no question why there is only four left, and that is because of the handiwork of restriction and government regulation has put these folks out of business, and caused that restriction.

And so, I am interested in hearing what we are going to do to create more supply, not more government, and I invite you to speak to those when you get the opportunity, Mr. Caruso. Thank you.

Mr. HALL. I thank the gentleman. The chair now recognizes Mr. Wynn.

Mr. WYNN. Thank you, Mr. Chairman, for calling this hearing. It is indeed an important issue.

The outlook is not good for our citizens. Sixty million households that use natural gas in the United States could see their home heating bills increase by an average of 50 percent. This translates to an increase of about \$350 more than last winter's costs. In my district in Maryland, 60 percent of my residents use natural gas for their homes. This means that from about \$750 last year, they could see an increase to about \$1,100 this year, almost 100 percent increase.

In terms of home heating oil, we have 8.5 million homes that use home heating oil across the country. Residents can expect an increase in their heating bills of about 32 percent, which translates into an increase of \$378 more in home heating expenses this winter. For the almost 7 percent of my district residents that use home heating oil, including myself, this means that last year's average expenditure of about \$1,200 could be as high as \$1,600 this year.

The point that I would like to bring home in the context of this hearing is that while we need to do a lot of things in terms of alternative energy development, increasing supply, people are going to be cold this winter. We need to prepare to do something for this winter. Increasing home energy costs will disproportionately impact low income and elderly citizens. All of a sudden, we in America have discovered the poor. Well, they are going to be not only poor. They are going to be cold, unless we do something.

Consider the following. Low income households spend a whopping 14 percent of their annual income on energy expenditures, while non low income households only spend about 3.5 percent. That is the face of poverty in America. In fact, two thirds of the families that utilize LIHEAP for assistance have annual incomes of about \$8,000. This makes low income Americans have to choose between heating their homes and putting food on the table. Thus, I think it is essential, since our task is to create a better quality of life in America, that the Administration fully fund the Low Income Home Energy Assistance Program, LIHEAP, and to authorize \$5.1 billion a year level, and that we consider appropriate increases to correspond to the increase in energy costs that we are experiencing.

There are a lot of perspectives on this issue, and I am not going to belabor the point further, except to say that there are a lot of people who are poor who are going to see significant increases in their energy costs, and it is our responsibility to do something to help them. We cannot just stand by and watch, as they shiver in

their homes, and take comfort that we are not in their unfortunate circumstances. I hope this hearing will lead to concrete action on the part of Congress to both preserve the existing levels, and hopefully to expand to new levels the LIHEAP program.

Thank you.

Mr. HALL. Thank Mr. Wynn. The chair at this time recognizes Mr. Shadegg from Arizona for three minutes.

Mr. SHADEGG. Thank you, Mr. Chairman, and thank you for holding this hearing. I want to associate myself with the comments of both Mr. Murphy and my colleague, Mr. Otter. Mr. Murphy is correct. We cannot continue to rely solely on oil and other fuels of that character to go into the future. We need a diversified portfolio, but my colleague Mr. Otter is also right. It is the height of hypocrisy for a Member of Congress, particularly one who has been here for years, to sit in this room and complain about the high cost of fuel. It is, indeed, the exact parallel to the child that murders both parents and then complains of being an orphan.

Year after year, decade after decade, this Congress has imposed higher burdens on the construction, exploration, development, and refining of fuel. My colleague Mr. Shimkus just held up this map. All of the East Coast is off-limits. You can't go get the oil there. You can't go get the gas there, not because it is not there, but because the government, the people in this room, the people in this Congress who have been here for decades, voted to put it off-limits. All of the oil and gas on the West Coast is off-limits. All of the oil and gas under all of the Federal land in the western part of the United States where I live is off-limits. So, we put all this oil and all of this gas totally off-limits, and then we are shocked, stunned, mystified, and outraged that prices are higher. Well, you know, it seems to me some Members of Congress ought to go back and take Economics 101. We tried to pass a bill last week. Thankfully, we did pass it by a bare two votes, that simply eases the siting and permitting restrictions, by letting the President designate areas where you could build a refinery, including closed military bases, to get around the NIMBY syndrome. Many Members of Congress voted against that. Indeed, every single one of my colleagues on the other side. You talk about the cost of \$3 a gallon gasoline, and how expensive it is. In part, it is that expensive because we have 17 different boutique fuels. That bill tried to solve the problem by saying no, we don't need the 17 to have clean air. We can indeed get by with six. Nonetheless, people voted against that. Well, where has that brought us?

Natural gas, the subject of this hearing, is \$13 per million BTUs in the United States. In China, it is less than \$5, and in Australia, it is less than \$4. We have a problem, ladies and gentlemen, that is bigger than home heating bills. You bet. We need, as my colleague from Maryland just said, to help the people who will be cold this summer who can't afford to pay their bills. But by God, we better look beyond that. We better look at the long-term problem. We better take a rational look at the restrictions we have put on this map to say you can't explore anywhere in the United States. You can't buy or build anywhere in the United States. My colleague from Massachusetts says well, Shell says they are not going to build a refinery even though we passed a bill letting them build a

refinery under easier restrictions. Guess what? Shell doesn't want more refineries, because Shell is getting rich off of the shortage of refineries. But thank God, in a free market economy, other investors will figure that out, and small investors will put together capital to build that refinery. How do I know that? Because it is happening in Yuma, Arizona, in my state, right now. Small investors are putting together the capital to build the first refinery in this country since Elvis was impersonating Elvis. So, we need to look at supply in this country. We need to look at a rational balance in this country, and we need to move forward with this hearing, and I commend you, Mr. Chairman, for holding it.

Mr. HALL. I thank the gentleman. The chair recognizes the good doctor from Texas, Dr. Burgess, for three minutes.

Mr. BURGESS. Thank you, Mr. Chairman. I appreciate, also, you holding this hearing.

I was just going to submit my statement for the record, but that map that Mr. Shimkus brought, if you look at that map, about the only place left to drill for natural gas in the United States is my district in North Texas, so Cooke, Denton, and Terry counties are enjoying a boom, and we thank the restrictions on the other parts of the country, but maybe it is time to relax those somewhat. And I will yield back.

Mr. HALL. I thank you, and Mr. Ross and I are going to try to have your refinery over at Texarkana, to bring you something. The chair now recognizes Mr. Walden, the gentleman from Oregon.

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

I appreciate your holding this hearing, and look forward to reading the text of our witness. I had a meeting this morning with a gentleman who represents and works with some 2,500 wheat farmers out in northwest, especially the east part of Oregon and Washington, and let me just tell you what \$14 natural gas is doing to farmers, who have to use nitrogen fertilizer. It is driving them out of business, and I sit here, as I have for a number of years, and I listen to all the information that comes out about the lack of supply, the lack of access to product, and I was a journalism major, not an economics major. But if you constrict supply, and you don't go replace it, and demand continues either at pace or increases, price is going to go up. And you get a natural catastrophe like Katrina and Rita, and you get a new spike, and you see that in these charts that this gentleman gave me, that show just what has happened to the U.S. nitrogen producer costs of ammonia, the price per ton. The dark blue on here is the component of natural gas. And I listen to some of my colleagues time and again talk about well, we can't drill there. We can't import here. We don't want to produce that kind of power. We don't like windmills off the coast, because we can see them. But we all want to turn on the lights, and we want \$1.50 gasoline, and we want natural gas back to \$2. You can't get there if you don't go find it, produce it, and get it to where it is being consumed, the effect of which is we are having an incredibly corrosive effect on the economy, on the men and women whose pocketbooks we all care about, we all care about.

Now, I was just suggesting to the chairman, I have tried to figure out why the Northeast has their own Home Heating Oil Reserve. We don't have one in the Northwest, and it gets kind of

chilly out there from time to time. I have supported your efforts on the Northeast Home—I have supported increasing funding for LIHEAP, and I understand those are patchworks. Those are the safety net. That is the safety net, when what we fail to do to provide adequate supply to meet market demand, causes a problem, along with perhaps a natural occurrence, or unnatural, like Katrina and Rita. And when you look at the price of natural gas around the world, and you understand we have failed to go get the natural gas we need here, even though we have enormous deposits, then don't come and complain to me about jobs being outsourced and off-shored in plastics and fertilizers. Don't come and complain to me about those sorts of trade issues, when one of the fundamental ingredients in our economy is energy, and we are not doing our part to go find it in an environmentally safe and sound way, and I fully believe we have those capabilities. We can do this, folks, if we quit throwing rocks at each other, come together as a committee and as a country, and say there are resources. We understand we got a real problem. We need to go tap them, and get them to the people, so that we don't have to reach into these what should be one time emergency reserves. And now, we are looking at them as just a sort of everyday experience. That is not what we ought to be about.

So, I hope we can move forward on some of these initiatives, and resolve this energy problem that we know is there, and we have the tools and the capability, the science, the research, to do it right. Thank you, Mr. Chairman.

Mr. HALL. All right. I thank the gentleman. I believe that is all the opening statements we have, and I am sure, Mr. Caruso, that you have supplemented your degrees from Connecticut and Harvard. This last hour, you have patiently listened to all of us, and if one thing you have gleaned, it is probably that we all agree on one thing, that is, that we have a problem, and we are going to listen to you for your suggestions, and recognize you at this time for whatever time it takes. I hope it doesn't take over about five minutes, but we will yield to you, and thank you very much for being here, and being so patient.

STATEMENT OF GUY F. CARUSO, ADMINISTRATOR, ENERGY INFORMATION ADMINISTRATION

Mr. CARUSO. Thank you very much, Chairman Hall, and Chairman Barton, members of the committee. I appreciate your invitation to present the Energy Information Administration's winter fuels outlook.

As you know, the EIA is the analytical and statistical arm of the Department of Energy, and we do not formulate or take policy positions. If we were holding this hearing on August 28, I would have been telling you that the world oil market is tight. Crude oil prices were high. Gasoline prices are high, as we find the reserve being heavily utilized, and natural gas prices were very high, due to a very warm summer, in particular, those areas that require air conditioning. And on August 29, 54 days ago, Katrina, Hurricane Katrina made landfall, and since that time, we have had more than 60 million barrels a day of our domestic oil production shut in, more than 300 billion cubic feet of natural gas shut in, and that

is continuing. About 10 percent of our refinery capacity is still offline, due to both Katrina and Rita.

[Chart.]

So, this is the situation as we prepare our winter fuels outlook, and the first chart I want to call your attention to, which you have in your handout, shows the summary of the different costs to our consumers in the various regions of the country, and by fuel type. On average, the average U.S. household will pay about \$260 more for heating oil this winter, but that varies considerably. Natural gas bills will be averaging about \$350 more, a 48 percent increase. Heating oil, about \$380 more, a 32 percent increase. Propane, \$325, 30 percent. Electricity gets off a bit better, with only \$38, or a 5 percent increase, and that is largely because 70 percent of our electricity in this country is generated by coal and nuclear. However, the expenditures for individual households, as a number of the members have pointed out, can vary significantly from those national averages, and even regional averages, based on the size and efficiency of the home, and their equipment that is using their fuels.

[Chart.]

The next chart shows the impact of the shut in production of crude oil on oil prices, and where we see that going over the coming months, and we do see the shut in capacity gradually coming back online, and we do anticipate that crude oil and natural gas production will be fully back online by the end of the winter. But nevertheless, there will be a continued shut in production of both oil and natural gas in the Gulf of Mexico, and the price of crude oil, in our view, will stay relatively high, at about \$64 to \$65 per barrel this winter.

[Chart.]

For the refineries that have been shut in, you see in the next chart, that they are coming back online. At one point, more than 20 percent of our refinery capacity was offline. Now, it is about 10 percent. And we see all of the refineries being fully back online by the end of the year. Nevertheless, gasoline prices, as has been mentioned, and diesel fuel, heating oil, and jet fuel prices remain very high, and particularly, middle distillates will stay high, because of the particular problems in producing, and the demand for those fuels. We see the prices coming down, but still remaining \$2.55 for gasoline in December, and \$2.73 for diesel.

For natural gas, as was mentioned, we are now looking at about \$14 for the spot price of natural gas on the New York Mercantile Exchange, and on the Henry Hub Spot Markets. This will come down, but slowly, because so much natural gas production is still shut in, and the processing facilities onshore remain offline and affect the processing of that natural gas.

[Chart.]

If there is an element of good news, the next chart shows where we are with respect to working gas in storage. Every year, our local distribution companies and gas companies—oh, sorry. The next chart, please. It does show that natural gas storage, as we approach the winter season, is approaching the 3 trillion cubic feet level, which industry considers about normal for going into the wintertime, so that we feel that even with a colder than normal

winter, there will be sufficient gas in storage to meet this increased demand. Just for your information, during the peak months of January and February, about one third of our gas consumption comes out of this storage, so it is critically important that we go into the winter with high levels of natural gas storage, and indeed, one of the reasons gas prices, natural gas prices, have been under such pressure is that the local distribution companies have been bidding up the price in order to make sure there is enough gas in storage, in order to serve their customers. So, this is part of the picture.

[Chart.]

On the individual regions of the country, the next chart shows natural gas heating bills by region, and as some members have already mentioned, it does vary considerably, and indeed, for natural gas, the Midwest, which uses, about 75 percent of the homes use natural gas for heating, will experience about a 61 percent increase in expenditures. But other regions will also see from 32 percent up to that 61 percent increase. Electricity expenditures are going to be more, increases will be more modest, as shown in this next chart, although that also varies by region, with the South being the area where the largest percentage of households use electricity as their primary source of heating.

[Chart.]

Heating oil, in the next chart, is very much concentrated in the Northeast, as Mr. Allen and others have pointed out, with 30 percent of the homes there using heating oil for heating their homes, and we expect about a 30 percent increase in that price for the Northeast. Finally, the Chairman, the last fuel we examine in our winter fuels outlook is propane, and the expenditures there are going to be up, on average, about 30 percent, and that affects about 4 percent of the homes in the United States.

Mr. Chairman, once again, I would like to thank you for the confidence in letting me present the Energy Information Administration's outlook for this winter, and I would be pleased to answer any questions that you may have.

[The prepared statement of Guy F. Caruso follows:]

**Statement of Guy Caruso, Administrator
Energy Information Administration
U.S. Department of Energy
before the
Subcommittee on Energy and Air Quality
Committee on Energy and Commerce
U. S. House of Representatives
October 19, 2005**

Mr. Chairman and Members of the Committee:

I appreciate the opportunity to appear before you today to discuss the Energy Information Administration's (EIA) *Short-Term Energy and Winter Fuels Outlook*, which we released on October 12. The text of this *Outlook* and some of the figures are attached to my testimony; the complete *Outlook* is available on our website at www.eia.doe.gov.

EIA is the independent statistical and analytical agency in the Department of Energy. We do not promote, formulate, or take positions on policy issues, but we do produce data, analyses, and forecasts that are meant to assist policymakers, help markets function efficiently, and inform the public. Our views are strictly those of EIA and should not be construed as representing those of the Department of Energy or the Administration.

Even before Hurricane Katrina struck, crude oil and petroleum product prices were setting records. On August 26, the near-month price of crude oil on the New York Mercantile Exchange closed at over \$66 per barrel, which was \$23 per barrel, or more than 50 percent, higher than a year earlier. On August 29, as the hurricane made landfall, average gasoline prices stood at \$2.61 per gallon, 74 cents higher than one year earlier, and diesel prices were \$2.59, or 72 cents higher. Oil prices worldwide had been rising steadily since 2002, due in large part to growth in global demand, which has used up much of the world's surplus production capacity. Refineries have been running at increasingly high levels of utilization in many parts of the world, including the United States. High production of distillate fuels and higher-than-average refinery outages this summer added to tightness in gasoline markets.

Throughout the summer months, EIA warned about the potential adverse impacts of an active hurricane season on domestic energy supply and prices. These warnings unfortunately are being reflected in the challenging realities brought about by Hurricanes Katrina and Rita. The impact on oil and natural gas production, oil refining, natural gas processing, and pipeline systems have further strained already-tight markets on the eve of the 2005-2006 heating season.

Projections are subject to considerable uncertainty. Price projections are particularly uncertain, because small shifts in either supply or demand, which are both relatively insensitive to price changes in the current market environment, can necessitate large price movements to restore balance between supply and demand. On the supply side, our *Winter Fuels Outlook* reflects a "Medium Recovery" or baseline scenario for recovery of energy operations in the Gulf of Mexico based on information available to EIA as of the end of the first week of October. On the demand side, the baseline projections incorporate the mean values for heating degree-days by Census Division as provided by the National Oceanic and Atmospheric Administration's Climate Prediction Center. EIA also examines 10-percent colder and 10-percent warmer winter cases to provide a range of heating fuel market outcomes.

This winter, residential space-heating expenditures are projected to increase for all fuel types compared to year-ago levels. On average, households heating primarily with natural gas are expected to spend about \$350 (48 percent) more this winter in fuel expenditures. Households heating primarily with heating oil can expect to pay, on average, \$378 (32 percent) more this winter. Households heating primarily with propane can expect to pay, on average, \$325 (30 percent) more this winter. Households heating primarily with electricity can expect, on average, to pay \$38 (5 percent) more. Should colder weather prevail, expenditures will be significantly higher. These averages provide a broad guide to changes from last winter, but fuel expenditures for individual households are highly dependent on local weather conditions, the size and energy efficiency of individual homes and their heating equipment, and thermostat settings.

Several factors are driving up winter prices and expenditures: first, international factors such as low spare crude oil capacity and political tensions contribute to uncertainty and low supply

growth for crude oil and high crude prices; second, recent hurricanes and associated disruptions exacerbate already tight markets in oil, petroleum products, and natural gas; and, finally, winter weather affects consumption and consequently household expenditures. This winter, we are likely to have a slightly colder weather, as measured by population-weighted heating degree-days, relative to last winter.

Overall, prices for petroleum products and natural gas are expected to remain high due to tight international supplies of crude and hurricane-induced supply losses. Under the baseline weather case, Henry Hub natural gas prices are expected to average around \$9.00 per thousand cubic feet (mcf) in 2005 and around \$8.70 per mcf in 2006. Retail gasoline prices are expected to average close to \$2.35 per gallon in 2005 and about \$2.45 in 2006. Retail diesel fuel prices are projected to remain high throughout the forecast period, averaging \$2.45 in 2005 and \$2.58 in 2006. Residential retail heating oil prices are expected to be \$2.54 per gallon this winter season, a 32-percent increase over last winter, reflecting not only high crude oil prices, but also strong demand in the international market for distillate fuels. Residential electricity prices are expected to average 9.3 cents per kilowatt-hour (kwh) in 2005 and about 9.5 cents per kwh in 2006, with significant regional differences depending on the fuel mix used to generate electricity in each region of the country. Under a colder weather scenario, prices for natural gas and all petroleum products are projected to be somewhat higher.

Worldwide petroleum demand growth is projected to slow from 2004 levels, but still remain strong during 2005 and 2006, averaging 1.8 percent per year over the 2-year period, compared with 3.2 percent in 2004. Moreover, only weak production growth in countries outside of the Organization of Petroleum Exporting Countries (OPEC) is expected. With the loss of production in the Gulf of Mexico from the hurricanes, production declines in the North Sea, and the slowdown in growth in Russian oil production, non-OPEC supply is projected to increase by an annual average of only 0.1 million barrels per day during 2005 before increasing by 0.9 million barrels per day in 2006. In addition, worldwide spare production capacity is at its lowest level in 3 decades.

Total petroleum demand in the United States in 2005 is projected to average 20.5 million barrels per day, or 0.9 percent less than in 2004. Average demand for the first half of 2005

was at about the same level as during the first half of 2004 because rapidly rising prices constrained motor gasoline demand growth, weather factors depressed heating oil demand, and relative price factors lowered residual fuel oil and propane demand. Hurricane-related disruptions combined with increased prices result in a lower projected demand for petroleum products relative to pre-hurricane predictions. Petroleum demand in 2006 is expected to average 21 million barrels per day, or 2.2 percent higher than in 2005.

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 (early 2005 was a relatively mild heating season in the Midwest) 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 reactivation 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 (bcf) below 1 year ago but still 1.2 percent above the 5-year average. Although natural gas storage remains above the 5-year average, the double blows of Hurricanes Katrina and Rita reduced the peak storage achievable over the remainder of the injection season from what was expected previously. Expected working gas in storage at the end of the fourth quarter is expected to be about 2.5 trillion cubic feet, 200 bcf below year-ago levels and about 50 bcf

above the 5-year average. Hurricane recovery profiles that differ from the scenario used for this month's baseline forecast would significantly affect the storage forecast.

In conclusion, due to continued tight crude oil markets, hurricane-related supply disruption, and slightly colder weather, the average U.S. household can expect to pay about \$260 more for heating this winter, mostly due to already tight supplies and the effects of the Gulf coast hurricanes. Our projections are subject to considerable uncertainty, as noted, depending in part on the rate of recovery in the Gulf of Mexico and on the weather. A winter that is colder than expected could substantially raise estimated expenditure increases; milder weather, of course, would lower estimated expenditures.

This completes my testimony, Mr. Chairman. I would be glad to answer any questions that you and the other members of the Committee may have.

Mr. HALL. Thank you, and I will start with the first question. Your outlook base case projects a colder winter, as I understood you, than last winter, and I think, as you know, there are other projections. A lot of other people are projecting, some even, for some reason, projecting a warmer winter. Well, that is something we can hope for and pray for, but what are your winter weather projections based on, and can you explain why others have been projecting a warmer winter, and why you differ with them?

Mr. CARUSO. Thank you, Mr. Chairman. Our weather forecast is based on the latest outlook of the National Oceanic and Atmospheric Administration's Climate Prediction Center, NOAA. They have released this in late September, and their indication, as we convert their temperature projections into heating degree days, into our model, indicates a slightly colder than normal winter, when weighted by population, which is what we do for our modeling exercise. But it will be several percentage points colder than last winter. So, both of those factors go into the numbers I have just presented with respect to consumption estimates by region.

There are others who look at the same NOAA forecast, and come up with slightly different conclusions, but mainly, it is the methodology that we use to convert the temperature estimates into heating degree days, and weight that by population for our model. That gives you a slightly different, but nevertheless, we are looking at slightly colder than normal winter, but about 3 to 4 percent colder than last winter.

Mr. HALL. And as you know, there are primarily three distillate fuels, diesel, home heating oil, and jet fuel. I guess my question is, what percentage of distillates are used for home heating, as opposed to transportation, if you have an estimate of that?

Mr. CARUSO. Yes. We do. Approximately one million barrels a day of heating oil is used during the winter heating season, but I can give you a much more precise breakdown for the record, but of the total barrels, about 33 percent is middle distillate. Of that 33 percent, jet fuel, which is part of that, is 7 percent, and then, the remainder is diesel fuel mainly used for transportation, and heating oil. That breaks down to 25 percent for those two fuels, and during the winter, it is about 50/50 between home heating and diesel fuel in trucks. But I will give you more precise figures for the record, sir.

Mr. HALL. And if you will, for the record, just tell us to what extent will the increase in diesel consumption affect home heating oil supply.

Mr. CARUSO. That is an excellent question. One of the problems in this country we face is not only the lack of total refining capacity, which has been mentioned by several members, but the conversion capacity of turning crude oil into specialty products, most notably gasoline, but in recent years, the demand for the middle distillates, diesel fuel, heating oil, and jet fuel, has been rising in this country, in Europe, and in Asia, all of which has put extremely heavy pressure on our refineries, on European refineries, and in Asian refineries to meet that demand.

The middle distillate part of the barrel has actually increased more than gasoline, and as you can see from the chart I showed on the refinery outlook, distillate prices are now higher than gaso-

line, which is rather unusual, and the reason is the competing uses for that middle part of the barrel are putting upward pressure on price. Therefore, we expect higher heating oil prices this winter, not only because of the increase in crude oil, but because the heating oil component of barrel competes with jet fuel and diesel fuel, and as you also are aware, the airline industry is suffering in this picture as well.

Mr. HALL. Yes. And if you can, without answering it now, my time is about up, how interchangeable are these two products, and what are the typical, we talked about profit and profit margin. We have had a hearing on that and what caused the escalation at the gas pumps. What are the typical profit margin differences between diesel and home heating oil? If you can do that, I will appreciate it, and I think my time is up.

I now recognize the ranking member, Mr. Boucher of Virginia.

Mr. BOUCHER. Well, thank you very much, Mr. Chairman, and Mr. Caruso, thank you for taking your time with us this morning, and preparing your always very thorough presentation for us.

One of the pressures on natural gas prices is the tremendous demand for natural gas on the part of electric utilities. And I wonder if you could give us some indication of whether you see any kind of changing in the long-term plans that utilities are making with respect to the fuels for their new generating units. Do you, for example, based upon natural gas prices today, at I think you said \$14 per million BTUs, see utilities beginning to look more toward coal? In their early planning, does coal play a larger role? You might also make reference to the new coal technologies that are now reaching commercialization, and in particular, integrated gasification combined cycle. American Electric Power and Synergy have now both announced plans to build commercial units for IGCC. And I am wondering if you are seeing a broader look at that technology by other electric utilities in the wake of those decisions by those two, and the fact that this new technology, which is far more environmentally friendly than the current pulverized coal technology, is now at the commercial stage, and is being utilized by two major utilities.

So, generally, what is the outlook? Is there going to be relief on gas because of a shift to coal?

Mr. CARUSO. Thank you, Mr. Boucher. The broad answer to your question is, we definitely see utilities taking another look at their fuel mix, and we anticipate, in our long-term outlook, that partly because of new technologies such as IGCC, and other cleaner coal-burning technology, that utilities will add new coal-fired power plants in the future. Most of the projects we are looking at are looking at about a 10 year lead time, so we are expecting much new before 2015. And of course, the energy bill, which you are very familiar with, did also provide some incentives for technologies such as IGCC, that will further enhance that.

The other area where we see a new look is nuclear, and when we come out with our new long-term outlook in the coming months, probably late November, early December, we will include new nuclear plants for the first time in our outlook, for the first time in many years. We have not had any prospects for new nukes for a number of years. We do think beyond the 2015, particularly to-

wards 2020, because of the longer lead time, we will have new nuclear power. So, in general, we do see, because of high natural gas prices, and because of the incentives from the Energy Policy Act, a shift slightly, not a dramatic shift, but a shift towards fuels other than natural gas. As you know, natural gas has comprised more than 95 percent of new generation capacity in the last seven or eight years, and we see that surplus of gas-fired, particularly combined cycle, turbine gas-fired plants, working its way through the system over the next 10 years, and when new investment decisions are made by utilities, they will be looking much harder at coal, nuclear, and in some cases, renewables also as a result of the EPACT '05.

Mr. BOUCHER. The report that you will put forward in December is going to analyze the longer term picture, in terms of the fuel mix for electricity generation. Did I understand that correctly?

Mr. CARUSO. That is correct.

Mr. BOUCHER. And as a part of that, you are going to analyze the potential for new nuclear plants to be a part of that mix. Are you also analyzing the potential for coal-fired facilities?

Mr. CARUSO. And coal. Yes.

Mr. BOUCHER. And—

Mr. CARUSO. All fuel sources, and alternative sources, as well.

Mr. BOUCHER. Right.

Mr. CARUSO. And we are going to incorporate, for the first time, the effects of EPAct '05, which is the one of the reasons, and the other reason is the higher natural gas price assumptions, which will clearly make a difference in investment decisions, not only in the electric power sector, but as someone mentioned, ammonium nitrate fertilizers for example, so heavily dependent on natural gas, there will be a huge shift outsourcing out of the country.

Mr. BOUCHER. All right. That is good, Mr. Caruso, and I look forward to seeing that report. Let me shift now to gasoline. I note from your presentation today that in 2006, we can expect prices at the pump for gasoline to be on the order of about \$2.34 per gallon. That is a pretty substantial improvement from where we are now, but it is still a significant increase from what were the previous norms, the pre-hurricane norms. And my question focuses on the increase from the pre-hurricane norms to \$2.34 per gallon, which is what we expect next year. To what extent is that increase attributable, in your opinion, to a shortage of refinery capacity?

Mr. CARUSO. It is a combination of the continued expectation of a very tight world crude market. Therefore, our expectations are for, in this case, west Texas intermediate benchmark crude to stay in that \$63 to \$65 per barrel range that it is selling at today. That is the number one factor. The second one is this increased pressure on the refineries, and the difference between the crude price and the gasoline price, the so-called crack spread, has widened, and we expect that to stay wide, because of the inability of our refiners to meet the demand for not only gasoline, but probably even more critically, diesel fuel and other middle distillates.

Mr. BOUCHER. And aviation fuel.

Mr. CARUSO. And aviation fuel, exacerbated by—

Mr. BOUCHER. And so—

Mr. CARUSO. —the new requirement that refiners now must produce ultra-low sulfur diesel fuel, beginning in the middle of '06. We have some concerns about their ability to do that, and if they do it, it certainly will be done at a higher cost and price.

Mr. BOUCHER. Have you done an analysis, or do you intend to do one, of whether or not the refinery companies, the petroleum companies and others, that build and operate refineries, intend to add capacity, in light of that increased demand?

Mr. CARUSO. Yes, we follow very closely, and indeed, we put out a report annually on what companies—

Mr. BOUCHER. Well, what—

Mr. CARUSO. —additions to refinery capacity—

Mr. BOUCHER. What conclusion can you make about that today?

Mr. CARUSO. Well, I would think, first of all, what we have been saying is that the typical refiner will add capacity over time at existing facilities, by adding these conversion units, and indeed, in some cases, overall primary distillation capacity. But we were not expecting any new, grassroots refineries to be built in this country. That is what we said last year.

Mr. BOUCHER. Well, it really matters less about whether it is a Greenfield build, or an extension of an existing facility, as long as the capacity that is necessary gets added. Let me just say that there is a fair amount of skepticism about whether the refineries really intend to add that capacity, in light of the fact that it has been fairly widely reported that over the period from September '04 to September '05, that one year period, the profits of refineries in the U.S. increased by 255 percent. I would be very interested to see any projections you are making as to the amount of capacity that actually is going to be added when there are a lot of people who are arguing that refiners are making more money by refining less gasoline, and if you add capacity, that means your profit per gallon decreases, so the financial incentives would appear to be, at least arguably, keep the current capacity, and just let the price continue to rise. Do you have any response to that?

Mr. CARUSO. Sure. Our long-term outlook was we expected, first of all, starting with history, we have added about 3 million barrels a day of capacity in this country in the last 20 years. There is a lot of focus on the fact that 300 refineries in 1980 is now down to 149 refineries. What is not focused is those 300 refineries had the capacity to produce about 18 million barrels a day of oil, and those 150 refineries that have been closed, of course, have reduced that, but the existing 149 have all, many of them have been expanded, so that we are now back to about 17, so it has been like a U shape. We have added capacity at the existing facilities, even though many small refineries have closed.

The second thing is we expected that the profit incentive will be increased by the recent margins, not just the one year, but we have now had about three of the last four years have been very good years for the downstream, and the profit incentive is there, and—

Mr. BOUCHER. Is there to build new capacity?

Mr. CARUSO. —is there to build additional capacity, and we think it will happen, because although you presented one side of it, which is if we hold back on capacity, prices will go up. The other side of it is, if we would make the investment, we will increase our market

share, and I think that incentive, in the history of the oil industry, has outweighed the other one.

Mr. BOUCHER. Okay. Thank you, Mr. Caruso. My time has expired. Thank you, Mr. Chairman.

Mr. HALL. Thank you, Mr. Boucher. The chair recognizes the chairman of the Energy and Commerce Committee, the gentleman from Texas, Mr. Barton.

Chairman BARTON. Thank you. Mr. Caruso, back in 1981, when our refinery capacity was at its peak, which is, I think, 18.1 million barrels a day, what was our demand for refined products then?

Mr. CARUSO. 1981.

Chairman BARTON. Wasn't it less than 18 million barrels a day? It was about—

Mr. CARUSO. I would have to check, but it was probably was less.

Chairman BARTON. I think it was about 16.

Mr. CARUSO. Yeah. Probably was about—

Chairman BARTON. I think we had about a 2 million barrel a day surplus capacity. So, you know, we closed all these refineries, and now, you say 17 million. My number is about 16 million. But what is our demand for refined products today?

Mr. CARUSO. 20.5.

Chairman BARTON. 21.

Mr. CARUSO. Yeah.

Chairman BARTON. 21 a bigger number than 16 or 17?

Mr. CARUSO. Even the head of a statistical agency has to agree with that.

Chairman BARTON. So, when we had the most refinery capacity in this country, we had less demand than capacity, and so margins were not good, but it was good for the American consumer, because we got a lot of competition, for a lot of different reasons. A lot of those refineries that were closed were really old refineries. They were in Pennsylvania in Texas, from the late 1890s, and small, 50,000 barrel, 25,000, so it is a good thing that a lot of those refineries have closed, from an environmental position, and an efficiency position, but since we have not built a refinery in this country in 30 years, we are now in a situation where we have a demand that is over 20, and a capacity that is 16 or 17, so we have this capacity gap, and Mr. Boucher is 100 percent right that demand has continued to go up, and the profitability of the existing refineries has gone up. So, we need to, and I think Mr. Boucher thinks, his alternative, he had a strategic refinery alternative in the Democratic substitute, so we both agree that we need more refineries.

I want to ask you a question. It costs about \$1 billion per hundred thousand barrels of new refinery capacity, whether it is brand new or expanded. So, that is basically \$10 million, 1,000 barrels. If you had \$1 billion that you wanted to invest, and you looked at the refinery situation in this country, and said you know, there is some money to be made. Now, if I start the process, it is going to take me nine or ten years to get the permits. So my billion dollars is just going to sit around. Or, if the poor little old bill that passed the House a week and a half ago by two votes were to become law, and we get an expedited permitting procedure that a governor can opt into, that you get all those 40 some odd permits, you still have to get them, but we consolidate with the Department of Energy and

the EPA, so that you get concurrent review and timelines, and current law is actually met, if it says the permit decision has got to be made 90 days or 180 days, you got to do it. That is current law. That is not new law. That is current law. That you could get a permitting decision within a year, six months to a year, what makes you more likely to want to invest your billion dollars to build a new 100,000 barrels, a permitting process that takes ten years, or a permitting process that takes a year?

Mr. CARUSO. Regulatory uncertainty has clearly been one of the impediments, in addition to the very low rate of return on capital invested in the—

Chairman BARTON. But wouldn't you be more likely—

Mr. CARUSO. Definitely.

Chairman BARTON. —to make the decision, if you would get a decision within a year, as opposed to within nine or ten years?

Mr. CARUSO. Definitely.

Chairman BARTON. That is just common sense.

Mr. CARUSO. Yes, sir.

Chairman BARTON. Well, I just wanted to make that point, because we, as you pointed out, you know, what you call it, the crack gap, is going up. You know, crude oil prices are going up, but retail prices are going up more rapidly. It is because we have got a refinery constraint in this country. And if we are going to import our way out of it, you have got to pay the people from overseas. You have got to pay them all their transportation costs, plus the profit on top of that. So, we are not going to lower refined product prices by imports. If we are going to get that gap back down, we are going to do it by building more refineries in this country.

And I want to ask you some questions about natural gas. What, if anything, has been done in this country to expand underground natural gas storage capacity in the Midwest and the Northeast?

Mr. CARUSO. There has been some gradual expansion by the owners of storage facilities, but it has been motivated by commercial—

Chairman BARTON. What is some? What percent of underground—

Mr. CARUSO. I don't have the specific number, but we have about 4 trillion cubic feet of capacity existing in working gas in storage for this winter.

Chairman BARTON. Can EIA put a number on—

Mr. CARUSO. Yeah. We have the numbers. I can certainly provide that for you.

Chairman BARTON. Isn't it true that if my producers in Texas and everywhere in the country produced as much as they could, we would still have a price problem, because we can't store the natural gas for the demand that exists in the Midwest and the Northeast?

Mr. CARUSO. I definitely think we would still have a price problem, because the problem is, ultimately, we are not producing enough new gas to meet the growth and demand in the last decade or so.

Chairman BARTON. I mean, if you were me and this committee, would you consider natural gas storage an issue we need to try to address in some way, underground natural gas storage, or even aboveground natural gas storage? Don't we need to get more stor-

age capacity closer to the markets, so that if we can get the production capacity up, you have to store in the summer months, in the fall months, so that you have it available for the peak winter months? Isn't that a true statement?

Mr. CARUSO. That is true, and I would say it is certainly worth studying. I think it is the whole system. It is from the wellhead through the burner tip.

Chairman BARTON. Okay. Are you aware of what the prospects are for some of these LNG projects being permitted? Do we have any that are close to being approved? I know we got about 50 that are under consideration.

Mr. CARUSO. Yeah, there is more than 50 under consideration, and I believe the last numbers I saw FERC and/or the Coast Guard, if it were offshore, have approved about five.

Chairman BARTON. So, we could see—when might we see a new LNG facility actually in operation?

Mr. CARUSO. You know, I believe the first—

Chairman BARTON. Two years from now?

Mr. CARUSO. —new regasification facility we have in our outlook is late '07 or early '08.

Chairman BARTON. '07, '08. And finally, what percent of the natural gas that is consumed in this country is consumed by electrical power plants for electricity generation?

Mr. CARUSO. I believe that is around 20 to 23 percent, but I will—

Chairman BARTON. So, that is 20 to 23 percent, put that in trillion cubic feet. Is that about 4 trillion cubic feet, 8 trillion cubic feet?

Mr. CARUSO. We are consuming about 22 trillion, about 80. Yeah.

Chairman BARTON. 80 trillion, so to follow up on what Mr. Boucher was saying, if we were to really revitalize the coal sector for power generation in, as you pointed out, the nuclear sector, that would take a lot of pressure off of natural gas prices, if we could go—you know, back in the 1970s, we had a Fuel Use Act that said you couldn't use natural gas to generate electricity.

Mr. CARUSO. Yeah.

Chairman BARTON. So, if we can do something to help Mr. Boucher's constituents in the coal regions, and get the nuclear industry, that would help our natural gas situation.

Mr. CARUSO. Yes, sir.

Chairman BARTON. Okay. And one last. Why do we have the price disparity on natural gas prices by region, from a 61 percent to a 31, 34 percent of total expenditures, and from a 55 percent to a 29? Why such a big gap in the average price increase, when natural gas, I would think, would tend to be a fungible commodity? Is that a supply constraint situation?

Mr. CARUSO. I believe it is a combination of supply constraints, and in this case, these are the residential consumers, and it also affects the pace at which the individual local utilities—

Chairman BARTON. So different—natural gas at retail is regulated, so is this a regulatory issue?

Mr. CARUSO. Yeah. It is partly regulatory. It is partly the earlier point you mentioned, in terms of regional differences.

Chairman BARTON. Could your staff elaborate on that, and give us—I would like a little more definition as to—I don't argue with the fact that prices are going up. I mean, that is a given. But it is somewhat puzzling that we are having that wide of a disparity of price increase.

Mr. CARUSO. Yes.

Chairman BARTON. Okay. Thank you.

Mr. CARUSO. I will provide more detail on that for the record.

Chairman BARTON. Thank you.

Mr. CARUSO. Mr. Chairman.

Chairman BARTON. Thank you.

Mr. HALL. Gentleman yield back. I thank the chairman. The chair recognizes Mr. Allen.

Mr. ALLEN. Thank you, Mr. Chairman.

Just a couple of comments, Mr. Caruso, and then, I have a couple of specific questions for you. I let the chairman's remark go by, but I can't let all the remarks that were made earlier go by without some response, because several of my friends on the other side of the aisle were suggesting that the whole problem here is we have to do more drilling, and certainly, we need to do more drilling for oil. We have to increase our supplies of natural gas, but the implication that several of them made was that if only we drilled more, more oil and more natural gas, well then the people who are getting LIHEAP today, to take one example, wouldn't need it, because the prices would be lower. And you know, from where we sit, that is the most bizarre thinking, to be kind, because if you are thinking of someone, there is, I would suggest, no evidence to suggest that the price of oil, or the price of natural gas, can be driven low enough so that people earning \$11,000 per year, living on \$11,000 per year, can get by without some sort of subsidy. And that is where I think we get, you know, the two sides here get crossways with each other.

Some day, we will have an energy bill which is as energetic on renewable fuels and conservation as it is on subsidies to the oil and coal industry, but we haven't had that particular bill yet, and when we do, we ought to make some real progress. So, we do have a different approach.

Now, what I am really concerned about is a couple things. One is, the suggestion was also made that if we only drilled more natural gas, then the price would come down. Well, in the past, when there has been more natural gas available, then we have turned to electric generation from natural gas. You said it is 20 to 23 percent of the natural gas supply. I guarantee you that keeps the price up. The bottom line is, with respect to oil, we have 2.5 percent of the world's oil reserves, we have 4 to 5 percent of the population, and we consume 25 percent of the oil in the world. You can't drill your way out of those numbers, no matter how much you do, though more supply is appropriate.

My immediate concern, Mr. Caruso, is the effect of the narrow margin of natural gas supplies on the electric grid, particularly in the Northeast. Natural gas producers are required to provide product to their gas utility customers, but they are not under obligation to provide product to electric utilities. Especially in the Northeast, this often results in a significant reduction in wattage of gas-fired

power plants. They may be taken offline in the winter months. And so, can you comment on the effect that tight natural gas supply margins could have on electric supply, particularly in the Northeast? Is there a risk of disruption in the electricity marketplace?

Mr. CARUSO. Our outlook does not anticipate that there was, and we certainly look at that closely, but we do not anticipate that. There may be some, as you point out, interruptible customers that choose to shift to a different fuel, where that is possible, but that is rather limited in the Northeast.

Mr. ALLEN. It is very limited in the Northeast, because I think virtually all of the power plants constructed in the Northeast in the last 10, 15 years have been natural gas.

Mr. CARUSO. Correct.

Mr. ALLEN. And there is a related issue, which is that if we, if the response of people in the Northeast, say, is to use space heaters and not their furnaces, then we may find an increase in demand for electricity in the Northeast, and I wondered if, I mean, I suspect that you may have the same response, but it is an issue.

Mr. CARUSO. Yeah. We are worried about it. As you can appreciate, the peak demand for electricity is, on a national basis, is in the summertime, for air conditioning, mainly because the space heating is—although it is used at about 29 percent of our households, it is not the majority. So, I think in a normal winter, and we are not anticipating the kind of behavior you just pointed out, we would expect there would be sufficient generation capacity. But clearly, it is something that the utilities would be watching closely.

Mr. ALLEN. I would encourage you to take a look at it, because this won't be a normal winter in the Northeast, because the rapid increase in price for home heating oil has my constituents, businesses, and homeowners very, very worried. Our thermostat's going down, I know, but you know, we don't really know what kind of a winter it will be.

And one last point. If you have data comparing the 05-06 projections to the 03-04, not 04-05 winter, but the 03-04, that would be very helpful, because that was a cold winter, and if we have another one like that, it could be quite serious.

Mr. CARUSO. We have every year, and certainly, I would be happy to provide that for the record.

Mr. ALLEN. Okay. I would appreciate it. I see my time has expired. I yield back, Mr. Chairman.

Mr. HALL. The gentleman complete? Thank you. The chair recognizes Mr. Shimkus, the gentleman from Illinois.

Mr. SHIMKUS. I hate doing that. I need to turn off the microphone before I move it over. My friend, Mr. Allen and I, continue to debate this over the years, and I imagine we will continue to debate it from decades to come.

But I have to remind him and, in the first energy bill, we increased the authorization for LIHEAP to \$3 billion. We did, Bobby Rush's amendment. I also have to remind him that we increased, in the last refinery bill, we increased the Northeast Home Oil Heating Reserve from 2 to 5 million barrels. It is in there.

So, we made the attempts. But it is—again, I will go back to the premise. I don't mind trying to debate this issue. Natural gas, if you are from a region of the country that uses natural gas to gen-

erate electricity, which is because we didn't have them diversify the energy portfolio, and then you do not allow exploration for natural gas off your coast, I find that really challenging to accept how in the world do we move to a position where this whole debate of we want to use electricity, we want to use gasoline, but we don't want to look for it. We don't want to explore it. We don't want to drill it. I mean, we just—it is tremendously frustrating. 85 percent of our outer continental shelf is off-limits. And in those 85 percent, there are natural gas reserves. And we ought to be there. And we ought to encourage that.

We are going from, in 1981, \$1 per 1,000 cubic feet. I don't even know the terminology. It is now \$15. It is totally disruptive of our own prices. And what is our response? Let us give tax breaks to the businesses so they can afford high natural gas prices. Let us give home heating resources, so the poor—instead of saying let us get more supply, or let us change our electricity generation away from natural gas to coal generation. Oh, no, we don't want to do that. Okay. Let us move to nuclear power. Oh, no, we don't want to do that. Well, what do we want to do? How do we want to use energy in this country, and where do we want to get it from? And that is our frustration, and I will take this debate anywhere in the country, with these principles.

I want to ask, do we see an easing up of the demand for natural gas in the future?

Mr. CARUSO. Well, I think that very much depends on the price, and as you pointed out—

Mr. SHIMKUS. You mean the market might have some role in this?

Mr. CARUSO. I think it would have a big role.

Mr. SHIMKUS. In fact, it does, doesn't it?

Mr. CARUSO. Yeah.

Mr. SHIMKUS. What is happening to the natural gas generation of electricity in this country, because of the high natural gas prices?

Mr. CARUSO. Well, we do anticipate there will be a reduction in natural gas demand this year.

Mr. SHIMKUS. So, those environmentalists who like electricity generation by natural gas, but will not allow us to get to the outer continental shelf, are actually hurting their debate, because of the high natural gas prices, we are going to turn off the electricity generations. The market is going to turn it, because the price is going to be too high.

Mr. CARUSO. In many instances, it is not as economically efficient to dispatch even new natural gas-fired combined cycle plants, in particular, in the South and Southwest. So, that is happening. Nuclear and coal are the base loads, and those will be dispatched first, and at a lower cost.

Mr. SHIMKUS. In fact, we are seeing great interest in new coal generating facilities, and of course, those of us from coal regions, the natural gas prices are going to probably help renew coal generation in this country, which is great for America, and we are obviously very excited about that.

I mean, there are so many issues in this debate. I do want to ask about two provisions. Have you done any analysis on the future,

part of the refinery bill was defining coal to liquid technology as refineries, and then, if that is the case, in your analysis and the future analysis, it would probably be very helpful to say what are our coal reserves, and how would new technologies, because of the high prices, how do we roll that into, you know, in essence, fuel production for automobiles? We do know there is foreign, you know the Fischer-Tropsch technology and now, because of the high prices, that is going to be affordable and within reach. So, that should be part of it. Also, the whole debate about the renewable fuels, and the component of renewable fuels. I come from the Midwest, and have been very, very fortunate, because of the refineries that have been built have been renewable refineries. The new ones, we have seven in Illinois, we have nineteen on the drawing board, and I am paying, on average, \$0.30 less a gallon to fill up my Ford Explorer with 85 percent alcohol-based fuel, and hopefully, the other states will be able to take advantage of that.

So, is there a renewable fuels component in your calculations?

Mr. CARUSO. Yeah. We do look at all the fuels, including renewables, and in particular, with the higher price assumptions that we did even last year, with the high, we did four price assumptions. In the highest one, you do get a substantial amount of coal to liquids coming on-stream at about \$40, between \$40 and \$45 crude oil costs in real terms, over the long term. And we will be looking at that even more carefully this year, because we will be raising our, as you can imagine, our price assumptions yet again in our long-term outlook. So, it has an impact on coal to liquids, and it has some impact on renewables, although most of the renewables in our outlook last year were as the result of renewable portfolio requirements on a state basis. There are about 14 states that have renewable portfolio requirements.

Mr. SHIMKUS. And that is mostly in electricity generation. You are not talking about the fuel—

Mr. CARUSO. Almost all of it—

Mr. SHIMKUS. Right.

Mr. CARUSO. —in electricity generation.

Mr. SHIMKUS. All right. Well, I thank you. Mr. Chairman, I have gone over my time. I appreciate it. Thank you, and I yield back.

Mr. HALL. I thank the gentleman. The chair recognizes the gentlelady from California, Ms. Solis.

Ms. SOLIS. Thank you, Mr. Chairman.

Mr. Caruso, I wanted to draw your attention, we have been talking a lot about refineries and capacity, and I wondered if you were familiar with a case in Arizona, Yuma, and I want to just start by saying I would like to ask unanimous consent to submit for the record an article by the Yuma Sun, and also, an article from the Arizona Clean Fuels, an article that is printed on their website.

If I can request unanimous consent to have that submitted for the record.

Mr. HALL. Without objection.

[The information follows:]



LOCAL NEWS

Refinery awaits green light from Mexico

BY JONATHAN ATHENS, SUN STAFF WRITER

Oct 13, 2005

Deal maker or deal breaker?

In two weeks, Arizona Clean Fuels may know the answer when it comes to its plans to build a controversial oil refinery in Yuma County.

The Phoenix-based company, which has been in negotiations for three years with Pemex, Mexico's state-owned oil company, is seeking permission from Mexico's energy secretary to move crude oil through Mexico, said ACF Vice President David Treanor.

Without that permission, the company will not be able to seal a deal for crude oil with Pemex. And without Pemex's guarantee to supply oil to the refinery, ACF will not be able to raise the \$3.2 billion needed to build it, Treanor said.

Pemex did not return calls placed by The Sun seeking comment.

"It has the potential of being a deal killer, but it doesn't look like that's going to happen," Treanor told The Sun on Thursday.

Treanor said senior level Pemex executives and some in the Mexican federal government, including newly appointed Mexico energy secretary Fernando Canales, are supportive of the pending crude oil deal with ACF.

Canales is the third person Fox has appointed in the past two years to serve as secretary of energy and that high turnover, Treanor said, has delayed ACF's negotiations for "at least one year."

Under the tentative agreement, in exchange for Pemex crude oil, ACF would pipe approximately 50,000 barrels per day of gasoline, diesel and jet fuel back to Mexico.

The proposed 150,000 barrel-per-day refinery would be the first refinery built from the ground up in the United States in nearly 30 years.

Treanor said he is tentatively slated to meet in two weeks with Mexican President Vicente Fox who, according to Treanor, "is very interested in the project."

Fox has called for reform in his country's energy policies. Whether the Mexican

Congress will approve the Fox administration's 10-point reform proposal, some of which would require changes in the Mexican constitution, remains in question.

The Mexican government is heavily dependent on Pemex, and the Mexican congress controls Pemex's budget.

Specific to ACF's plans, one point of Fox's proposed reform would allow for foreign ownership of pipelines.

"We've got to have a pipeline, we've got to have infrastructure to move that crude," Treanor said. Even if the Mexican congress does not approve Fox's proposed reforms, Canales can still give the go-ahead for such changes, he said.

Approval by Mexico's congress "is more of a public relations help to us," Treanor said.

Treanor said he expects Canales will announce a decision in two weeks.

If the Mexican government clears the way for ACF to move forward with their proposed agreement with Pemex, ACF still must successfully obtain rights of way for pipelines in Mexico, obtain dozens of operating permits there and in the U.S., and raise the investment capital to build the refinery and the pipelines.

In addition, the company must also clear a yet-to-be conducted environmental assessment of the area in Wellton where they want to build the refinery.

They have until November 2006, according to the terms of their state-issued air permit, to begin construction of the refinery or that permit will expire.

http://www.arizonacleanfuels.com/news/2005/092505_AZR_ACF.htm

Refinery planners still talking with Mexico

Arizona Republic
Ken Alltucker
Sept. 25, 2005

It would seem to be a perfect time to invest in a new refinery.

With gas prices flirting with the \$70-a-barrel mark and the nation's refining capacity strained, refiners are raking in huge profits. Further highlighting the need for more capacity are hurricanes that have battered and disrupted Gulf Coast refinery production this month.

A local group, Arizona Clean Fuels, is seeking to build the nation's first new refinery in three decades. After securing an air-quality permit this spring for a 150,000-barrel-a-day refinery, the group is courting investors to fund the \$2.5 billion project, planned at an old citrus grove 40 miles east of Yuma.

Backers of the ambitious project point to a couple of events in recent weeks that brighten prospects for an Arizona refinery.

Mexico President Vicente Fox has pushed for a change in Mexico's laws that would allow foreign investors to tap Mexico's rich oil reserves. Such a change would allow the state oil company, Pemex, to team with private companies to exploit reserves in the Gulf of Mexico and Baja California.

Glenn McGinnis, chief executive of Arizona Clean Fuels, said his group has had ongoing talks with Mexican government officials about securing crude oil from Mexico. The Arizona group would ship refined fuel back to Mexico, which must import gasoline because of a lack of refining capacity.

Fox's proposals "are in direct support of our project," McGinnis said.

Yet Fox's initiatives have encountered opposition from Mexico's Congress, wary of opening up its natural resources, which account for a significant portion of the government's budget.

Another glimmer of hope for the Arizona group comes from a bill introduced recently by Republican Sen. Jon Kyl of Arizona.

McGinnis said Kyl's bill is another incentive for investors who are reluctant to park money in a project that won't begin producing refined gasoline, diesel and jet fuel before 2009.

Kyl's legislation would allow investors to write off the cost of a new refinery the first year the project starts production. The recently passed Energy Bill has a less aggressive timeline, calling for a 50 percent write-off the first year.

"The companies would realize the return on their investment faster," McGinnis said.

McGinnis said his group still doesn't have any signed agreements with investors or refining companies that are willing to partner with the Arizona group.

Some foreign interests have expressed interest in either building or partnering with a U.S. company to build a refinery.

Ms. SOLIS. And I would like to just go into this discussion about the refinery. We have talked about the fact that there hasn't been any refineries built in the last 30 years, and the one that was permitted actually was in Arizona, Yuma, and this was back January 16, 1992. The Arizona Department of Environmental Quality actually issued a permit. They did not move ahead at that time. They said that they didn't have enough financing. They let that go dormant, and then, they come back April 14, 2005. The Arizona Department of Environmental Quality again, then, issues another permit. Now, we are finally hearing that they are looking back at plans now to open it up, but my understanding is that they are looking for financing from the Mexican government, from President Fox, and that they have a plan to transport, I would say, maybe half of the capacity of that refinery, whatever they are able to provide, to Mexico.

Do you know anything about that?

Mr. CARUSO. I am not familiar with that specific request for financing. I can say that we export a fair amount of gasoline to Mexico currently, so it fits in with the current situation.

Ms. SOLIS. Would you know how much, offhand? What are we talking about here?

Mr. CARUSO. I have it. It is about 100,000 barrels a day.

Ms. SOLIS. And what is that? What does that—

Mr. CARUSO. Well, we consume 9 million barrels a day, so it is relatively small, compared with our total consumption, but it is our largest recipient of our exports of gasoline. Mexico is our largest. And most of that comes from the Gulf Coast refineries, some of which have been, have, or continue to be shut in. So, it is—the reason—I had a chance to look at that more carefully lately is looking at the impact of the hurricanes on those refineries, part of which is the exports of gasoline to Mexico.

Ms. SOLIS. One of the concerns I have is that there has been statements made that the fact that we haven't had refinery capacity is because of environmental regulations, when in fact, we are really looking at financing here, and the compression of these refineries, and the fact that those that are in operation, that do exist, are the ones that are actually reaping these profits. And I just find it ironic that somehow, now, we are trying to negotiate with Mexico to ask them for support, and in that agreement, that we will also provide them with, I believe, half of the capacity that would come out of that refinery in Yuma would go to Mexico.

I think the public is not fully aware of these items that are coming to us, and I would love to have more detail from you, Mr. Caruso, about any other projects like that that you may be aware of, or not aware of.

Mr. CARUSO. Well, financing has been a major issue with respect to refinery projects. I mean, most sources of finance in the last 20 years have not seen that to be a worthwhile use of capital, because of the low rate of return during the '80s and '90s. That may be changing now, with the higher margins. And the Yuma case is a specific example I have heard from the financial community that the main obstacle, in addition to permitting, was financing of the Yuma project.

Ms. SOLIS. That was the main obstacle?

Mr. CARUSO. Yes.

Ms. SOLIS. Thank you very much. I yield back.

Mr. HALL. All right. I thank the lady, and Mr. Otter, we will recognize you. Apparently, you will be the last witness.

Mr. OTTER. Thank you, Mr. Chairman.

Mr. HALL. We are expecting a vote in the next five, ten, or fifteen minutes.

Mr. OTTER. About two years ago, the Speaker of the House put together what he called the HEAT Team, which was the House Energy Attack Team, and the questions that we were asked to answer, there was ten of us, I think there was ten of us on the committee, and the question that we were asked to answer was how can we keep home heating bills lower? How can we get affordable natural gas was the primary question.

So, we went about the business of trying to assess that by having twelve meetings throughout the United States. At nearly every meeting, one of the questions that continued to come up through the testimony was why do we have such terrible restrictions on drilling and exploring on Federal lands, and not only drilling and exploring, but also accessing right of ways through Federal lands for pipelines, for power grids, and that sort of thing.

And I remember the testimony that we received in Colorado, at the Colorado School of Mines, which was particularly interesting to me, because that is where we got some good, hard facts. In other words, in the Great Basin, that is between the west bank of the Mississippi River and the toenails of the Rockies, there is estimated to be 193 trillion cubic feet of natural gas. Most of that, of course, lays under ground that is hard to access, because it is either BLM or Forest Service, or some kind of government ownership, and therefore, an environmental restriction, or you are in for a lot of environmental lawsuits.

The testimony that was particularly interesting to me was whether it was in Colorado or Wyoming. It was estimated that it takes 15 days to get a drilling permit to drill on private ground, 15 days, and the cost of that permitting process is about \$1,000 a day, 15 days on private ground. If you are wanting to drill on the state of Idaho public lands, it took about 30 days, or Wyoming public lands, or Colorado public lands. Over 500 days to drill on U.S. land. Now, some of it was three or four or five or six years, because of the lawsuits that ensued, development and exploration.

Would you agree with those figures, 15, 30, and over 500 days?

Mr. CARUSO. I have heard similar numbers. I can't subscribe to those specifically, but those are not out of the range of which I have heard from private sector.

Mr. OTTER. If it stands to reason that we have got a reservoir, a known block of gas, of 193 trillion cubic feet, would you agree with that, in the Great Basin?

Mr. CARUSO. I think that sounds about right. I have the actual specific numbers that the Department of Interior has published, and the USGS.

Mr. OTTER. What I would like to do, Mr. Caruso, is have you and your staff put together the amount of known, identified gas blocks, whether it is in the Gulf, or anyplace in the U.S. intercontinental shelf, or if it is within the Great Basin, or whatever.

Mr. CARUSO. Sure.

Mr. OTTER. And give us, and Mr. Chairman, for the record, I would like to have that submitted for the record on this hearing.

Mr. HALL. Without objection, it is submitted.

Mr. OTTER. Give us the total amount of gas that is within the dominion of Federal lands, or is off-limits as a result of Federal regulation or rules. In many cases, we found out that Congress hadn't done anything, and so, either the Environmental Protection Agency, through the Endangered Species Act, the Army Corps of Engineers, through the Wetlands Act, or some government bureaucratic office, through some rules that they had promulgated themselves, and Congress had never questioned and tested and vetted, that actually put these areas—but my point in bringing all this up is there wasn't one industry interest group that came before the HEAT committee in all our hearings that said that they wouldn't rather spend \$15,000 on a drilling permit or \$30,000 on a drilling permit, as opposed to a half a million.

And so, I think, you know, perhaps I ought to make a motion, too, Mr. Chairman, to put in the record, in this record, Economics 101, the entire textbook on Economics 101, so that we can get away from this silly debate as to whether or not—but I will not make that motion.

Mr. HALL. It would probably die for—

Mr. OTTER. But I think it is—

Mr. HALL. It would probably die for a lack of a second.

Mr. OTTER. Probably. I couldn't get a second out of the chair?

Mr. HALL. Well, you might.

Mr. OTTER. Thank you, Mr. Chairman. Thank you very much, Mr. Caruso, for being here.

Mr. HALL. And I thank you and Mr. Caruso, we thank you. You are one of the few witnesses that has had total respect from both sides. No one has doubted your conclusions, or argued with you. You are unusual and very resourceful, and we thank you.

Mr. CARUSO. Thank you, Mr. Chairman.

Mr. HALL. And thank you for your time. We are adjourned.

[Whereupon, at 12:05 p.m., the subcommittee was adjourned.]

[Additional material submitted for the record follows.]

QUESTION FROM REPRESENTATIVE HALL

- Q1. In light of supply disruptions caused by Hurricanes Katrina and Rita, calls are being made to stockpile refined product in a refined product reserve, rather than focusing on increasing overall refining capacity. How much total infrastructure would a 47 million barrel refined product reserve require and what would be the total estimated costs of construction and operations? What are the technical difficulties involved in such an operation, for instance in overcoming loss of gasoline volatility issues? As that amount would provide America with less than a weeks worth of product reserves, how effective would that reserve be in mitigating gas prices?
- A1. Your questions concerning issues of a refined product reserve are important but difficult to answer without making specific assumptions concerning the proposed product reserves. The two recent hurricanes, and the damage they left in Gulf coast energy infrastructure, have occasioned some concern about the concentration of energy facilities in storm-prone areas. Possible remedies include: incorporating better protection against storms into the design and reconstruction of existing facilities, diversifying the location of new capacity, expansion of product reserves held in either private or public ownership, or simply building greater redundancy of energy infrastructure. Unlike SPR storage of crude, complicating factors in terms of gasoline storage include the need to "turn over" the product on a fairly regular basis and the boutique fuel issue, which would entail ascertaining how much of which kind of gasoline should be stored in which areas of the country. We have been carefully considering all options as we assess the pace of recovery from Hurricanes Katrina and Rita. We remain convinced that the proper level of long-term investment in energy infrastructure is best determined through private decision-making influenced by market signals.

QUESTION FROM REPRESENTATIVE HALL

Q2. What problems would five refined product reservoirs, spread across the country, have in delivering refined product nation – wide in a time of gasoline shortage? Could such a system deliver enough product in a timely manner?

A2. Subdividing a reserve and locating it near end users has advantages and costs.

The main advantage is elimination of the vulnerability associated with the transportation system from a centralized storage location to the consuming areas.

The programmatic cost of regional storage is the loss of flexibility to take the product to whatever part of the country may need it. For example, a regional reserve located in Virginia would provide no help if a problem surfaces in the Midwest. In general, the location of reserves should take advantage of the already existing infrastructure for moving refined products.

QUESTION FROM REPRESENTATIVE HALL

Q3. Does the United States currently hold reserves of refined product, through private investment or otherwise, and if so, how much? What role did those reserves play in mitigating the supply shortages seen after Hurricanes Katrina and Rita? Were there any factors that prevented utilization of those reserves?

A3. In July of 2000, the U.S. established a 2-million-barrel home heating oil component of the Strategic Petroleum Reserve in the Northeast. This portion of the Strategic Petroleum Reserve was converted to the Northeast Home Heating Oil Reserve, as authorized by the Energy Act of 2000. The intent was to create a buffer large enough to allow commercial companies to compensate for interruptions in supply or severe winter weather, but not so large as to dissuade suppliers from responding to increasing prices as a sign that more supply is needed. Two million barrels would augment commercial supplies for Northeast consumers, and is deemed adequate for approximately 10 days, the time required for ships to carry heating oil from the Gulf of Mexico to New York Harbor. Draw-down of this reserve was not necessary in the aftermath of the hurricanes and we are aware of no factors that would prevent utilization of these reserves in the winter months.

Private inventories rise and fall according to market conditions. Since the Government has no control over private inventories, all of those inventories should be considered to be working inventories and not reserves in any strategic sense.

QUESTION FROM REPRESENTATIVE HALL

- Q4. Can you provide an estimate of how much the proposed Fall River, Massachusetts liquefied natural gas project, if built, would reduce prices of natural gas in Northeast?
- A4. The Energy Information Administration estimates that a Fall River facility, with capacity of 800 million cubic feet per day, opening in 2010, could reduce natural gas prices in the Northeast on average by 8 cents per thousand cubic feet in 2004 dollars from 2010 to 2030. This estimate is based on the assumption that consumption does not increase in response to the price reduction and that the facility will operate at an annual utilization rate of 70 percent. A key assumption is that the price for the liquefied natural gas will be based on the market price of natural gas in the United States.

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