S. HRG. 109–510

DISCUSSION ON AGRICULTURAL TRANSPORTATION AND ENERGY ISSUES

HEARING

BEFORE THE

COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY UNITED STATES SENATE

ONE HUNDRED NINTH CONGRESS

FIRST SESSION

NOVEMBER 9, 2005

Printed for the use of the
Committee on Agriculture, Nutrition, and Forestry

Available via the World Wide Web: http://www.agriculture.senate.gov

U.S. GOVERNMENT PRINTING OFFICE

28–421 PDF WASHINGTON : 2006

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
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DISCUSSION ON AGRICULTURAL TRANSPORTATION AND ENERGY ISSUES

WEDNESDAY, NOVEMBER 9, 2005

U.S. SENATE,
COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY,
Washington, DC.

The committee met, pursuant to notice, at 10:26 a.m., in room SDG–50, Dirksen Senate Office Building, Hon. Norm Coleman, presiding.

Present or submitting a statement: Senators Coleman, Talent, Crapo, Harkin, Baucus, Lincoln, Stabenow, and Salazar.

STATEMENT OF HON. NORM COLEMAN, A U.S. SENATOR FROM MINNESOTA

Senator COLEMAN. This hearing of the committee on Agriculture, Nutrition and Forestry is called to order. Good morning, and welcome.

The transportation and energy challenges we face this year hit our farmers particularly hard. But the faults revealed of late show us how to move farming in the Nation forward. Both transportation and energy are basic inputs into almost every farm and business, so high transportation and energy costs go to the heart of our competitiveness as a nation. It goes to the heart of our ability to create jobs, improve our standard of living.

Our transportation system is the lifeblood of agriculture. U.S. agriculture is highly dependent upon the effectiveness of our integrated agriculture transportation system, and poor transportation directly adds to farmers' bottom lines. Truck, rail, and river must be able to work together to compete with each other and keep the price of transportation down.

Congress recently passed a Highway Bill to address many of our surface transportation needs, but we have yet to pass the Water Resources Development Act, known as "WRDA," to authorize crucial funding for our water infrastructure. Improving our river navigation will not only lower the cost of doing business for producers, but also mean less highway congestion and lower air emissions.

Hurricane Katrina certainly highlighted the importance of river transportation to farmers, which was devastating to the agriculture transportation system in and around the Mississippi Gulf region. Overall, this area is responsible for about 60 to 70 percent of U.S. world grain exports. It is estimated that one in four acres of U.S. production is destined for export channels; 60 percent of which goes through New Orleans to the Gulf.

Hurricane Katrina resulted in the extended closure of the ports of New Orleans and South Louisiana; and still we are operating at only two-thirds capacity. This tells me two things. First, USDA needs to continue working hard to mitigate the barge backlog. And second, Congress needs to pass WRDA.

Rail and truck transport have been critical for agriculture in this time of interrupted river traffic; but clearly, agriculture is heavily dependent on our rivers. And we cannot expect to compete with the rest of the world using locks over 70 years old, as we have on the Upper Mississippi River system.

But all of us here know transportation costs can't be just boiled down to infrastructure. The price paid for energy has an enormous impact. And beyond transportation, energy prices are taking a severe toll on our farmers. On average, energy accounts for about 13 percent of a farmer's expenses. The increased costs of fertilizer caused by high natural gas prices, combined with extraordinarily high diesel prices and high transportation costs, have been a true challenge for producers today, who can't raise their prices and are forced to absorb these very severe increases.

Katrina made a bad situation worse, as far as the price of oil is concerned. Before the hurricane, on August 26th, the price of a barrel of oil was 50 percent higher than a year earlier. Three days later, Hurricane Katrina sent these prices skyward. And even now, the prices for gasoline and diesel are about 50 cents higher than 1 year ago.

Right before harvest, farmers found themselves in the line of fire of these rising costs. Even before Katrina, farmers were projected to spend about $10.2 billion in 2005 for fuel, $2 billion higher than in 2004. Katrina has created a real crisis for our farmers in terms of energy costs, and I hope this issue will be addressed in any upcoming disaster aid package.

Clearly, our energy problems go beyond—far beyond—Hurricane Katrina. I want to share three numbers with you that I find very significant—a few numbers with you: 37, 53, 60, 74. These four numbers represent the percentage of petroleum supplies we purchased overseas in 1980, 2002, today, and the projected purchases we will make in 2025: from 37 to 74. We were addicted to foreign oil in 1980; wherein our costs double our dosage down the road.

I am serious when I say that this Nation's energy dependence is the greatest threat to our economy, our security, and our freedom that this Nation faces.

This energy crisis presents a tremendous opportunity for our producers to grow the fuel our Nation needs. If we think Katrina was bad for energy prices, just imagine what would happen if OPEC, which currently accounts for well over 50 percent of our oil supplies, shuts off the spigot. We must have energy independence, or risk losing our autonomy.

I believe our farmers are a major part of our energy independence. That is why I want to see 10 percent of our motor fuel come from renewable fuels by 2010. All new motor fuels sold in the U.S. should contain at least 10 percent renewable fuels.

And we need to be looking at a hard date for all vehicles to be able to run at E–85. Moreover, converting sugar to ethanol has been instrumental to Brazil's successful push toward energy inde-

pendence. We need a viable sugar-to-ethanol program here in the United States.

Coupling the energy production of our farmers with commonsense conservation initiatives, we can solve our energy dependence problem.

I want to hear from our witnesses today on what they think can be done to address our transportation and energy challenges. How do we become more efficient, more innovative, and more independent? What steps does Congress need to take to build an affordable, reliable, and environmentally friendly infrastructure system in this country?

I look forward to hearing from our witnesses. And at this point, I turn to my colleague from Montana, Senator Baucus.

STATEMENT OF HON. MAX BAUCUS, A U.S. SENATOR FROM MONTANA

Senator BAUCUS. Thank you, Mr. Chairman. Thank you very much for holding this hearing. I am also glad that you have assembled witnesses in order to discuss the energy crisis that the farmers and ranchers face in this country.

Just last week, when I was home in Montana, I knew in my head that rising energy prices are a real problem facing farmers and ranchers, but I was not prepared for the onslaught of criticism and, more importantly, just the deep worry and concern; the deepened lines in people's foreheads, just worrying about how high costs have increased—essentially, diesel fuel and natural gas—not only for producers individually, but also as it translates into fertilizer.

I mean, I have never in my 20–some years in the Congress experienced such a strong reaction about the problems the producers are facing due to the high energy crisis. I mean, this is a whole next category. This is really real.

As a consequence, a lot of banks are wondering whether they should give loans to producers; whether it is going to cost out. You know, banks are worried about their bottom lines, just like producers are. And the banks are very worried that they are not going to be able to meet their bottom line because producers won't be able to get the price they need or, more importantly, because the energy costs might just be too high for them.

And we all hear concerns from farmers. That is the nature of farming. But I have not heard anything quite this deep, this worrisome, as I have this time when I was home.

And Mr. Chairman, clearly, since we represent our people at home, we have an obligation to do something significant about this; not just talk about it, but do something significant that addresses the problems that they are facing.

I might say, too, that this is not only a domestic concern; it is an international concern. Data indicate that our costs are a lot higher than are the costs for farmers and ranchers and producers in other countries. Statistics provided by the American Chemistry Council indicate that the natural gas cost per million Btu is higher in the United States than in over 25 developed and developing countries around the world.

As of September, the United States had a $12.60 per-million-Btu price for natural gas, $12.60. At the same time, South Korea,

Japan, Taiwan—countries with no natural gas reserves—had costs around $5.25 per-million-Btu. Costs in Europe hovered around $7 per-million-Btu, as did prices in Mexico. Again, ours were $12.60. For those countries I mentioned—South Korea, Japan, and Taiwan—with no gas reserves, the costs are around $5.25 per-million-Btu; in Europe, about $7.

This clearly is a tremendous price disparity. So it is not just an internal problem; it is an international competitiveness problem.

Just coincidentally, Mr. Chairman, I was talking to a couple of mill operators, lumber mill operators, saying they can't compete, either; because natural gas prices in other countries are so much lower that the finished lumber, plywood, you know, other products that American producers are attempting to produce—we are being undercut overseas.

And we have got a lot more imports to the United States because of costs. It is not just Canadian imports and stumpage fees, low stumpage fees, that are a problem facing American mill operators. It is also very low production costs facing producers in other countries; so that we Americans trying to put a sawmill together and a plywood plant together and sell some product in the United States are finding that we are being undercut by foreign competition, mainly because of energy costs overseas that are so much lower than they are in the United States.

I have got some ideas of what the problem is and what is causing this, and we will get at that later, Mr. Chairman. But nevertheless, it is a real problem that we have to address.

I just hope that maybe our witnesses can shed more light on all of this because, clearly, we have got a problem. And clearly, we have got to do something about this.

And I just thank you for holding this hearing.

Senator COLEMAN. Thank you, Senator Baucus.

Senator Crapo.

STATEMENT OF HON. MIKE CRAPO, A U.S. SENATOR FROM IDAHO

Senator CRAPO. Thank you very much, Mr. Chairman. I agree with the comments that my colleagues have made so far today. And I want to thank you for holding this hearing to discuss the agriculture transportation and energy issues. These issues are of vital importance to Idaho farm families, and I appreciate this opportunity.

I want to first thank the Administration for substantial work done to assist with the recovery in the Gulf Coast. The challenges have been considerable, and the transportation disruption ripples through the agriculture industry far beyond those immediately impacted by the hurricanes.

I look forward to hearing more from Dr. Keith Collins today regarding the details of USDA's efforts.

As Idaho is a landlocked state, with a modest population and substantial distance to markets, the Idaho producers have limited shipping options. They face the same kinds of difficulties that Senator Baucus has just described from our neighboring state, Montana. And I am sure Colorado and others out in the West have the same types of experiences.

I am consistently hearing from Idaho agriculture producers, who are growing increasingly frustrated with the limited availability and high cost of rail, truck, and barge service in Idaho.

Specifically, much of the concern is focused on the cost of rail shipment and the limited availability of a consistent supply of rail cars to get their products to market. This is a real problem in Idaho and other states with similar challenges, and I support efforts to reach workable solutions.

Additionally, U.S. producers already face enormous input costs, and I am deeply concerned that the cost of production is increasing even more through the rising cost of fuel. High fuel prices are resulting not only in higher costs around farm equipment and shipped goods to markets, but also in rising input costs for products such as fertilizer.

While agriculture is certainly not alone in being impacted by rising fuel prices, I am deeply concerned with the strain that these increased production costs are putting on farm families and the effect that increased production costs have on U.S. agriculture's ability to compete in our global markets.

Again, I appreciate all of our witnesses here today and their effort to contribute to this incredibly important discussion, and for the opportunity we will have to share our views on finding solutions. Thank you, Mr. Chairman.

Senator COLEMAN. Thank you, Senator Crapo.

Senator Salazar.

STATEMENT OF HON. KEN SALAZAR, A U.S. SENATOR FROM COLORADO

Senator SALAZAR. Thank you very much, Senator Coleman. Let me first say thank you very much to Chairman Chambliss and to Ranking Member Harkin for agreeing to hold this hearing to try to put a spotlight on the issues that are facing rural America, especially with the hike in gas and diesel prices that we have seen over the last several months. I think it is important for this committee to do it, and I very much appreciate the hearing that we are holding today.

I also want to thank Ryan Neibur, who is here from Colorado today as one of the witnesses that we will be hearing from. Mr. Neibur is a fourth-generation family farmer who has chosen that way of life. And we, as members of this committee, are dedicating to sustaining family farming and ranching across America. I am pleased that he is here today, and I very much look forward to hearing his story about what it is like actually on the ground in eastern Colorado; which I am sure is very typical of what it is like for farmers and ranchers all across America.

As I travel around my own State of Colorado, I share the same concerns that Senator Baucus shared; because I see those concerns in the faces of the people that I represent. I don't believe that at any time in my history in Colorado, having been to every one of our 64 counties many times, that I have seen the concern on the eyes and the minds of farmers and ranchers that I see today.

Many of them were on the edge of the cliff financially. I think that the fuel spikes that we have seen over the last several months have all the tendency of pushing them over that cliff. And I think

it is the responsibility of this committee to provide assistance to these farmers.

A few weeks ago, I got on the World Wide Web, and I "Googled" the gas prices on "Google News." Sixty-four pages came back from that search on "Google." But as I worked through the reams of these stories, I did not see a single article on the impact of high fuel prices on farmers and ranchers.

I did see a lot of stories on a lot of other things: rising gas prices that were hurting commuters; hurting SUV drivers; hurting local governments; hurting lottery sales; hurting pizza delivery services; hurting golf travel plans; and indeed, even hurting the leaf-watchers in the western part of our country. I have no doubt that these high prices are hurting families and many people around America, but I am certain that they are not feeling the same kind of pain that farmers and ranchers are feeling across our country today.

We all know, those of us who are associated with agriculture, that no one is hurt more by astronomical gas prices and diesel prices than farmers and ranchers. That is why it is so important to hold this hearing today.

We must examine what is going on in rural America, and we must start to find ways to address the situation, both in the short term as well as in the long term.

Here is what I am hearing from my state during harvest. Agriculture producers are some of the largest fuel consumers in the U.S., and producers are facing enormous fuel costs. For example, in Grand Junction, Colorado, diesel prices today are still over $3 a gallon.

I have heard from a farmer in Brandon, Colorado, who has a dry land wheat farm of approximately 5,000 acres. He has seen a 217–percent increase in diesel costs, and about a 71–percent increase in gasoline costs since the summer of 2004. This operation will use about 200 to 250 gallons of diesel per day during the heavy farming season and, if fuel prices do not moderate, this farmer will realize a doubling of fuel costs for 2006; equating to an additional $16,000 annually, just for his fuel expenses on his farm.

I have also heard from another farmer in northeastern Colorado who, in order to cover the increasing price of fuel, has applied for additional loans from his local bank; only to be turned down because he was already over-extended on his existing loans.

These anecdotes illustrate a problem which goes far beyond the borders of Colorado. After 5 years of weather-related disasters, such as droughts, hurricanes, or fires, these higher-input costs are having a severe impact not only on producers' ability to harvest this year, but also in their ability to secure financing to operate for the next year.

This is a crisis that is undermining the stability of farming operations across our country. This is a crisis and emergency that we must address. Our producers need help. In the short term, I believe they need economic loss assistance, which will help offset the staggering increases in fuel and fertilizer costs.

We, on this committee, must work together to provide this help so that our producers will be able to stay in the business of agriculture, and so that our rural communities will remain viable. I urge the members of this committee to join together, on a bipar-

tisan basis, and to pass legislation that will provide our producers with much-needed emergency economic loss assistance in the form of direct payments to producers.

This type of economic loss assistance is not unprecedented. In fact, Congress has provided this sort of help in the past. We did it in 1999, in 2000, and 2001. Because of the economic pressures that our farmers and ranchers are facing today, we should do it again now in 2005.

This will not be an inexpensive effort, but our producers are in a downward spiral, and we must help end that downward spiral. Each day, this energy crisis continues to drive farmers and ranchers into deeper debt, putting the life of our rural communities at risk.

Over the long term, we must also address the opportunities that are created for ranchers and farmers through renewable energy. I strongly believe that that will be the next most important chapter for agriculture in America. And it is something that, as a member of the Energy committee, I intend to work on.

Let me just finally conclude by saying there is another hearing that is taking place at exactly this same time, with the Energy and Natural Resources committee, where we are hearing from the five chairmen and CEOs of the largest petroleum companies in our world. When you look at the numbers that they are testifying about, in terms of the record profits, the record profits for just the last quarter alone were $32 billion—$32 billion. When you start putting the zeroes behind that 32, there are a total of nine zeroes that you put behind that 32.

I can tell you that, as the farmers and ranchers of America continue to feel the pain and the reality of struggling to stay in existence, there seems to me to be something unconscionable about the record prices that are being made by the oil and gas industry, while at the same time the farmers and ranchers that feed our nation are barely able to hang on.

On my desk when I was attorney general, and on my desk today as a U.S. Senator, there is a sign that says, "No farms, no food." And I think that we, as an American Nation, need to come back to that reality and do whatever we can to help our farmers and ranchers through this crisis that we are in today.

Thank you again, Senator Coleman. And again, thanks to Senator Chambliss and to Senator Harkin for holding this hearing.

Senator COLEMAN. Thank you, Senator Salazar.

Senator Lincoln.

STATEMENT OF HON. BLANCHE LINCOLN, A U.S. SENATOR FROM ARKANSAS

Senator LINCOLN. Thank you, Mr. Chairman. And I would like to associate myself with my good friend and colleague from Colorado. I think Senator Salazar has really put into perspective the pain that our agricultural producers are feeling out there.

I know that in the South, and particularly our great State of Arkansas, not only the drought conditions but the Gulf Coast disasters which have come up hit the southern part of our state and the growers that are there. They have had a double-whammy on the weather conditions. But then, to be hit with these incredible fuel

prices, it is absolutely devastating our producers down there. They are seeing a tremendous amount of their efforts and resources going into a crop, to find that they are not going to be able to recoup those costs.

In September, I introduced emergency legislation to help agriculture producers across the country cope with record economic losses that were suffered this year due to persisting drought conditions and these high fuel prices. They have been devastating.

The severe drought conditions which the country has seen, particularly in our region, combined with the high fuel costs, have forced our farmers to experience extremely high operating costs. And it is literally wreaking havoc on the heartbeat of our Nation's economy.

Now, having grown up on a farm and having seen, particularly, my father as a farmer—recognizing that the majority of farmers out there like to complain—but the fact is, they are not really that loud about it oftentimes. There is a real sense of pride in terms of what they produce and how they produce it.

They work desperately to work by the rules. But they also have a real sense of pride and perfection, quite frankly, in what they do. And when they recognize the enormous amount of cost that they are having to put in to produce the crops that can be competitive in a global marketplace, it is just sending them into a tailspin.

We are hearing from our bankers, as well, our financial institutions. I have got three counties of banks that are telling me that they are going to have a record number of farm operations that will not be able to pay out or cash-flow because of the record amounts of resource they have had to put into producing a crop, and then to find the natural disasters that have wreaked havoc on them at harvest time.

So it is a time when we have to remember what it is our producers do. And they do it very quietly. Very quietly, they produce the safest, most abundant and affordable food supply in the world. They make sure that, per capita, we pay less for our food supply than any other developed nation in the world. They also reassure us that the grocery store shelves will be stocked, and they will be stocked with foods that are produced in a way that is sensitive not only to the environment, but also to the way that Americans want their food sources produced.

So I hope that we can take a look at what it is these producers do in a very quiet way, in reassuring the American people that we can maintain that safe and abundant and affordable food supply.

But I have to reiterate, Mr. Chairman, our farmers are devastated, in terms of these fuel costs. And it is not just in terms of the diesel they put in their tractors. It is also the feedstock for their fertilizer. They are paying record prices for fertilizer, the feedstock, in the natural gas that is causing that to happen.

And I will just remind the committee that the projection is that in the next several years, we will no longer have a domestic production of fertilizer. So once again, we are going to set another variable onto our producers of not knowing what and when they can depend on the products that they need in order to produce this safe and abundant food supply.

So I thank you, Mr. Chairman, for focusing on this. I know that there are multiple other issues, in terms of transportation. We do in our region have other issues, in terms of transport. Those small, rural county roads oftentimes are not able to transport the large cotton modules and the other crops that we grow. So we have got a lot of different issues there. But without a doubt, the fuel costs are the greatest burden that our farmers are carrying right now. And we have got to do something about it.

Just in closing, I would like to also echo Senator Salazar, in terms of relieving our dependence on foreign oil. If there is one consistent thing I hear from our ag producers in the South, it is, "Please, please, allow us to be a part of providing the kind of fuels, the renewable fuels, that we need in this country, to lessen our dependence on foreign oil and give us yet one more secondary market where we can market our products and our crops."

Now Eastman Chemical has produced its first off-line batch of biodiesel, which came out on-line a couple of weeks ago in Arkansas. We have got another facility that will be going into production as of April. There are a lot of people that want to invest. We have got to make sure that the incentives are there for them. And it is critically important to our agricultural producers. They are desperate for it, and want passionately to play a role in lessening our Nation's dependence on foreign oil.

So thank you, Mr. Chairman. I appreciate you all bringing this very critical issue before the Congress. And I certainly am signing myself up to work as hard as I possibly can to alleviate that burden that our agricultural producers see. Thank you.

Senator COLEMAN. Thank you, Senator Lincoln.

Senator Stabenow.

STATEMENT OF HON. DEBBIE STABENOW, A U.S. SENATOR FROM MICHIGAN

Senator STABENOW. Thank you, Mr. Chairman. Thank you very much for holding this important hearing.

Welcome to each of you today. Thank you for your presence.

We all are hearing the numerous stories about the impact of high energy costs on Americans and our economy. Most recently, we have heard about that in Michigan related to manufacturing and to our families. But there is no question about it, that our farmers are right in the middle of it.

They are being hit, really, three different ways, as we all know: high gas prices, high diesel prices, and high natural gas prices. And so this is critically important for Michigan, as it is for all of the states that my colleagues represent; since agriculture is so important to us and our farming economy is absolutely critically hit by all of what is happening.

I noticed, coming in and listening to Senator Lincoln talk about alternative fuels, that it certainly something that we are anxious in Michigan—we are very much involved with ethanol and biodiesel. And one of the reasons I was a strong supporter of the energy provision of the 2002 Farm Bill was because of the important ways in which we in agriculture can help to solve the problem of our dependence, over-dependence, on foreign oil. And we need to renew our efforts and move as quickly as possible on that front.

I just introduced a bill called the Energy Tax Rebate Act, to give our farmers and families, businesses, an immediate $500 tax rebate to pay for these increased costs, fuel costs and home heating costs. And I hope that we will see serious consideration and enactment of this type of tax rebate, to help our families and our farmers immediately.

I appreciate again, Mr. Chairman, this hearing, and know that we have some important work to do together. Our farmers are feeling squeezed on all sides, and we need to act on their behalf.

Senator COLEMAN. Thank you, Senator Stabenow.

For our first panel today, we will have Dr. Keith Collins, Chief Economist at the United States Department of Agriculture; Mr. Gerald W. Barnes, who is Chief of Operations, U.S. Army Corps of Engineers, and Mr. Howard Gruenspecht, Deputy Administrator, the Energy Information Administration. We will start with Dr. Collins, and then move across.

Dr. Collins, it is always a pleasure to have you before this committee. I just would note, on a personal note, to thank you for the work that you did a number of years ago debunking the myths in the anti-ethanol study that was done a while ago. So your service to this Nation is really appreciated, and it is a pleasure to have you here today.

STATEMENT OF KEITH COLLINS, PH. D., CHIEF ECONOMIST, U.S. DEPARTMENT OF AGRICULTURE

Mr. COLLINS. Thank you, Mr. Chairman. Mr. Chairman and members of the committee, thank you for the invitation today to come up here and talk about the implications for U.S. agriculture of the higher energy prices and the disruption of the marketing system due to the Hurricanes Katrina and Rita.

Strong world energy demand and large expected farm production this fall were already causing high prices for energy and lower prices for key crops, even before Hurricanes Katrina and Rita struck. The hurricanes, of course, reduced energy production and caused extensive damage to our trade infrastructure. In a typical year, about half to two-thirds of grain exports move down the Mississippi. So, of course, the disruption of that channel meant the impacts were felt over much of the Nation.

While substantial challenges remain, Gulf Coast areas have made some remarkable steps toward recovery. For example, between Baton Rouge and Myrtle Grove, Louisiana, there are ten export elevators and three floating rigs that load grain from barges onto ships. Operational capacity right after Katrina struck went to zero. Today, all of these facilities are fully operational.

The Mississippi River channels used for grain export are now open and operating at normal depths. On the Mississippi Gulf, 90 percent of grain delivered there comes by barge. So recovery of barge traffic is crucial. The barge industry reports that only a small number of barges were lost, but twice as many barges as normal are currently on the lower Mississippi, and that is limiting grain movement from the Midwest to the Gulf. Lack of labor and housing, and barges holding poor-condition grain, still limit a return to normal traffic.

The USDA has implemented several assistance programs to address the barge bottleneck and the related storage problems. We are providing assistance to move barges of damaged corn from New Orleans to up-river locations. We are paying incentives for alternative storage. We are providing assistance to move grain to other river transportation modes and locations.

USDA has also provided flexibility for producers having 2004 crop marketing loans. We have permitted emergency and temporary storage for new crop loans, and we have made available funding for emergency loans.

The quick actions taken by the Army Corps of Engineers, the barge and grain companies and their employees, have helped limit the disruption to grain marketing. From late August through October 27th, grain inspections for export from Mississippi Gulf ports were 72 percent of last year's level. They even exceeded last year's pace during 1 week in October.

Part of this decline in grain inspections has been offset with increased exports from other ports; so that during this 2–month fall period, combined grain inspections for export from the Mississippi Gulf, from the Texas Gulf, and from the Pacific Northwest, were 94 percent of last year's level.

In addition, cumulative corn exports since the start of the marketing year, September 1st, through October 27th, were 1 percent higher than last year's exports during the same period; although soybeans are only 76 percent of last year's level.

The hurricanes also worsened the already tight energy situation. Farmers paid 43 percent more for diesel fuel in October 2005 than a year earlier; while prices paid for fertilizer by farmers were up 13 percent this October, compared with last October.

The higher energy prices and marketing disruptions are raising farm production expenses, pressuring the storage system, lowering crop prices to producers, and raising farm program costs.

On a positive note, diesel and natural gas prices and barge rates have all fallen sharply the past 2 weeks. Corn and soybean prices have started to rise the past 2 weeks. Farm product demand remains relatively strong. And farm programs are cushioning the income drop for many producers. Still, energy costs will be a financial problem for producers this and next year, and substantial work still remains to restore the marketing system to normal.

The USDA will continue its efforts of assistance, and try to assist other Federal, state, and local agencies.

While farmers and ranchers face a number of challenges for 2006, we are confident the underlying financial strength of U.S. agriculture will enable producers to deal with the uncertainties ahead. Thank you, Mr. Chairman.

[The prepared statement of Mr. Collins can be found in the appendix on page 46.]

Chairman COLEMAN. Thank you very, very much, Dr. Collins.

Mr. Barnes.

STATEMENT OF GERALD W. BARNES, CHIEF, OPERATIONS DIVISION, U.S. ARMY CORPS OF ENGINEERS

Mr. BARNES. Mr. Chairman, distinguished members of the committee, I am Gerald Barnes, Chief, Operations Division, Directorate

of Civil Works, of the Army Corps of Engineers. I am honored to be testifying before your committee today on the status of the Mississippi River transportation system and the role that the Department of Army and the Corps of Engineers play in ensuring the viability of this critical energy-efficient transportation artery.

I would like to offer my observations regarding the expected river conditions over the next 6 months, as well as offer a brief discussion regarding the inland navigation system in general.

The Corps has had a navigation mission since the Survey Act of 1824. Since that time, the Corps has established a tradition of fulfilling the vital navigation needs of this Nation through the construction and maintenance of ports and waterways across the Nation.

The goal of the Corps' navigation mission is to help facilitate commercial navigation by providing safe, reliable, highly cost-effective, and environmentally sustainable waterborne transportation systems.

Water resources management infrastructure has improved the quality of our citizens' lives and supported the economic growth and development of this country. Our systems for navigation, flood and storm damage reduction projects, and efforts to restore aquatic ecosystems contribute to our national welfare.

The Mississippi River serves as a major transportation artery for the movement of bulk commodities such as agricultural products and petroleum products. After Katrina struck Louisiana, numerous barges and towboats were impacted, many of which contained agricultural products for offloading at one of the many grain facilities in the New Orleans area.

At the same time, all shipping into and out of New Orleans was halted; which had a major impact in the short term on the ability to move petroleum products and grain.

Immediately after Hurricane Katrina passed, Federal agencies, including NOAA, the Navy, the Coast Guard, and the Corps, began to assess the condition of the Mississippi River, as well as other impacted ports and waterways. This monumental task was completed much sooner than projected, thanks to coordinated Federal efforts and the outstanding support from our waterways users and partners.

The Mississippi River has been successfully restored to full deep-draft operation, and many of the barges and vessels have been retrieved and replaced back into service.

In review of the latest long-range forecast graphs prepared by the National Oceanic and Atmospheric Administration for both precipitation and temperature, they suggest that the Upper Midwestern states have a 33 percent chance of not experiencing any unusual dry weather conditions during the upcoming winter season. And they suggest warmer than normal conditions projected.

From evaluations of river stage information, it is reasonable to anticipate some fairly low stages during the next few months. And it is highly likely that stages lower than those reported earlier this year, minus–1.5 on the Saint Louis gage, would be encountered in the near future.

River stages do not directly relate to reliable drafts and tow sizes. There are many other factors that are taken into consider-

ation when deciding what prudent restrictions should be in place. On the Middle Mississippi, drafts are historically unrestricted, as long as the Saint Louis gage is above 0 feet.

Once stages reach, or are forecast to reach, the–2 to–3 feet stage, drafts have usually been reduced to less than 10 feet. Provided the stages fall at a reasonable rate, and there is not a catastrophic grounding which disturbs the bottom of the river, drafts of 9 feet or better can usually be accommodated with dredging.

In addition to draft restrictions, tow sizes are also reduced as stages fall. Unrestricted tows on the Middle Mississippi are usually in the 36– to 40–barge range. With stages approaching 0, this would possibly be reduced to 30 barges or less. In the minus–2 to minus–3–foot range, tows would likely be reduced to barge configurations of 24 or less. With extreme low stages, two sizes might actually be reduced to 12 to 15 barges. This is very much dependent on the actual channel dimensions, however.

Decisions regarding restrictions in tow sizes and drafts are made through a collaborative effort of the Corps, the Coast Guard, the National Weather Service, and the towing industry.

The Corps' primary role is monitoring channel conditions, assisting the Coast Guard in locating and marking channels, and dredging as required.

There are three dredges currently working in the shallow-draft channels of the Mississippi River. The Government dustpan dredge, and a contract cutterhead dredge are working on the Middle Mississippi, and a Government dustpan dredge is working on the Lower Mississippi near Memphis. In addition, the Corps has the ability to bring several others into the region, if required. There are two other large dustpan dredges that can be called upon, if needed.

Historically, ice has resulted in suspension of commercial navigation on the Upper Mississippi above Saint Louis, from mid-December until mid-March. In conjunction, Locks 11 and 19 are scheduled to be closed for major rehabilitation from December 15th, 2005, to March 15th, 2006.

Historically, ice does not result in a complete closure of the Middle Mississippi. It can cause traffic delays and short-term stoppages. This is not an annual event, and usually occurs in late January and February.

The Mississippi River serves as a major transportation artery for the movement of bulk commodities, such as agricultural products and petroleum products. It is part of the Federal inland waterways navigation system, which includes nearly 12,000 miles of commercial waterways, rivers, and harbors, developed and maintained by the Corps.

The inland waterway system carries one-sixth of the Nation's volume of inner-city cargo, about 630 million tons annually. The inland waterways include 192 commercially active locks, with 238 lock chambers. Some locks have more than one chamber, often of different dimensions. These locks enable barges to stairstep through a series of navigation pools and reach distant inland ports, such as Minneapolis, Chicago, and Pittsburgh.

In terms of ton-miles of cargo, the vast majority of the traffic on the inland waterways travels along three principal corridors: Mississippi, Ohio, and Illinois waterways.

Since the 1960's, the Federal Government has invested heavily in the maintenance and major rehabilitation of these structures on these high-commercial-use waterways. These investments support substantial movements of agricultural products, energy-related materials, and other bulk commodities. Under this Administration, the Corps is giving priority to continued maintenance and major rehabilitation of these waterways.

In summary, given the uncertainty of the weather, it is impossible to predict what channel conditions will be for the rest of the year. However, due to the dynamic nature of the river, the Corps cannot guarantee that there would likely be any closures. But for the reasons given above, it is unlikely that there will be any long-term closures or catastrophic disruptions to barge movements due to inadequate channel dimensions.

The Corps is committed to maintaining this vital waterway in the best condition possible. And we will remain diligent in monitoring channel conditions through surveys, communication with towing companies, to assure that potential problems are recognized early and addressed appropriately.

Sir, this concludes my statement. I appreciate the opportunity to testify, and stand ready to answer questions.

Chairman COLEMAN. Thank you, Mr. Barnes.

Mr. Gruenspecht.

STATEMENT OF HOWARD GRUENSPECHT, DEPUTY ADMINISTRATOR, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY

Dr. GRUENSPECHT. Thank you, Mr. Chairman and members of the committee. I appreciate the opportunity to appear before you today to discuss recent developments in energy markets and their possible implications for the agricultural sector.

The Energy Information Administration is the independent statistical and analytical agency within 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.

Hurricanes Katrina and Rita wrought incredible devastation on the central Gulf Coast; most importantly, in terms of human suffering, but also in energy impacts that have spread well beyond the stricken area. At its peak impact, Katrina shut down over 25 percent of U.S. crude oil production, 20 percent of our crude imports, 10 percent of our domestic refining, and over 15 percent of U.S. natural gas production.

Rita compounded those impacts. For example, nearly 30 percent of total U.S. refining was shut in ahead of Rita, and outages continued at nearly 20 percent of refining capacity for some weeks thereafter.

The farm sector, as many of you have mentioned in your opening statements, is a significant consumer of energy, particularly diesel fuel, propane, and electricity. In addition to direct farm use of en-

ergy, agriculture is indirectly affected by energy requirements in the fertilizer industry, specifically in nitrogenous fertilizers.

With that background in mind, let me turn to recent energy market developments, starting with petroleum. Again, even before Hurricane Katrina struck, crude oil and petroleum prices were setting records. Oil prices worldwide have 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.

In the immediate aftermath of Katrina, with the extent of the actual damage still largely unknown, crude oil prices rose briefly over $70 per barrel, up over $4 in less than 48 hours, but in less than a week had fallen back below the pre-storm level.

The more significant impact, however, was on finished petroleum products. Spot prices for gasoline, which are the prices by which large volumes are sold by refiners, importers, and traders, rose as much as $1.40 per gallon east of the Rockies within 3 days; spot diesel fuel prices rose 35 to 40 cents.

The seemingly disproportionate change in finished product prices reflects the severity and expected persistence of Hurricane Katrina's impacts on refining operations in the Gulf. Following Rita, it was the turn of diesel prices to be disproportionately affected.

Wholesale petroleum product prices, like those of crude oil, have now fallen well back from their peak levels. As of Monday, November 7th, the average retail price of regular gasoline was about 23 cents per gallon lower than its pre-hurricane level. Diesel prices, having fallen by 45 cents per gallon over the past 2 weeks, are now within 10 cents per gallon of their pre-hurricane level. But keep in mind, the pre-hurricane level was high, relative to the past.

We have recently released, as of yesterday, our short-term energy outlook, reflecting our updated scenario for recovery of the energy system. The recovery of crude oil and natural gas production in the Gulf is occurring somewhat more slowly than we had previously assumed. However, the operation of the world oil market is substantially mitigating the impacts of these disruptions on crude and gasoline supplies.

In our latest outlook, we project a continued drop in diesel prices, although prices are expected to remain substantially above year-ago levels through the end of the year.

Several of the opening statements mentioned natural gas. Like crude oil and petroleum products, natural gas prices were also setting records before Hurricane Katrina struck. In August, the Henry Hub natural gas spot price averaged over $9.00 per 1,000 cubic feet, as hot weather in the East and Southwest increased natural gas fired electricity generation for cooling demand.

The outlook we released yesterday projects an average Henry Hub natural gas spot price of $9.15 per 1,000 cubic feet for 2005, and $9.00 for 2006. Weather is clearly a critical factor in any price projection for natural gas, given the importance of heating demand. A colder-than-expected winter will significantly raise projected prices, while a milder winter should lower them.

The natural gas market is likely to stay tight over the next couple of months, but spot prices are expected to ease going into 2006. However, we do think that natural gas spot prices at the Henry Hub will average, on a monthly basis, over $10 per 1,000 cubic feet until the winter is over.

Many of the opening statements mentioned the role of renewable fuels. While higher petroleum prices are viewed as a negative development by most energy consumers, higher prices could also serve to improve ethanol's competitiveness as an energy source.

EIA, in the context of energy legislation that was recently enacted, recently conducted a study on the near-and mid-term potential price and supply effects of enacting legislation mandating the use of renewable fuels. We considered provisions similar to those that were ultimately included in the recently enacted Energy Policy Act.

The estimated impact of such provisions was shown to be highly dependent on assumptions regarding the future path of world oil prices, relative to the costs of ethanol. And I can get into that more in the Q&A.

Let me now turn to the upcoming heating season, where the expectation is for sharply higher costs, although somewhat lower than in the outlook we released a month ago. We expect natural gas households to pay 41 percent more than the previous winter; heating oil households to pay 27 percent more; propane, 21 percent more; and 5 percent more for electrically heated households.

Again, using previous information about energy use on farms and in closely related sectors, every additional dime added to the price of gasoline and diesel oil per gallon, sustained over a year, costs U.S. agriculture almost $400 million annually. Every dollar added to the price per 1,000 cubic feet of natural gas costs agriculture over $200 million annually in direct expense, and costs the fertilizer industry almost $500 million annually. Every dime increase in the price of propane costs agriculture over $200 million per year. Every penny increase in the price per kilowatt-hour of purchased electricity costs agriculture about $500 million annually in direct expense, and also adds about $35 million to the costs of the nitrogenous fertilizer industry.

That concludes my statement, Mr. Chairman. I will be happy to answer any questions you or the other members might have. Thank you very much.

Chairman COLEMAN. Thank you, Mr. Gruenspecht. Mr. Gruenspecht, let me kind of reverse order here, and ask a little bit about diesel. It seemed that regular gas went to $3 a gallon, and had a big impact, and so a lot of conversation about that. Diesel is up there. Regular gas seemed to fall more quickly—well, it did. The price fell much more rapidly.

And two questions. I hate to ask two questions at once, but let me put them together. There seems to be a phenomenon where prices rise quickly, and then ultimately they fall, but they fall back much more slowly. So the impact, you are paying that price; within a short period of time it seems prices shoot up. And then weeks later, we say, "Well, they have rebounded." Yes, but it took me 3 weeks to get to where we were, still higher than a year ago. But the rise was very rapid.

So can you help me on both those issues? Talk about the rapidity in the rise, and the slowness in fall, and what is controlling that. And then help me understand a little bit about why diesel costs, which really impact our producers greatly; why they seem to fall at a slower rate than the price of regular gasoline.

Mr. GRUENSPECHT. OK. Well, let me try the first one first. Prices in the markets for gasoline and diesel fuel are affected mostly, or significantly, by the wholesale spot market prices. There is a lagged pass-through of wholesale spot market prices into retail prices.

So in fact, when the wholesale prices rise, the retail prices initially don't rise as much. When the wholesale prices then start to fall, you have a combination of effects of the delayed pass-through of the previous rise, coupled with the start of the pass-through of the decline. So it is pretty typical that retail prices won't rise as much, but then there will be a delay in the fall.

In terms of the diesel versus gasoline, that is really quite an interesting issue. Initially, following Katrina, gasoline took off, and diesel really didn't take off as much. But following Rita, we saw diesel rising more.

There are really two things going on. One is, the disruption in refining really affected the output of both diesel and gasoline. But the world oil market is better able to respond to high gasoline prices by sucking in a lot of gasoline imports.

The world market for distillate fuels, which includes diesel and heating oil, is a lot tighter, and there is less available spare capacity to supply diesel. Part of this reflects what is going on in Europe, where a very large proportion—over 50 percent of the new vehicles, new light-duty passenger vehicles, sold in Europe are diesel-powered. So Europe is moving toward less reliance on gasoline, and more reliance on diesel. And that, as well as diesel demand in Asia—which we can talk about more—has made the diesel market tighter.

So we got more help, in terms of increased imports of products, in terms of gasoline. In fact, gasoline imports are running about 500,000 barrels a day above their seasonal norms. We have gotten much less help on diesel. So the imports helped us on gasoline; less on diesel.

The other thing is, this is the time of the year for diesel generally to be tighter, because we are going into the heating season, which is when people in the Northeast who use heating oil start filling up their tanks. We are going into the harvesting season, when people in the farm communities start using diesel for their harvesting.

So independent of the hurricanes, this is a time of year when there tends to be more pressure on diesel prices. For gasoline, past Labor Day tends to be the time when consumption is falling off. So it is really a combination of those factors, I think would be a fair description.

Senator COLEMAN. One follow-up question.

Mr. GRUENSPECHT. Absolutely.

Senator COLEMAN. And then I want to go to Dr. Collins with what you just talked about in terms of the impact on our producers.

Did you see any shifting within this country of refining capacity from diesel to regular gasoline? I mean, the consumer pressure is on regular gasoline. There are not as many farmers as there are folks just driving vehicles. And one of the impressions I get in my conversations with some of my producers is, "You know, we are getting the short end of it, with this kind of great flurry about the rise in gas prices."

So did you notice any shifting of refining capacity that would have increased the pressure on our producers who use diesel?

Mr. GRUENSPECHT. I think it is fair to say that there were very high margins available on gasoline immediately following Katrina. And I think there was an effort to fill the gasoline gap, and moving slates somewhat to emphasize the products that produce the highest margins. So I would say, yes.

But then, obviously, following Rita, when diesel prices rose dramatically, that pressure works the other way. The real difference is, you don't get the help from the imports on the diesel that you were able to get on the gasoline.

Senator COLEMAN. I am not sure if anyone on this panel can answer, but where is the line between pressure and gouging? It is one thing to say that there is pressure; it is another thing to say that—you know, gas at $5 a gallon in Georgia. Can somebody help me draw a line between taking advantage of increased margins and shifting production, the difference between that and gouging?

Mr. GRUENSPECHT. Do you want to do that, Mr Barnes?

[Laughter.]

Senator COLEMAN. Dr. Collins? Does anybody want to just help educate this Senator?

[No response.]

Senator COLEMAN. We are going to have to look into that. I mean, that is an area of serious concern.

Mr. GRUENSPECHT. I know there are lots of hearings today. And I know you have a panel of state attorneys general, I think, at one of the other hearings. I believe you also have the Chairman of the Federal Trade Commission at one of the other hearings. It is my understanding there is no Federal law in this area. But I think the states have laws, and I think they differ from state to state.

I am an energy analyst; not a lawyer. So I have to watch how deep I dig my hole. Maybe those hearings will produce more of what you are looking for.

Senator COLEMAN. Let me turn to Dr. Collins. Can you give me a little bit? I thought your testimony was rather optimistic about, certainly, recovery from Katrina and some of the long-term economic impacts. But every member of this committee talked about the anecdotal conversations with our producers now; particularly increased diesel and natural gas right now.

And we are looking at heating as the weather in a number of northern states—well, it gets cold in Colorado, too, but you have got a number of northern states represented. We have cold winters.

Can you talk to me a little specifically on the impact of high diesel and natural gas prices on our producers; particularly in these cold-weather states?

Mr. COLLINS. Sure. Perhaps if I was a little optimistic, it may be because I was focusing, too, on the transportation system, which I think has made a substantial recovery in the last month.

With respect to higher energy prices, of course, this is a significant impact for producers. We estimated that this year, just for fuel alone, there is a 40–percent increase in farm production expenditures on fuel. The last time you can find a 40–percent increase in 1 year, you have to go back to 1980, when we had the huge oil price spikes then.

So economists can define a crisis as an abrupt change in relative prices. That is what we have seen here, an abrupt change in relative prices. So this cuts into the profitability, the bottom line, of producers.

The saving grace here—which is a note of optimism—is that we have had very high gross cash income in 2004, and again in 2005. Most people have in their mind that American agriculture produces $200 billion worth of farm products a year. They did, four or 5 years ago. This year, they are producing $240 billion worth of farm products, valued at cash receipts.

In addition to that, we have had a substantial increase in farm program payments. So gross income is very strong. That is certainly not going to help every farmer, because not everybody gets farm program payments, and everybody faces energy costs differently. But higher energy prices at least have come at a time when we have been at the top of the farm cycle.

I think that cycle is turning. I think in 2006, we are going to face lower farm incomes. And we are going to face higher energy costs in 2006, as well. So I think that that will be more of a problem for producers.

Senator COLEMAN. I want to turn to my colleagues, and maybe do a second round. Mr. Barnes, just a question here. In your testimony, you talked about substantial investment in our waterways system. Does the Corps of Engineers have a position on the 2005 Water Resources Development Act? We have been trying to get WRDA passed. Is the Corps weighing in on that?

Mr. BARNES. Sir, we finished the report, and the Chief Engineer recommended in that report both small-scale structural and nonstructural measures on the Upper Mississippi River, to include a number of items I can mention later; and then new 1,200–foot locks at Locks 20, 21, 22, 24, and 25, on the Mississippi; and the LeGrange Lock and the Peoria Lock on the Illinois Waterway. The report is under review by the Assistant Secretary, in conjunction of course with the Office of Management and Budget. The Assistant Secretary is expected to recommend in that study, also, an electronic guidance system to assist tows.

It is sufficient to say that, also, there is a reminder that authorization of the plan recommended in the report is contained in the Water Resources Development Act, 2005, passed by the House of Representatives. And it is also contained in the Senate version of WRDA 2005 that has been reported out of the committee.

Senator COLEMAN. We have a bipartisan effort to modernize locks. This is an important issue. I notice the President indicated his support, endorsed modernization of the Panama Canal. I would

also hope that we would have strong support for modernizing the Upper Mississippi River system.

Mr. BARNES. Right, sir.

Senator COLEMAN. Very important to us. Senator Baucus.

Senator BAUCUS. Thank you, Mr. Chairman.

Is it Mr. Gruenspecht? Is that how you pronounce your name? Thank you, very much. Is it true that natural gas prices, as I indicated in my statement—and I am just asking for confirmation—are much higher in the United States historically than in those other countries I mentioned?

Mr. GRUENSPECHT. Today?

Senator BAUCUS. Generally, today, and over the last several years.

Mr. GRUENSPECHT. I think, actually, there was a report done by the Department of Commerce earlier this year that looked into the comparison, as part of the issue of natural gas and its effect on industrial competitiveness. I think they found that there were definitely some countries that used to have more expensive natural gas than the United States, that now had cheaper natural gas than the United States. But it is not a uniform situation, in my understanding.

Senator BAUCUS. OK. My figures, and they could be wrong——

Mr. GRUENSPECHT. Right.

Senator BAUCUS. These are just my figures. And this is provided by the American Chemistry Council. Why them; I am not sure how we got this. But just to repeat, the natural gas cost per million Btu in the United States is higher than in over 25 developed and developing countries.

As of September, the U.S.—that is clearly after Katrina—had $12.60 per million Btu. And in South Korea, Japan, Taiwan—with no natural gas reserves and no supplies to speak of—costs were about $5 per million Btu. And Europe hovered around $7 per million Btu, as is the case in Mexico.

And I hear this anecdotally from American business people, as I mentioned to you. And so let's assume that generally it is correct. I don't know if it is or not——

Mr. GRUENSPECHT. Right.

Senator BAUCUS [continuing]. But let's assume that it is. The next question is, why? Why are natural gas prices much higher???????

[sic] in other countries—Japan, North Korea, South Korea, Europe, Mexico—than they are in the United States? Why? What would explain that?

Mr. GRUENSPECHT. OK. Let me try. Regarding the natural gas market in North America, although we do have a limited amount of liquefied natural gas coming in, primarily we have a market that clears within North America. In terms of United States natural gas use, we domestically produce about, I think, 83 percent of what we consume. We import a bunch——

Senator BAUCUS. Much more than the case with crude oil.

Mr. GRUENSPECHT. Much more than the case with crude oil. We import natural gas from Canada, about——

Senator BAUCUS. Not much. Basically, it's domestic.

Mr. GRUENSPECHT. No, about 15 or 16 percent.

Senator BAUCUS. Right.

Mr. GRUENSPECHT. And then a tiny bit of liquefied natural gas. And actually, we export natural gas to Mexico. We are net exporters to Mexico of a small amount.

Senator BAUCUS. But basically, it is produced pretty much domestically.

Mr. GRUENSPECHT. It is produced domestically, and certainly in North America.

Senator BAUCUS. Right.

Mr. GRUENSPECHT. So we have a situation where you have tight production—and we have been in that situation for some time. Our domestic production has been relatively flat, despite increasing drilling. And we also have a situation where a lot of electric generating capacity has been built that can use natural gas.

Senator BAUCUS. But my question is, why are they higher here than, say, Japan?

Mr. GRUENSPECHT. Well, because we are clearing the market in North America. OK? So something like oil is a world commodity, like some of the agricultural commodities that this committee would address. And you would expect the price to equilibrate on a world basis; but natural gas prices don't equilibrate, at least now, on a world basis. There is a North American clearing market, and there is a market for——

Senator BAUCUS. Why can it be lower in Japan, which does not have any significant domestic production?

Mr. GRUENSPECHT. Well, again, I am not stipulating that the quoted prices are right, but they bring——

Senator BAUCUS. True, but you hear it. That is the kind of——

Mr. GRUENSPECHT. Right, and that could be right. And they bring in liquefied natural gas because, as you point out, they do not have domestic production. They bring that in under long-term contracts. Those contracts have whatever terms they have; in many cases, tied to the price of crude oil. And the pricing in that market comes out of those contracts. The pricing in the North American market, however, largely comes out of the demand and supply in North America. I mean, that is——

Senator BAUCUS. Let me——

Mr. GRUENSPECHT. OK.

Senator BAUCUS [continuing]. Take the same subject, different direction.

Mr. GRUENSPECHT. OK.

Senator BAUCUS. It is my understanding—I don't know if it is accurate or not, but again, it is my understanding. People are showing me figures which show—these are DOE figures—that the actual supply of natural gas to the United States over the last 5 years has been pretty much constant.

Mr. GRUENSPECHT. That is, I think, correct. Production.

Senator BAUCUS. Right, production. They have also shown me on a volume basis—not price, but a volume basis—the actual demand for natural gas in the United States in the last 5 years is fairly constant.

Mr. GRUENSPECHT. I believe that is also correct.

Senator BAUCUS. Now, and they also show me that the price has not been constant although—although—the supplies have been con-

stant, and the volume demand has been fairly constant. The prices are just all over the lot, and very high in some points. A lot of spikes in price.

Mr. GRUENSPECHT. I think that is also correct.

Senator BAUCUS. Now, my next question is, why? Why is that the case? And it goes to the question of, how much of natural gas prices in the United States is determined by the spot market, is determined by trading on the NYMEX, say, the futures markets; and how much is determined by provisions of long-term contracts? And the question is, what are the terms of those contracts and the degree to which the terms of those contracts, the price terms of those contracts, are in any way reflected to the spot market? Those are a lot of questions——

Mr. GRUENSPECHT. Those are good questions.

Senator BAUCUS [continuing]. But you get the drift of where I'm going.

Mr. GRUENSPECHT. I get the drift. I think I get the drift. It may be hard for me. I don't maybe have the gift to answer this as well as I would like, so some of it may——

Senator BAUCUS. Well, if anybody else on the panel can——

Mr. GRUENSPECHT [continuing]. Go to the record. But it is true that because the market is the North American—— clearing market and, as you point out, production hasn't increased significantly——

Senator BAUCUS. It has not.

Mr. GRUENSPECHT. Right. So in fact, by definition, demand, if you can't consume more than you have got——

Senator BAUCUS. You would think. You would think.

Mr. GRUENSPECHT. If it ain't there, you are not going to consume more. So at least we got that right. Production has been flat, and consumption has also been flat.

What is going on is, people on the demand side are competing with each other for the natural gas that is available. And the advent of some of the new demand from electric power generation has tended to put more pressure on the relatively fixed amount of supply. I mean, something has to give. If there is a certain amount of supply, and you have to clear the market——

Senator BAUCUS. Right.

Mr. GRUENSPECHT [continuing]. Then price is going to rise. And I think that——

Senator BAUCUS. Again, but how much of this is the gap between actual supply and demand forces, on the one hand, and perceived supply and demand, on the other, reflected in futures trading on the NYMEX?

[No response.]

Senator BAUCUS. And I am going to ask another question there, while you are thinking about that.

Mr. GRUENSPECHT. Boy, you are really——

Senator BAUCUS. And that is this. I understand—again, I could be wrong——

Mr. GRUENSPECHT. OK.

Senator BAUCUS [continuing]. I am just digging into this—that on other futures markets there are bans that limit volatility in trades. Mr. Collins is here. Is that true? With, say, wheat futures.

Mr. COLLINS. Yes, sir. Commodities.

Senator BAUCUS. Commodities. I am also told, though, that is not the case with natural gas and the NYMEX. There is no ban, volatility—well, maybe practically—I mean, maybe theoretically; but practically, there is not a ban on the limitation of volatility in prices.

And then you get another area that is a little bit "iffy" here, and I am not going to go too far in this direction because I am even on weaker ground, because I just don't know the facts yet. I am looking into the facts, believe me. The question: Who are these traders?

And again, to what degree does the spot market price reflect—is it being pushed up by traders? Because, lo and behold, my gosh, a hurricane hits. And even though there are lots of natural gas reserves in the ground, they will go bananas because Hurricane Katrina has hit. That is, the supplies are really there; but still, you know, they bid up the price, and that gets the prices higher.

And traders bid up the prices. Traders pocket huge income. And now, the other question: Who are the traders? Who owns the traders? Who are they? And I have got some ideas about that, too.

But the point I am trying to get at is that we have got to think a little more deeply about what is really causing natural gas price increases; and not just say, "Well, gee, it was Katrina," or not just say it was something else. I mean, we have got to get behind the figures, behind the data, and follow the money; see what is really going on here.

And that is why I am asking you these questions about why is there a price differential in natural gas between other countries and the United States. Why? I have got some ideas as to why.

And you have just confirmed that, really, the actual production of gas, and the actual demand for gas on a volume basis, have been pretty constant the last 5 years; although prices are all over the lot. And so I am trying to figure out why is that the case.

And frankly, we have got to find a solution to that, so that consumers, farmers, ranchers, you know, people who use natural gas, aren't paying as much in price increase as they really should be paying; and at the same time when a lot of people are making a lot of money off of all these trades. And that, to me, is the issue here.

Mr. GRUENSPECHT. Well, I will just say a little bit. On the trader thing, obviously, perhaps Dr. Collins might have more to say, and the Commodities Futures Trading Commission might have more to say. I mean, we really track the energy side of things and the fundamental energy data.

Senator BAUCUS. Right.

Mr. GRUENSPECHT. You know, with respect to one comment you made about storage being adequate, and why are prices so high, as you know, recently prices—and again, I am not making excuses for anybody, but prices have in fact been falling.

One reason prices, I think—at a fundamental level, not talking about the trading aspect of things—have remained high, even though storage levels have been by historical standards pretty healthy, is that, you know, we still are down in production in the Federal Gulf of Mexico over 4 billion cubic feet a day, which, if you

take that out over a 30–day month, would be 120 billion cubic feet. And we are still down in production in Louisiana, from the storms, as well.

So when people look at the historical storage level that they are comfortable with, you know, that is comfortable given normal production. But, in fact, if you envision or are worried about production being sub-par—and it has been sustained sub-par over the past 2 months—then what would in a normal production environment be considered a healthy level of storage doesn't look so healthy.

Just like if you knew your income was going to be depressed over the next several months, you might want to have more money in your bank account than you normally would have going into that period.

So again, I am not making excuses for anybody. But talking about the energy fundamentals, there are some energy fundamentals there.

The other thing on gas, in terms of volatility, is that, unlike the other fuels, gas demand is very weather-dependent. And that is a big factor. And I am not taking issue.

Senator BAUCUS. You just happened to be here——

Mr. GRUENSPECHT. I know——

Senator BAUCUS. You tried to answer my question.

Mr. GRUENSPECHT. OK.

Senator BAUCUS. So I just thank you for that.

Mr. GRUENSPECHT. I am trying.

Senator BAUCUS. I appreciate that. Yes, thank you.

Senator COLEMAN. Thank you, Senator Baucus. Senator Crapo.

Senator CRAPO. Thank you very much. Dr. Collins, I want to focus my questions on you. And really, I want to focus on the general issue of the availability of viable, affordable transportation options to agriculture producers. Has the USDA researched the economic impact of the lack of affordable shipping options to the overall agriculture industry?

Mr. COLLINS. Not precisely in those terms. We do have an Office of Transportation at USDA that follows these markets. We do publish a transportation update every week. We try to track the proportion of agricultural commodities that are shipped by each mode, and we try to understand what are the driving forces behind the rates; whether it is truck, whether it is rail, or whether it is barge.

But I don't know of any long-term economic studies that we have produced. But we do try to keep the shipping industry up to date on how we see things unfolding in transportation and agriculture.

Senator CRAPO. Well, as I indicated in my opening comments, rail transportation is a big sore spot in Idaho. Has the USDA conducted any studies, or are there any conclusions you can share with us on the rail shipping, specifically, and the impact of rail shipping, and the affordability, or lack of affordability, of it on the price of agriculture commodities?

Mr. COLLINS. Well, I would say a couple of general things about that. First of all, taking the last part first, when you have an increase in transportation costs, that is going to get passed forward, partially, to consumers. It is going to get passed back, partially, to producers. Often, as a rule of thumb, we use something like a 75

percent 25 percent split, where 75 percent gets passed back to producers.

So the consequence of this is, farmers get lower income; and consumers buying farm products pay a little more, or more than they otherwise would.

Senator CRAPO. But the pass-back is three-fourths of the increase?

Mr. COLLINS. That is generally a rule of thumb that we use. It will depend on the market, the commodity, and so on.

One of the things we have observed with respect to rail, and it is true with barge as well, is that there hasn't been an increase in capacity—number of cars built or number of barges built. We know—barge is a good example, because the focus has been on that on the Lower Mississippi—that we have seen more barge retirements than new barges built for years now.

The whole transportation system in the United States has been under pressure, particularly the last year. If you look at what is going on now with respect to rail, we have a terrific seasonal problem in rail.

This is the season when agricultural crops are harvested; there is rail demand. This is the season when new cars show up in showrooms; there is a tremendous demand for rail to move new cars, including imported cars. Because of high natural gas prices, we have seen more demand for coal; there is more coal moving by rail. And we have got the Christmas season, the Thanksgiving and Christmas shopping season coming up, where most stores do most of their business; a lot of that stuff is transported by rail. So right now, we have this tremendous pressure on rail rates that comes from all of these different sources.

I can remember early in my career, we used to always say that truck transportation was three times as expensive as rail, and rail was three times as expensive as barge. So if you were going to do something, if rail or barge wasn't available, you did truck. If it was between rail and barge, you did barge.

But that is not so true any more. Because of the high energy prices, because of the demand, because of an economy that grew at 3.8 percent last quarter, there has just been tremendous demand for all modes of transportation. And we haven't seen the response in terms of new rail cars or new barges built during that period.

Senator CRAPO. The description you just gave of the pressed capacity of the rail industry is sort of a "downer," if you will, for those in agriculture. And your last comment about the fact that we have not seen the increased production of cars or facilities raises the question of infrastructure. Is the solution to this problem to somehow see an expanded investment in infrastructure?

Mr. COLLINS. Well, I am not sure. One of the solutions has been, what we have seen is grain companies buy their own cars and build their own cars. And so we have seen a lot of the big grain companies, the integrated grain companies, own their own cars now. And they will auction those cars off on the secondary market, too, to provide those available to other shippers. So that is a market response to this pressure. If the railroads weren't doing it, the grain companies are going to do it.

I think we have seen over the last couple of years better performance in the rails with respect to agriculture. You may remember a couple of years ago the tremendous problems we had, particularly in the Southern Plains, with respect to rail movement. I think it has gotten better, and I think this fall, it has actually, despite the hurricanes, been pretty good. We have some areas where there is track washout. I think the Union Pacific has some problems; but Burlington Northern and Santa Fe seem to have done a pretty good job.

And rail rates themselves actually didn't quite spike as much as barge rates this past fall. We saw the premium paid for rail cars go way up; but the tariff rates had gone down, so the net effect wasn't that great.

But I am not sure of the answer to the question of a public policy with respect to infrastructure. I know we have talked a little bit about locks and dams on the Mississippi. That is something that I think everybody has supported. The Administration has supported more investment, particularly on the Upper Mississippi and Illinois Rivers. And so I think that there is some support for public investment in those kinds of resources, locks and dams on the Mississippi.

I am not sure it is there for rail cars or barges, because there are private firms that can respond to a market incentive and buy and build those things themselves.

Senator CRAPO. All right, thank you. I see my time is up. But this is an issue I think we really need to explore, because we have got to figure out how to relieve this pressure that you have described. Thank you, Mr. Chairman.

Senator COLEMAN. Thank you very much, Senator Crapo. Before we go to Senator Salazar, we have the presence of our distinguished Ranking Member here. And I know he is pressed for time, so I will turn to Senator Harkin.

Senator HARKIN. Mr. Chairman, thank you very much. Again, I apologize for being late. I would just ask that my statement would be made a part of the record.

Senator COLEMAN. Without objection.

[The prepared statement of Senator Harkin an be found in the appendix on page 63.]

STATEMENT OF HON. TOM HARKIN, A U.S. SENATOR FROM IOWA, RANKING MEMBER, COMMITTEE ON AGRICULTURE, NUTRITION , AND FORESTRY

Senator HARKIN. And again, just picking up just a couple of things I have heard, our inland waterways transport 16 percent of our goods, at 2 percent of the cost of fuel usage. So it is very efficient, very effective.

And I know, Mr. Chairman, you had asked earlier about the WRDA bill. We have got to get that through. We have got to think down ahead, that we need to expand these locks and dams, we need to make the river more accessible to our shippers and our farmers.

Right now—you talked about rail—but they are captive to rail. I mean, you have only got one rail line, and there is no competition there at all. And to the extent that we can get our rivers more ac-

cessible and get bigger barges on those rivers, that provides that competition and keeps those prices down for our farmers.

So I am hopeful, Mr. Chairman. I know you are supportive of it. And I hope we can get this Water Resources Development Act bill through as soon as possible, and get on with the business of expanding those locks and dams.

With that, I thank you, Mr. Chairman.

Senator COLEMAN. Thank you, Senator Harkin. I would note that I indicated to Mr. Barnes that there is a bipartisan focus and effort and commitment to this expansion of locks and dams and improving our inland waterway system. And I think certainly the Ranking Member's comments reflect that. So thank you, Senator Harkin. Senator Salazar?

Senator SALAZAR. Thank you. And again, Ranking Member Harkin, thank you for holding this hearing along with Chairman Chambliss. I think it is a very important hearing.

Dr. Collins, let me ask you a question. You know, last night, I was reading your testimony. It was on page 7. You made a statement about, I quote, "The lower... prices and higher prices for energy-related products such as diesel, propane, and fertilizer, are cutting into farmers' bottom lines."

And in response to some of the questions that were asked by my colleagues, you said that "crisis" would be defined as an abrupt change in relative prices, and that the increase in these costs were 40 percent or so, which was the highest spike we have seen in 25 years.

Given that, what I would like to do is to just have you answer the following questions, as the Chief Economist. And let me just say, I thank you very much at the outset for the service that you provide to our country. As the Chief Economist for the Department of Agriculture, as you look at the impacts of these price spikes on farmers and ranchers, do you have an estimate as to how many farmers and ranchers will be forced into bankruptcy by these higher costs that have had to be paid for these items?

Second, do you have an estimate as to how many farmers and ranchers are not going to be able to secure their operating lines for the coming year for their operations?

And third, is the Administration prepared to support emergency assistance for farmers and ranchers that are caught in this squeeze this year?

Mr. COLLINS. Regarding the first two questions on farmers that would be exiting agriculture or unable to finance their operations, those are not variables that we estimate or forecast at USDA. I can't answer that question.

There are too many factors that determine whether someone is going to go out of business or not. You can't take a change in energy costs in 1 year and translate that into somebody leaving the business.

American agriculture is incredibly diverse. People have tremendous sources of income outside of farming. Farm income accounts for 13 percent of total household income of all 2.1 million farms, so they have other sources of income to draw on if they wanted to stay in business. So it is not something that we can predict, who is going to go out of business.

Every year, farmers go out of business. Every year, new farmers start farming. And the net effect is the change in the number of operations. And it is just a tremendously difficult variable to try and forecast, so we just don't do that, because we can't do it very well.

With respect to providing assistance, I guess the best answer I could give you to that is that the Administration has already sent to Capitol Hill its proposed reallocation to provide assistance to the hurricane-affected states: the $800 million which you have probably seen; $550 million in conservation spending, and $250 million in Section 32 money for direct assistance to producers. That is what the Administration is proposing.

Senator SALAZAR. If I may just interrupt you, because I know that we don't have all the time in this hearing, I am aware of the package that the Administration has sent over, and I am supportive of the efforts to try to help the producers in the Gulf Coast states.

The issue of these high costs of energy, though, that we haven't seen for 25 years is something that affects the Nation as a whole. And so I am wondering about my producers in Colorado, or Senator Coleman's producers in Minnesota, or Senator Harkin's producers in Iowa.

What are we doing in terms of trying to deal with what I consider to be an emergency crisis for farmers and ranchers across the country?

Mr. COLLINS. Right. Well, if you are focusing strictly on energy, what I would say is that that is a national problem, and that requires a national solution. To look particularly at farmers and suggest that you are going to write them a check to offset their higher energy costs, I think is a difficult proposition, at best.

I say that because we have had historical programs to try and cover farmers' production costs. We used to call that "parity." Then in the 1970's, we used to tie our target prices to costs of production. As farm programs have evolved, we have focused our support on the value side, by providing a target price—for example, wheat growers, a $3.92–a-bushel target price; corn growers, a $2.63 target price—made up of a marketing loan, a counter-cyclical payment, and a direct payment.

That is a substantial risk-reducing safety net that the American taxpayer now provides producers. And over time, we have tried to make that more market-oriented, so that we didn't inoculate producers from changes in commodity prices that they are selling.

In the same way, if we start neutralizing input prices that farmers have to pay, that would be moving us in the direction that we went once before, and have abandoned.

Senator SALAZAR. Yes, but, Dr. Collins——

Mr. COLLINS. So it is just a precedential thing that I think you have to think seriously about.

Senator SALAZAR. My time is up, but let me just make this comment to you. I think that what we have seen here in the months of August, September, and October, is very unprecedented. I mean, when we talk about the 200–percent increase in prices that people have had to provide into their inputs for production, I think that is something that we haven't seen for a very, very long time.

Mr. COLLINS. That is true.

Senator SALAZAR. And I would expect that the number of farmers who aren't going to be able to get those operating lines at the bank this next year is going to be very large.

Mr. COLLINS. That's right.

Senator SALAZAR. I suppose many farmers are not in that category where they can go into other resources to be able to provide their financing.

And I do think we have a huge disaster, emergency, on our hands. And we have, in the role of the U.S. Government, in the past in the last number of years, been able to provide some direct emergency assistance. And I hope to be able to work with my colleagues on this committee, as well as the Department of Agriculture, in pushing that forward.

Mr. COLLINS. Yes, sir.

Senator COLEMAN. Thanks, Senator Salazar. Senator Talent?

Senator TALENT. Thank you, Mr. Chairman. I appreciate your holding this hearing.

Dr. Collins, I am going to ask mostly about the river, but I really have to respond to something you just said. We do have a precedent of helping farmers when there has been a natural disaster. We did with the Florida hurricane a couple of years ago. We have often done it.

And I just think maybe what is hidden here is a disagreement about something. I mean, I think the ability of our producers to continue to produce the safest and most abundant and highest-quality food supply in the world is not just an economic issue. It is a national security issue. I don't want to be in a position where we are importing food the way we import oil.

And part of that means, when there is some extraordinary hit on that sector, we should ameliorate a little bit some of the costs that they have had to take because of that. I don't view that from an ideological perspective. For me, that is just a question of trying to protect the food security of the people of the country. So I guess we disagree about that.

We have certainly done it in the past. To say it is not precedented, I just would suggest to you, is factually incorrect.

You can go ahead and respond. I am going to ask another question, first, and then maybe you can respond to all of it.

Mr. COLLINS. OK.

Senator TALENT. The Administration announced a cost-sharing program so companies could recoup their costs of installing temporary or emergency grain storage that was necessary due to the shutdown of the Mississippi River. Was the bidding open to rice producers?

I know the needs of the corn growers, and I strongly support meeting those. We have a number of rice producers in Missouri. They had to build temporary storage, and they paid about $700,000 for it. I wonder if any rice contracts were considered in that bidding and, if not, why it was limited to corn and wheat, when rice and soybeans have faced similar problems?

And if you could, answer that. And then, I just want to make one other comment, and just join those who have spoken about the importance of keeping our river system open, both by fixing locks and

dams—I mean, if we are going to fix the Panama Canal, which is fine, we need to fix our locks and dams.

And we all understand that in the context of trade competitiveness. Everybody who argues for a trade agreement will say one of the reason we are competitive with low-cost countries is because we have a very good transportation system. And it is true. But you have to invest in it and keep it up.

But I would just appreciate whatever you could do, and Mr. Barnes, to keep the Missouri River open. And I hope that we can convince the Corps somehow that keeping the river open to navigation means putting more water into it when the river is low, and less water into it when the river is high.

I mean, if you ask somebody in this country, as a matter of common sense, when the U.S. Government released water from the upstream reservoirs into the rivers, "Well, should they release it in the spring, when the river is high; or should they release it in the summer, when the river is low?" I think most people, not trained in engineering or hydrology, would say, "Well, gee, I think we ought to release it in the summer, when the river is low." And yet, they would be shocked to find out the policy of our Government is to the contrary; and that now you all are actually moving toward releasing it twice in the spring, causing two rounds of flooding.

So if you want to comment on that, I would appreciate it. Thank you, Mr. Chairman.

Mr. COLLINS. All right. Let me start with my comment that I think providing a payment for energy price increases that would affect farmers like they affect every other business in America, like every other household in America—would be unprecedented. I think that would be unprecedented.

Certainly, in the disasters that you spoke about, we did provide assistance. And those were focused on agriculture; those were focused on crop losses; and they were special, localized, specific disasters.

We face a $5 billion increase in energy costs in agriculture this year. We are predicting next year we will face a $2 billion increase in interest costs. Interest is an input just like energy is an input. And my comment about precedential is, how do you distinguish covering interest rate increases from energy increases, when this would be a national impact that affects everybody; not just unique to agriculture?

So I was just trying to provide a little food for thought here for the committee as they proceed.

Senator TALENT. Well, no, I didn't mean to get—I don't know, I've got a cold, so maybe I am in a bad temper. No, I was just saying, it is not unusual for us, when a disaster peculiarly affects our producers in a certain way——

Mr. COLLINS. Correct. It depends on the——

Senator TALENT [continuing]. To provide some funding to help them through that time. Now, it may be true that we have never—I am trying to think whether we have ever looked at a disaster that had an increased energy price. But we have looked at drought disasters, I mean, with the result of the last hurricane. So it is not unprecedented in that sense for us to treat the farm sector a little bit differently. That is the only point I was making.

Mr. COLLINS. OK. I am happy to agree with that. Regarding rice, I believe we did, under our alternative storage program, receive a proposal for alternative storage from a rice-storer. We did not accept that proposal. We accepted corn and wheat proposals.

I think our logic for that was that at the time we made that decision—that was early in the post-Katrina period—that our number-one priority was to try and deal with the backup on the Mississippi River.

We were also looking at the basis and price effects of commodities. And corn, wheat, soybeans, had some very wide basis changes during that period. Those basis changes translated into much lower posted county prices and soaring government farm program payment costs.

During that period of time, we were not facing any change in the loan repayment rate for rice. There was no increased budget exposure for rice. And that increased budget exposure for grains, driven by the congestion on the Mississippi, was probably the single biggest reason why the decision was made to focus on the grains, as opposed to rice.

If we had had more money, I am sure we would have dealt with rice. It was just a question of the scarce resources, and setting our priorities.

Senator TALENT. OK.

Mr. COLLINS. With respect to the locks and dams on the Mississippi, I can only say, just as a general statement, that is something that the U.S. Department of Agriculture has supported. We are concerned about the fact that the Mississippi represents the backbone, the spine, of our inland transportation system. When grain arrives in Japan or some foreign country, often half the landed price that the Japanese are paying is attributable to transportation.

Our competitive advantage in the world market is keyed to our transportation infrastructure. We do some long-term forecasts. We don't do the 50–year forecasts that the Army Corps of Engineers does. But in our last long-term baseline forecast, which goes out to the year 2014, we project that the corn exports by that year would be 3 billion bushels. And you would have to assume that a substantial portion of those bushels—perhaps 60, 70 percent—would go down the Mississippi.

So we need expanded transportation capacity to stay competitive in the world market for the future. That is what is behind our support of maintaining and improving that infrastructure.

Mr. BARNES. Senator Talent, good to see you again, sir. Pleased to take your question. The Corps has an agreement that has been struck with regard to the Missouri River mainstream master water control manual, to begin reducing releases from the Gavens Point Reservoir, but maintaining them at a flow rate of 23,000 Cfs. That was implemented in early October, to touch the fall shipping season, and gradually was reduced in modest amounts of 1,000 to 3,000 Cfs, over generally the month of October.

What that did, in fact, tie to, it prolonged the shipping stage on the Mississippi River by about 2 additional feet, and maintained the 0 gage in Saint Louis; such that about 4 to 5 feet of additional water below the minimum required by law of 9 feet was available.

As to the spring rise, both the fall and the spring rises—spring releases, rather—are tied to minimum storage that's maintained at Gavens Point. And given my earlier comments about we are in the midst of a fairly prolonged drought, particularly in the upper and the northwest area of the country, it is not likely that there will be minimum flows in Gavens Point such that a spring release would be occurring this year.

Senator TALENT. Thank you, Mr. Chairman.

Senator COLEMAN. Thank you, Senator Talent.

I want to thank the members of this panel. It has been very worthwhile, and thank you. Thank you for your testimony.

With that, we will have our second panel, many of whom have traveled a great distance to be here, be prepared to be seated.

With us for our second panel today is Mr. Daniel T. Kelley, of the National Council of Farmer Cooperatives, on behalf of the Ag Energy Alliance, out of Normal, Illinois. Welcome, Mr. Kelley.

Mr. KELLEY. Thank you.

Senator COLEMAN. Mr. Rick Calhoun, Vice President, Grain and Oilseed Supply Chain, North America, Cargill, out of Minneapolis, Minnesota; on behalf of the North American Export Grain Association and the National Grain and Feed Association. It is good to see you again, Mr. Calhoun, and a great pleasure to have you here with us.

Dr. R. Neal Elliott, Industrial and Agricultural Program Director of the American Council for an Energy Efficient Economy, out of Washington, D.C.

And Mr. Ryan Neibur, of the Rocky Mountain Farmers Union, out of Burlington, Colorado.

Gentlemen, a great pleasure to have you here. We will start with Mr. Kelley, and then move across the panel. You may proceed, Mr. Kelley.

STATEMENT OF DANIEL T. KELLEY, NATIONAL COUNCIL OF FARMER COOPERATIVES, NORMAL, ILLINOIS; ON BEHALF OF THE AG ENERGY ALLIANCE

Mr. KELLEY. Thank you, Mr. Chairman, members of the committee. I am Dan Kelley, a corn and soybean farmer from Normal, Illinois. And I also serve as Chairman and President of GROWMARK, Incorporated, a farmer-owned cooperative serving farmers throughout the Midwest.

I am here today on behalf of the National Council of Farmer Cooperatives, and the Agriculture Energy Alliance. We commend you for holding this hearing, and appreciate the opportunity to share our views on the impact of high natural gas prices.

NCFC is the national trade association representing nearly 3,000 farm cooperatives across the United States, whose member-owners include a majority of our Nation's more than 2 million farmers. NCFC members are uniquely affected by the surge in energy costs as producers, suppliers, and consumers of energy and related products.

In addition my comments today, I would like to submit for the record a brief statement by NCFC.

Senator COLEMAN. Without objection.

[The prepared statement of NCFC can be found in the appendix on page 65.]

Mr. KELLEY. Thank you. The Agriculture Energy Alliance, of which NCFC is a member, represents a broad-based coalition of 100 farm organizations and agribusinesses facing a real crisis because of public policies that have created demand for natural gas, while at the same time restricting access to new supply sources.

U.S. agriculture and related agribusinesses use natural gas for irrigation, crop drying, food processing, crop protection, and nitrogen fertilizer production.

Since 2002, 36 percent of the U.S. nitrogen fertilizer industry, which uses natural gas as a raw material, has been either shut down or mothballed. According to the U.S. Department of Agriculture, farmers' fuel, oil, and electricity expenses have increased from $8.6 billion to $11.5 billion, from the period 1999 to 2005.

Over that same period, fertilizer expenditures went from $9.9 billion to $11.5 billion. Combined, these expenditure increases represent a $4.5 billion decline in U.S. farmers' bottom line over that 6–year period.

The U.S. chemical industry has been especially hard hit by high energy prices, since natural gas is needed as a feedstock. Its natural gas costs increased by $10 billion since 2003, and $40 billion of business has been lost to overseas competitors, who pay much less for natural gas.

Chemical companies closed 70 facilities in the United States in 2004 alone, and at least 40 more have been tagged for shutdown. Of the 120 chemical plants being built around the world with price tags of $1 billion or more, only one of those is being built in the U.S.

Our Nation's current natural gas crisis has two solutions: to increase supply; and second, to reduce demand. The challenge is to find ways to balance our Nation's dwindling available supply of, and rising demand for, natural gas.

The Energy Policy Act recently approved by Congress and signed into law included a number of important provisions to help meet our Nation's agricultural energy needs. Additional action, however, is needed to further encourage the timely development of critical supply sources.

For example, Congress can adopt measures to ensure potential Federal lands and Outer Continental Shelf areas are open for leasing; that leases and permits are issued promptly; that the appropriate tax and royalty policies are in place; and that the necessary pipeline infrastructure is available to bring supplies to market; while leaving behind as small an environmental impact as possible.

The agriculture community believes that it is strategically critical for Congress to remove these production barriers now, to provide new sources of natural gas and oil supplies.

A high priority should be placed on opening up to exploration Lease Area 181 in the Gulf of Mexico; which is known for its abundant supply of energy resources, with access to existing pipeline infrastructure. This action would facilitate speedy delivery of much-needed natural gas to the marketplace. This area alone could ensure that agriculture has access to natural gas to continue manu-

facturing our fertilizer, to grow our crops, and to help meet the food and fiber needs of consumers at home and abroad.

Again, I appreciate the opportunity to testify before the committee, and will be happy to answer any questions later. Thank you.

Chairman COLEMAN. Thank you very, very much, Mr. Kelley.

Mr. Calhoun.

STATEMENT OF RICHARD CALHOUN, VICE PRESIDENT, GRAIN AND OILSEED SUPPLY CHAIN—NORTH AMERICA, CARGILL INCORPORATED; ON BEHALF OF THE NORTH AMERICAN EXPORT GRAIN ASSOCIATION, AND THE NATIONAL GRAIN & FEED ASSOCIATION

Mr. CALHOUN. Chairman Coleman and members of the committee, I am Rick Calhoun. I am Vice President of Cargill's Grain Division, and President of Cargo Carriers, which is a subsidiary barge line for Cargill. I am here today representing the National Grain and Feed Association, and the North American Export Grain Association.

The transportation system in the United States has for many decades been one of the true competitive strengths of U.S. agriculture. For a number of reasons, this asset has turned from a potential strength to a potential weakness. Higher energy costs, congestion on railroads and highways, lack of investment in modernizing and maintaining the inland waterway system, as well as the recent storm-related problems, are combining to sharply escalate the costs of moving agricultural products to market.

At the same time, of course, some competing countries in South America are building infrastructure, which will narrow the competitive advantage we previously enjoyed.

We believe that limits on transportation capacity in the United States are becoming a very serious economic issue in the agricultural as well as the rest of the national economy. We submit that the time has come to get serious about how we can expand transportation capacity, or face the reality that economic growth in agriculture and in other economic sectors eventually will be constrained by our inability to efficiently move product.

The U.S. transportation system serving agriculture, including barges, railroads, and trucks, was running at virtually full capacity at the time Katrina struck the United States. The loss in transport capacity from that storm proved how vulnerable the U.S. is to such disruptions.

While most of the export elevators are now in condition to move product, the remaining constraints on the system, as reflected in barge unloadings—which remain at about 27 percent under the 5–year average—this loss in export capacity has made U.S. FOB Gulf export prices relatively high. As a result, we are seeing traditional customers, such as Korea, sourcing corn from China and others.

We commend Secretary Johanns and the Administration for the post-hurricane initiative designed to assist in the recovery. One program, involving incentive payments to offset costs associated with disposing or directing to alternative uses out-of-condition corn, helped get barges emptied more quickly and back into service to transport new crop corn from the Midwest. We appreciate the

USDA's initiative in developing the program, and recognize that the efforts of many individuals were necessary to make this happen.

We would also like to call attention to Monday's announcement that additional resources will be made available to ease barge congestion related to Hurricane Katrina. This step, too, will be helpful in restoring barge operations and assist in the possibility of raising internal U.S. cash grain prices.

More barge transport capacity will help alleviate storage congestion. It will reduce government LDP payments that have risen sharply due to congestion, and minimize losses in U.S. market share to reliable customers like Korea.

Given the critical importance of the inland waterways to efficient movement of export grain and many other products, modernization of locks and dams and improved river maintenance should be given a higher national priority—it should have been given a higher national priority several years ago. Now, with substantially higher prices, it is more important than ever.

Barge transportation is 2.5 times as fuel efficient as rail movements, and almost nine times as efficient as trucking product. So as energy is likely to remain expensive, and energy conservation is a national goal, the time is nigh to begin seriously investing in modernizing the commercial navigation system.

Many members of this committee have been leaders in trying to pass a water resource development bill in the Senate, and we thank you for that. Given that the House has passed a bill this year, we would respectfully request that the Senate redouble its efforts to move this bill forward. Even if a bill is passed today, we are decades away from completing the critical construction projects—not years, but decades.

In the 25 years since the Staggers Act was passed, the rail freight never had a chronic capacity shortage until the past 2 years. Since then, the problem has only gotten worse, and there are signs that it may take a number of years to work through the rail capacity challenges.

Along with the strain in capacity, of course, we see freight rates increasing; sometimes very sharply. Simply adding rail cars to the existing system will not solve the rail capacity issue. Railroads need to hire crews, purchase more locomotives, build double track in some corridors, build passing lanes, and make structural adjustments to rail yards to improve efficiency.

Even with a commitment by rail carriers to expand capacity, these kinds of changes require several years. And economic projections suggest higher volumes of intermodal freight, coal movements, and other parts of the rail business will continue to expand the demand for rail freight in the next several years.

With severe capacity limits, rail service is becoming increasingly unpredictable; which adds to the effective costs of transportation. With capacity severely constrained, in particular during harvest months, the farmers in rail-served markets likely will be confronting increasing price risks in coming years, unless transportation capacity problems can be successfully resolved.

Finally, the Jones Act requires that goods transported by water between U.S. points travel in U.S.-flagged, U.S.-built, U.S.-crewed,

and U.S.-owned vessels. While we know there is strong resistance to any amendment to this law from industries protected by it, the increase in congestion of cars and commercial trucks on the Nation's highways, the rail capacity shortage, and the need for more inland waterway capacity eventually should force some reassessment of the pro's and con's of maintaining such a law in perpetuity.

In conclusion, it certainly appears that high energy costs are here to stay. And we have a transportation capacity challenge in the major modes serving agriculture. We need cost-effective, highly dependable, and responsive transportation services to respond to customers' needs when they want to make purchases.

Simply put, we must be in position to serve all types of customers, if we are to successfully compete and grow in markets. Katrina and the difficulties we have confronted this year only reaffirm that now is the time to reassess our strategy for transportation investments that will ensure adequate capacity in future years. Thank you.

Chairman COLEMAN. Thank you, Mr. Calhoun.

Dr. Elliott.

STATEMENT OF R. NEAL ELLIOTT, PH. D., P.E., INDUSTRIAL & AGRICULTURAL PROGRAM DIRECTOR, AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY

Mr. ELLIOTT. Thank you, Mr. Chairman, and thanks to the committee for this opportunity to discuss this very critical topic with the committee.

I would also like to acknowledge the contributions of my colleague, Lee Murray, who helped in preparation of the testimony.

ACEEE is a public, non-profit, research organization dedicated to increasing energy efficiency as a means of promoting both economic prosperity and environmental protection. We were founded in 1980, and have been involved in a number of government policy discussions over the intervening years, including assisting some of the staff of this committee in the work on the Energy Policy Act—I'm sorry, the Farm Bill, 2002.

I would also like to acknowledge and commend the committee, under the leadership of Senator Harkin and Senator Lugar, for including major energy efficiency provisions in the Farm Bill in 2002. I think we can now see that those activities anticipated the energy crisis that is currently confronting the agricultural community, and prepared them in some ways for the forthcoming challenges that they are now facing.

As Mark Kingland, of Alliant Energy in Iowa, said of the provisions, particularly Section 9006, these are making a real difference out there on the farms today with small-and medium-sized farmers, because they are now making investments that they would not otherwise be making, that are going to have impacts on their competitiveness for decades to come.

Not only have these provisions had direct energy impacts, but they also really have mobilized, if you will, the ag community and many in the energy efficiency community to bring forth their own programs in responding to the energy challenges that are now facing the farm and ag-ranch community. And these activities have leveraged Federal funding many times over in the past 3 years.

To give a brief response, perhaps, to the questions that were raised earlier, particularly by Senator Salazar, America, I would say, is in an energy straitjacket right now. In contrast to sort of previous periods that we have seen, we now have tight markets in supply of all major energy sources that are available to us.

It will take several years, if not longer, to make significant expansion in energy resources. However, there is one resource that is available to us today, and that is energy efficiency and conservation. This is a resource that we can bring to the market both quickly and cost effectively. And we have seen several examples of those in recent years. In California and New York in 2001, energy efficiency and conservation played a major role in reducing demand and rebalancing energy markets; which avoided major economic losses.

In the current market, the very tight markets they are in, small changes in energy demands can have significant impacts on prices. We have witnessed that over the last couple of months on the upside, as small changes in availability of supply, as a result of the hurricanes, have resulted in the price spikes.

In the longer term, however, what we are going to need to do is look at expanding our resources in the marketplace. And the ag sector is uniquely positioned to respond to that, by becoming more energy self-sufficient by using local fuels. This shift will also help decouple the ag sector from the market.

So how do we go about saving energy in the farm? And it is not new. I ran ag programs in North Carolina, as an extension specialist, in 1980. We put together brochures like this. They are still relevant today. What we need to do is we need to bring that information back to the farmers and make it available to them.

And the ag sector is uniquely positioned to take that kind of information and use it practically. The extension system, the experiment stations, the land grant universities, as well as the USDA rural development program, are all well positioned to deliver that information. What we need to do is mobilize the network. We need to build the awareness, provide the updated guidance to the farmers, and then provide the resources and education that they need.

And to do that, we recommend full funding of many of the provisions that were in the Farm Bill of 2002, the Section 9006, the Conservation Security Program; also, funding of some programs that were authorized but not funded, such as Section 9005, which provides audits.

So now is the time not to scrimp on funding. Now is the time to actually make sure that the USDA and the other folks in the ag community have the resources that they need in order to mobilize the farmers to respond to this crisis that now faces them.

I would like to thank again the committee for the opportunity to give these remarks, and look forward to any questions the committee may have. Thank you, sir.

Chairman COLEMAN. Thank you, Dr. Elliott. And to all of the members of the panel here, we will enter your complete statements in the record. Obviously, the complete statements are much more extensive than the 5–minute period you had here. So they will become part of this official record. We want to thank you.

Mr. Neibur.

STATEMENT OF RYAN NEIBUR, ROCKY MOUNTAIN FARMERS UNION, BURLINGTON, COLORADO

Mr. NEIBUR. Senator Coleman and members of the Senate Agriculture committee, I am honored to have been asked to get off the combine and be here today to discuss with you one of the most important and critical issues farmers and ranchers are dealing with across America.

I want to thank Senator Salazar for including me, and especially for taking the time and effort to hold meetings in every county in Colorado, listening and talking to the people about this unfolding energy crisis and how it affects farmers.

I was raised on a fourth-generation family farm near Akron, Colorado, and attended Colorado State University. After college, I returned home and began doing custom application of chemical and fertilizer. I now farm 4,500 acres of irrigated and dry land, and own my own chemical and fertilizer store, Tri-County Ag. I am an active member of the Rocky Mountain Farmers Union, and proud to be here today representing the family farm and ranch members of the National Farmers Union.

Wherever rural Americans gather today—at church, picking up parts, or getting repairs at the implement dealers, at the feed store and, of course, at the local coffee shop—everyone is talking about fuel and energy costs.

Even before the natural disasters of the hurricanes, oil companies began to raise prices and establish record profits. For example, Exxon Mobil posted earnings of $25.3 billion dollars in 2004, and last Thursday posted the highest corporate profit ever, of $9.9 billion.

While the reports of these profits hit the front page of all newspapers throughout the country, the impact of this price gouging on family farmers and ranchers, small businesses, including trucking and other industries, goes unreported and misunderstood.

Let me share with you what is happening on my farm and every other family farm and ranch throughout America.

The price of natural gas has increased 215 percent in the last 3 years. This increase has raised my cost of irrigation per crop year from $50 an acre in 2003, to $158 expected in 2006. At this rate, farmers will not be able to afford irrigation, and will be forced to dry-land farm in an area that has been in a drought for 5 years. In my situation, dry-land farming irrigated ground is not an option with my bank.

Natural gas is the main ingredient used to make anhydrous ammonia and liquid nitrogen. In 2003, we paid $295 a ton, compared to $495 a ton in 2005. In the production of our corn crop, this price increase translates into a cost-per-acre change of $37–per-acre in 2003, to $62–an-acre in 2005; almost doubling the cost.

In December 2003, I paid $1.10 a gallon for farm fuel. In October 2005, I paid $2.85 a gallon, for the same farm fuel; an increase of over 155 percent.

On my farm, fuel expense has gone from $60,700 in 2004, to over $135,000 in 2005. If you put this into a per-acre basis, it is extremely scary. Fuel cost for harvesting corn in 2004 was costing $9.80 per acre. In 2005, fuel cost for harvesting this year was over

$22 per acre. Remember, the price of corn has not increased; nor has the yield.

Farmers and ranchers are in a situation that does not allow us to pass on these additional costs as a surcharge; which other industries, such as truck lines and airlines, are able to do.

In addition, farmers and ranchers are facing lower commodity prices. The price of corn in 2003 at our local market was $2.45 a bushel; and in 2005, the price was $1.81. So this huge increase in the price of natural gas and other fuels has hurt me even more.

Regrettably, it seems that Congress is in the process of cutting farm commodity price support programs at a time when we need more help, not less. Lower income, higher production costs, and a reduced farm safety net do not add up to a balanced checkbook; and local lenders are getting extremely nervous.

In my part of the country, farmers and ranchers are waiting for a clear signal that Congress and the Administration are taking seriously the economic crisis resulting from high energy and fuel costs, and that something will be done to address the problem.

As a farmer, I have no means by which to pass on the higher costs of energy. And it seems that Congress should consider approving some type of mechanism to help farmers and ranchers offset these higher costs.

I believe that renewable energy and fuels—like wind and solar for electricity, biodiesel, ethanol, and hydrogen—can decrease our dependency on imported and fossil fuels. Farmers must be involved in the manufacturing side—the value-added side—of the process, to benefit economically.

NFU has been a longtime advocate for renewable fuel standards and renewable bio-based fuels. And we believe that more efforts need to be made to produce fuel and energy from our farms. We are also in favor of a mandate for the establishment of an extended biodiesel standard.

In closing, I want to thank the Chairman and Ranking Member for recognizing the seriousness of these issues, and for your consideration of the actions necessary to address our crisis. Thank you.

Chairman COLEMAN. Thank you very much, Mr. Neibur. And I had a meeting yesterday with wheat growers from Minnesota, and what you express here was expressed by them. And my meeting with the corn growers is going to be the same thing; and soybean growers, same thing.

Everyone is paying increased surcharges, fuel surcharges, coming in to them; but you can't levy a food surcharge for fuel and energy going out. So you find yourself squeezed. And it is a serious problem. And I am glad that we have your perspective here this morning.

Dr. Elliott, let me, if I can, respond to some of the things Mr. Neibur said. Very practically—very practically—what are the one, two, three, four, five things that can be done today, in terms of conservation, that farmers can do to save on some energy costs?

Mr. ELLIOTT. Well, there are a number of opportunities. I would say what we see first is a practice, if you will: the low-till/no-till opportunities. If you are doing irrigation, look at some of the advanced irrigation scheduling and soil moisture monitoring aspects.

Probably more than anything else, energy awareness, and just being able to go out, and thinking about, "Do I need to drive the pickup truck out to that field today?" A lot of it is not doing a big thing. There are no silver bullets out there. What we have got is a lot of little, small steps that together add up to some significant cost savings for the farmer.

Senator COLEMAN. And I wonder, Mr. Neibur, if you could give us a real kind of very specific—what are the things that you and your fellow producers are talking about, in terms of, right now, what you can do to deal with some of the energy costs, as practical things?

And then give me—I think you have kind of laid out perhaps one or two things that you want Government to help you do.

Mr. NEIBUR. OK. I would start off by saying, you know, as far as the no-till, conservation-tillage practices, I have been practicing those since I started: very minimum tillage across the whole board, no-till, strip-till. And so, you know, I am really struggling to find ways where we can cut back.

We will buy motors that use less fuel for irrigation. You know, most of the practices that are available, we have already got implemented. I hope that answers the first question.

The second one, as far as what I would like the Government to do, you know, that is a tough question. I believe I was in Mr. Salazar's office a month and a half ago, and we were addressing the same issues. And he brought it up, "How do you do it?" Well, I don't really know.

You know, direct payments, obviously, have been there in the past. You know, I personally don't feel that—you know, our posted county price for corn is $1.98. It could have been $1.98 in 1950, and it just hasn't increased.

I was joking last night with some people, and said, "You give me $4 corn, and I won't be here." So I guess that is the million-dollar question. Other than direct payments to offset the increase in fuel costs, I wouldn't, you know——

Senator COLEMAN. Well, it is a conversation that we have to have. I think it is fair to say—my colleague and I both admit—the answers aren't going to simply come from us in Washington. I mean, that is the purpose of these hearings. What we do need is input from folks who are out there dealing with it day to day.

Mr. NEIBUR. Yes.

Senator COLEMAN. And come up with some solutions.

Mr. Kelley, from a co-op perspective, can you tell us a little bit about the specific impact of these energy prices? And are there things that you are doing, things that the co-op is doing, to alleviate some of the pain?

Mr. KELLEY. Well, the impact—obviously, we are an agricultural co-op, and so we have been affected in terms of transportation costs of products. And we deal with retail cooperatives throughout the Midwest and to the East Coast. So all of our co-ops and all of our members have been impacted, as the other panelists have said.

What we are doing is in a couple of areas. One is, we are increasing our capability in biofuels. We have been marketing ethanol for 30 years. Ninety percent of the gasoline that we market, which is several million gallons, contains ethanol.

We have invested, and are investing, in biodiesel—soy diesel plants, to further refine the vegetable oil so that it can be used in our producers' equipment—tractors and whatever.

We are also increasing our storage capacity. One of the critical issues around soy diesel right now is, because of the demand levels where it is at, it is not available at terminals. So it has to be a process called "splash blending"; which means that the driver has to dump it in the truck manually. We are now investing in facilities to improve that capability, to where we will be able to blend that right at the terminal; be injected as the fuel is loaded.

So we are expending some resources, some of our members' capital, to further enhance our capability in terms of the biofuels area.

And we believe strongly we have been producing—as a farmer, I have produced food and fiber all my life. We have the opportunity today to produce fuel to replace much of the crude oil that we are importing today. And so anything that we can do as a country to enhance the capability to deliver, to market, to process, corn, soybeans, and other products into fuel, to me, is in the national interest, and something that we should be about.

Senator COLEMAN. I certainly share that perspective. I was in Brazil not too long ago; the fifth-largest country, I think, in the world. Half the population of Latin America at the end of this year will not import a drop of foreign oil.

Sixty percent of the new cars are onto flex-fuel engines; which means they can run on 100 percent ethanol, or 100 percent regular gas; the same vehicle, just sensors in the fuel pump line kind of change compression ratios. So if Brazil can—and they made a commitment 30–some years ago to move in this direction.

Mr. KELLEY. Well, I think that is our challenge. What we decide here in the next few months will probably take at least five to ten to 15 years to enact. So time is critical.

Senator COLEMAN. Yes. And that turns to you, Mr. Calhoun, and your testimony—decades away from completing some of the construction projects. You know, you go from the micro, what is happening on the farm, to kind of the macro, infrastructure, construction.

You talked about modernizing locks and dams; you talked about WRDA; you talked about expanded rail capacity. Could you prioritize the investments needed to rehabilitate our transportation infrastructure as it relates to agriculture?

Mr. CALHOUN. Thank, Senator Coleman. I think they are all a priority. And I don't know that I would like to rank them one, two, or three. The modernization and the expansion of locks and dams—it will require decades. You don't fix these things in a year. And they have been neglected for a long period of time.

I think there are a number of groups—MARC 2000 and Waterways Conference, Inc.—which have been working with Congress to try to identify the priorities on the various rivers. And frankly, we are looking at needs on the Ohio, the Illinois, and the Mississippi Rivers, to try to serve all the markets.

And it is not just agricultural. There are a lot of things moving up and down the inland waterway system that aren't just grain. It is coal, and fertilizer, and things that are all vital to our economy.

The rail situation today, throwing more cars at the system is not going to solve it. In fact, it might make the problem worse. We have to become more efficient. We have to be able to put more capacity through the same amount of infrastructure, or we are going to have to make some major infrastructure investments in this country. And those are big decisions for railroads. And to start double-tracking, you know, hundreds of miles of track, that is a lot of money. And that is a bet on the economy. And those decisions are going to be before us in the years ahead.

Anybody that goes out in one of our major cities—you know, Senator Coleman is from my area. And if you drive around Minneapolis around rush hour, it is horrible. I moved there in 1989, and it is a disaster. And there is more that needs to be done there. And the last thing we need to do is put more trucks on the roads.

So to say that one is more important than the other, I think would probably—that is a debatable situation. But I think we need to take a focus and look at all of them. And all of these things can be going on simultaneously. They don't have to be done in a sequence.

Senator COLEMAN. I appreciate your candor and your perspective. Senator Salazar?

Senator SALAZAR. Thank you very much, Senator Coleman.

First, Mr. Neibur, thank you again for getting off the combine and coming here with the real-life story about what is happening on the ground itself.

Second, for all of you who are involved here, I think you just heard Senator Coleman talk about the great prospect of renewable energy, and what has happened in Brazil. I would ask you to join us, keeping your eyes on that spotlight, because I think there is going to be a lot happening, even this year and into the next Congress, with respect to the new Farm Bill. And I think it is going to open up a whole new chapter of opportunity for rural America.

Third, in terms of a question, Mr. Neibur and Mr. Kelley, you are surrounded by people who actually are on the ground, farming every day. And you know your neighbors and you know the members of your co-op. You, yourselves, both are farmers.

The short-term issue of this spike that we saw—August, September, October—tell us how severe that is. Do you think that you are going to see your neighbors and others essentially be forced out of business this year because of this unprecedented rise in costs we haven't seen for 25 years? Mr. Kelley, how about you, and then Mr. Neibur.

And then, just to finish my other question, Dr. Elliott, with you, with respect to conservation, the thing that could be done immediately—just reinforcing what Senator Coleman asked—if you were just to say what two actions the U.S. Congress could take now—as opposed to April or May; but now, in November, in the remaining 2 weeks—what would those two actions be to move with conservation?

So why don't we just start with Mr. Kelley, Mr. Neibur, and then Dr. Elliott.

Mr. KELLEY. Senator, thank you for your question. The immediate impact will definitely impact people's bottom lines. The agricultural economy, because of what was said earlier, with some ex-

cellent years in terms of gross income, can withstand a short-term downturn, in terms of net income.

However, I think there will be producers—one of the aspects of the current Farm Bill is that you have to have a crop in order to be able to get LDP payments. If you only have 50 bushel corn, versus 150, obviously, that changes your income structure. So I think there are many things besides the energy crisis that are going to affect farm income this year.

But the short-term—people had the opportunity that saw this coming to be able to forward contract through our cooperative and our member cooperatives some of their fuel. Those that took advantage of that, both that and LP gas, probably kept their costs of production down.

But as we look to the future, those opportunities aren't there today to forward price next year's inputs. We are paying, as Mr. Neibur said, $500 for anhydrous ammonia—probably, 35 percent, 40 percent higher than what it was a year ago.

So as we look at next year's crop, being able to secure the financing to finance a higher input, both in fuel, fertilizer, and other inputs, is going to put a real question mark in bankers' eyes. Fortunately, as to my knowledge of the farm credit system, their credit quality is high. I am sure the rest of the banking industry and agriculture is fairly similar.

And so, as we look at the opportunities, I think we can weather this current storm with a negative-impact bottom line, but the long-term impact of these higher costs is going to make it very difficult.

Senator SALAZAR. Mr. Neibur?

Mr. NEIBUR. Thanks again, Mr. Salazar. Mr. Kelley hit the hammer on the head, I guess: the whole issue with the banks, the cash-flow issues. You cannot take these fuel costs and the irrigation costs and the fertilizer costs in to your bank and make it cash-flow.

So in turn, your bank is going to say, you know, "We are not going to supply you with an operating note, when there is no chance of there being a profit." And you know, last year was tight; this year was virtually impossible; and next year looks like it is not going to work.

And so the answer to your question is, yes, there is going to be a tremendous amount of banking issues, bankruptcies, people just falling out of bed. They just can't—you know, and we are in a situation, too—maybe perhaps a little different than Mr. Kelley—of our drought; like I noted there, 5 years of drought. I have not raised a single crop of dry-land corn in 5 years.

And so we have got that, on top of the fuel prices, on top of the fertilizer prices. And so I would say that the effect is going to be very wide, very widespread.

Senator SALAZAR. Thank you, Mr. Neibur.

And Dr. Elliott, 2 weeks, two things for us to do.

Mr. ELLIOTT. Well, the first thing, Senator Salazar, is something not to do; which is, don't cut funding for programs like the Conservation Security Program, 9006, and others in the USDA budget. And I think, also, send a directive to USDA to take a look at deploying the resources that they have, that we hope are not cut.

Senator SALAZAR. Do you think those resources are being deployed now?

Mr. ELLIOTT. I think they are being deployed. I think they could be deployed better, and they need to be deployed more aggressively. The problem is, that is hard to do in a day of shrinking budgets and offices, like RD and Extension.

Senator SALAZAR. Thank you all very much.

Senator COLEMAN. Thank you, Senator Salazar.

Gentlemen, thank you. Your testimony has been very, very helpful. And I appreciate Mr. Neibur coming off the combine to be here. Gentlemen, all, thank you for what you have contributed.

With that, this hearing of the committee on Agriculture, Nutrition, and Forestry is now adjourned.

[Whereupon, at 12:39 p.m., the committee was adjourned.]

A P P E N D I X

NOVEMBER 9, 2005

STATEMENT OF KEITH COLLINS
CHIEF ECONOMIST, U.S. DEPARTMENT OF AGRICULTURE
BEFORE THE U.S. SENATE COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY

November 9, 2005

Mr. Chairman and members of the Committee, thank you for the invitation today to discuss the implications for U.S. agriculture of higher energy prices and the disruption of the transportation system due to hurricanes. Prior to the hurricanes, many farmers were already facing rising energy and lower crop prices for the 2005/06 year due to strong global energy demand and large expected crop production in the United States. Hurricanes Katrina and Rita reduced domestic crude oil, natural gas and refinery production temporarily and destroyed some port infrastructure, adding significantly to energy prices and disrupting trade. These impacts have had effects across the Nation's agricultural producers. Energy and transportation costs remain elevated, and labor to operate export facilities remains tight. The higher energy prices and disruption of the transportation system are increasing farm production expenses, lowering prices to producers and raising farm program costs.

Despite these challenges, Gulf Coast areas have made important and remarkable steps toward recovery. USDA has implemented a number of assistance programs to help. In recent weeks, barge traffic has increased sharply; grain inspections for export through the Mississippi Gulf have approached last year's levels; barge and rail forward rates have moved well below spot rates; and cumulative corn and soybean exports for this marketing year are now only moderately below year earlier levels.

Importance of Gulf Ports for Agricultural Trade

Four of the top 10 U.S. ports used to export agricultural products are located in the Mississippi and Texas Gulf region. They are South Louisiana, 36 percent of total agricultural exports by weight; New Orleans, 8 percent; Westwego, 5 percent; and Houston, 5 percent. Fifty-four percent of agricultural exports moved through these four ports in 2004. Key commodities include bulk grains and grain products such as cereal and flour, soybeans, vegetables, animal feed, rice, and tallow.

Two of the top 10 ports used to import agricultural products are also located in the Mississippi and Texas Gulf region. They are Houston, 5 percent by weight, and New Orleans, 3 percent. In 2004, 8 percent of total agricultural imports moved through these Gulf ports. Key commodities include oils (coconut, soybean, palm kernel, nut), coffee, fruit (bananas and pineapple), molasses, and beverages.

The Mississippi River system is a major transportation artery in the U.S. agricultural marketing system, providing a low-cost way for Midwest grain and oilseed producers to ship to international markets. This system is an important factor in keeping U.S. products competitive

in world markets. In a typical year, 50 to 65 percent of U.S. grain exports move down the Mississippi and through the Gulf to their final destinations around the globe.

Gulf Area Transportation Situation for Agriculture

Initial Situation. Immediately after Hurricane Katrina hit New Orleans on August 29, debris, and loss of aids to navigation, loss of power, evacuation of the city and infrastructure damage closed the Mississippi River to navigation. In addition to the bulk grain facilities and ports along the Mississippi River, the ports of Gulfport and Pascagoula, Mississippi, sustained damage to warehouses and storage for refrigerated and frozen commodities. Hurricane Rita, tracking farther west than Katrina, added to the disruption. The pace of vessel loading at Gulf ports fell sharply the week following Hurricane Katrina. Prior to the storm, the weekly loading pace was 36 vessels, and the week after the hurricane, vessels loaded fell to 10.

Port Recovery. USDA's Office of Transportation and Marketing in the Agricultural Marketing Service has had the USDA lead for assembling information on the status of the marketing system in the Gulf and tracking the recovery effort. They report that Gulf Ports have made substantial progress, although much work remains. There are 10 export elevators and three floating rigs between Baton Rouge and Myrtle Grove, LA that have a total storage capacity of about 53 million bushels of grain and a capability of loading 970,000 bushels per hour when fully operational. All facilities are now fully operational. Grain elevators on the Texas Gulf generally escaped damage from Rita. Getting power restored was their most significant delay. Initially, dredgers were not able to get to ports like Gulfport and Pascagoula because they were busy dredging in the Mississippi River. Dredging is now occurring in these ports as well.

At New Orleans, the number of dock workers, truckers and crane operators as reported are still below normal. Some workers are still living on temporary MARAD ships provided by the Department of Transportation; these vessels are scheduled to leave in mid-November. Demand for truck drivers at the port remains high, with truck capacity reportedly running at 50 percent of pre-storm levels.

In Gulfport, the storm clean-up continues, including demolition of several damaged warehouses including some used for frozen product. Pascagoula is providing only direct loading services, with cargo moved directly from truck, rail, or barge to and from the vessel. The port's warehouses are being reconstructed. The port expects to have the warehouses open and operational within a matter of weeks. At the Texas Gulf, public facilities at Port Arthur, which took almost a direct hit from Hurricane Rite, are fully operational. Some private facilities/terminals have not completely restored operations.

All Mississippi River channels used for grain export are open and operating at normal depths. The shipping channel leading to Port Arthur and Beaumont, Texas, is open to 40 feet with no restrictions. The Coast Guard also cleared the Port of Lake Charles, Calcasieu Channel, to 40 feet with no restrictions.

Barge Situation. On the Mississippi Gulf, 90 percent of grain is delivered by barge, the rest by rail. Prior to Hurricane Katrina, lower water levels in the Upper Mississippi River system

resulting from drought had already led to rising barge rates in July and August and higher overall costs of moving grain down river. The low water levels were also causing concerns about the ability to move grain down the river during the upcoming harvest season.

As a result of Katrina, only about 25 barges are estimated to have been lost due to severe damage or sinking. Out of a fleet of 11,900 covered barges, the industry reports that as many as 2,000-plus covered barges are currently on the lower Mississippi River between Baton Rouge and Myrtle Grove, Louisiana – twice the normal number. The bottleneck of barges in the south is partly due to a lack of adequate labor to unload barges. A shortage of housing for barge crews contributes to this problem. In addition, an unknown number of barges are reported to be holding poor quality grain, some of which are said to have been on the Mississippi Gulf prior to Hurricane Katrina. In addition, covered barges are being used to move non-grain cargo back up the Mississippi River which adds to the turnaround time of a barge.

Barge grain shipments on the Mississippi Gulf were running below the 4-year average before Hurricane Katrina. After the storm, shipments declined further as barges began to back up waiting for ports, elevators, and navigation channels to reopen. Despite the below-normal turn-around time, by late October, barge grain shipments were recovering toward their pre-storm levels, although they still lagged compared to the 4-year average.

Rail Situation. Grain deliveries by rail to the Mississippi Gulf decreased sharply after Hurricane Katrina, recovered by September 21, lagged in mid October, but rose 45 percent from a year ago in the week ending October 26. Deliveries to the Texas Gulf have been erratic, but have been running well above year ago levels since the beginning of October. Interchange service in New Orleans among five of the six major railroads has been restored. CSX is the only major railroad unable to interchange freight in New Orleans, and it expects to restore service by the end of February.

Bids for guaranteed grain cars have been at record highs since August due to large harvests and grain stocks. Secondary market rail bids for delivery during the months of January and February finally began to decline during mid October from sharp increases that occurred in response to Hurricanes Katrina and Rita. Still, they remain much higher than previous years, signaling tightness in the transportation market overall. Bids normally ease for rail cars to be delivered in December as harvest ends; however, ongoing pressure on freight rates is anticipated this year.

Export Situation. Vessel loadings of bulk grain in the Mississippi and Texas Gulf declined significantly after Hurricanes Katrina and Rita. Within two weeks after Hurricane Katrina, vessel loadings were just about back to normal, reaching the 4-year average. However, with the approach of Hurricane Rita, the loading pace dropped again. By mid October, vessel loadings again reached the 4-year average but slipped some the week ending October 27.

Another indicator of export performance is grain inspections for export through the Mississippi Gulf, which in the week after Katrina hit fell to 21 percent of the same week in 2004. Compared with a year earlier, grain inspections were generally at, or well below, the year earlier levels until the week of October 13, when they were up 30 percent over last year. The volume of grain inspected again declined during the weeks of October 20 and 27.

In the Texas Gulf, inspections have returned to normal and have helped offset some of the decline in the Mississippi Gulf. The Beaumont facility remains an exception as the export grain elevator there has had limited power and continues to clean up, but it expects to resume loading of vessels prior to November 6. Grain inspections in the Texas Gulf have been very strong the past two weeks, running 142 and 130 percent above a year earlier for the weeks ending October 20 and 27, far better than the 16 percent experienced during the week immediately following Hurricane Rita.

USDA Efforts to Help Improve the Marketing Infrastructure. USDA has implemented a series of emergency provisions to help improve the transportation and marketing situation for producers.

- **Barge movement.** USDA is providing temporary incentives to assist immediate movement of barges of damaged corn from New Orleans to up-river locations. When empty, the barges will be available to move newly harvested crops. USDA has accepted proposals to move about 145 barges of damaged corn out of New Orleans to up-river locations. On November 2, USDA announced that it would continue with a second round of the program, providing an additional $7.6 million in funding.
- **Alternative storage.** To help producers deal with insufficient barge transportation, USDA will pay incentives for alternative storage of grain. USDA has accepted proposals on 41.4 million bushels from 19 companies.
- **Alternative transportation modes.** To reduce stress on the transportation system, USDA is providing a transportation differential to cover the costs of moving grain to other river transportation modes and locations. Freight differentials have been provided to move 294,770 tons of corn, wheat, and soybeans through the Great Lakes and Pacific Northwest ports. The shift from Gulf barge transportation to Great Lakes and Pacific Northwest rail transportation will help mitigate the temporary congestion at Mississippi Gulf ports.
- **Marketing Assistance Loans.** Producers with 2004-crop corn, soybean and rice marketing assistance loans maturing at the end of September and October and who wish to forfeit the loan collateral securing these loans are being provided the opportunity to keep the commodities on their farm for 60 days, rather than move it immediately to commercial warehouses as normally required. During this 60-day period, the producer may purchase these forfeited commodities at the rate allowed for repaying marketing assistance loans.
- **Emergency Loans.** More than $150 million in emergency loans has been made available to eligible producers who have suffered at least a 30-percent reduction in crop production or have sustained physical losses to buildings, chattel or livestock from Hurricane Katrina. Farmers and ranchers have eight months from the date of a Presidential or Secretarial disaster declaration to apply for low-interest agency loans.
- **Temporary and Emergency Storage.** For the 2005-crop year, producers may obtain marketing assistance loans for on-farm grain storage on the ground in addition to storage in grain bins and other normally approved structures. States along the river in the upper Midwest have requests for approval of temporary and emergency storage in excess of 250 million bushels. Areas tributary to the Illinois River have requests for approval in excess of 37 million bushels. Facilities along the Missouri River have requested temporary and emergency storage in excess of 138 million bushels. We have requests along the Ohio River

of approximately 45 million bushels. In total throughout the U.S., USDA has approved 242 million bushels of temporary storage and 302 million bushels of emergency storage.

- **On-farm storage capacity.** In addition, the Farm Storage Facility Loan Program (FSFL) is available to provide low-interest financing for producers to build or upgrade on-farm grain or silage storage facilities.

Energy Situation for Agriculture

In addition to the disruption of port facilities, agricultural export infrastructure and rising transportation rates, the hurricanes have exacerbated an already tight energy market. Fuel and fertilizer prices have risen, reflecting higher prices for crude oil and natural gas. USDA estimates farmers paid 43 percent more for diesel fuel in October 2005 than in October 2004. Crude oil delivered from the Gulf accounts for 30 percent of domestic production. Ninety-percent of Gulf oil output was disrupted by the hurricanes and caused a 30-to-40-cent-per-gallon jump in gasoline and diesel prices as farmers were gearing up for harvest.

Producers use energy directly for operating machinery and equipment on the farm, transporting products to market and indirectly in fertilizer produced off the farm. Farm expenditures on energy-related production inputs—electricity, fuels and oils, and fertilizers—rose from about 5 percent of total farm cash expenses in 1910 to over 17 percent by the early 1980s. From the early 1980s to 1999, improvements in efficiency and generally stable energy prices caused energy-related expenses as a share of total farm cash expenses to fall to about 11 percent. The share of energy-related expenses started rising again after the energy price spikes of 2000-2001.

Rising energy costs affect farm commodities in different ways, depending on their reliance on energy. USDA estimates the cost of production for corn, soybeans, wheat, cotton, grain sorghum, rice, peanuts, oats, barley, sugar beets, tobacco, milk, hogs, and cow-calf operations based on surveys conducted every 3-8 years. These estimates indicate that commodities with the highest energy-related expenses per acre include tobacco, rice, sugar beets, and peanuts.

- For example, in 2003, the average energy-related expenses for tobacco were about $400 per acre, with about $100 per acre for fuels, lubricants, and electricity and about $300 per acre for fertilizer and soil conditioners.
- In comparison, the average energy-related expenses for rice, sugar beets, and peanuts were about $128, $108, and $97 per acre, respectively.
- Energy-related costs for corn, sorghum, and wheat averaged $66, $51, and $34 per acre, respectively.
- On the lower end, energy-related costs for soybeans were only $16 per acre because of significantly lower fertilizer use.
- Expressed as a percent of per acre total farm expenses, which includes land and depreciation, energy-related costs are the highest for sorghum, 23 percent; rice, 21 percent; corn, 19 percent; and wheat, 18 percent.
- Energy-related expenses as a share of total farm production expenses were highest in the Midwest, where energy-related expenses accounted for about 11 percent of total farm production expenses and lowest in the Atlantic and West regions at about 7 percent.

- If the 2003 cost of production data for energy-based inputs are indexed to reflect higher energy costs for 2005, energy-based production expenses for the 2005 crops are about 20 cents per bushel higher than 2003 costs for corn and soybeans, 31 cents higher for wheat, and 45 cents higher for sorghum.

Natural gas is the primary input in the production of nitrogen fertilizer, representing 70 to 90 percent of the cost of anhydrous ammonia nitrogen fertilizer. When U.S. natural gas prices started to increase significantly in 2000, the cost of domestically produced ammonia also rose significantly. These rising production costs have been reflected in the prices paid by farmers for fertilizers, although prices have not fully reflected increases in natural gas prices. From 1999 to 2004, the Prices Paid Index for fertilizer rose by 34 percent. The Energy Information Administration (EIA) reports that the U.S. average natural gas price for industrial users doubled over the same period. More recently, the Prices Paid Index for fertilizer for September 2005 was 11 percent above September 2004, and the October Index was 13 percent above October 2004. Long-term increases in natural gas prices will lead to an increase in the cost of U.S. nitrogen fertilizer production and higher expenses for fertilizers. Increasing imports of fertilizer will limit the impact of higher domestic natural gas prices on farmers to the extent that natural gas prices in other countries do not increase as rapidly as prices in the United States.

USDA's farm income forecast, issued on November 3, 2005, reflecting post-hurricane conditions, placed expenses for fuels and oils, fertilizer and electricity at 14 percent of total farm cash expenses for 2005. The estimate indicated expenses for energy-related production inputs would be up $5.2 billion over last year, with fuels and oils accounting for $3.4 billion of the increase and fertilizers $1.7 billion

Implications of Transportation and Energy Situation for the Farm Economy

Barge rates, rail rates, energy prices and farm prices. The price to charter a barge on the Mississippi River from the Illinois River to New Orleans generally ranged between $10 and $20 per ton during most of 2004/2005. Rates increased sharply since early September, peaking at $39 per ton the week of October 12. By the week of October 26, rates fell to $27 per ton and forward rates three months in the future were down to $19 per ton.

Rail will continue to struggle in a few areas until backlogs created by Hurricane Rita are corrected. Demand for rail cars has increased due to large grain supplies and to other, non-agricultural factors. This means that railroads are pressed to capacity and continued pressure on rail rates is likely.

The competition for the available barges and railcars, as well as high energy prices, continues to pressure barge and rail rates. Higher energy prices are also raising rail, truck, storage and processing costs. Much of these increased marketing costs get passed back to producers in the form of reduced farm prices. In addition, farm production costs are rising as prices for off-road diesel, propane, and fertilizer are up.

In addition to lower market prices and higher production costs, grain storage capacity has become a serious problem with carryover stocks of nearly 2.5 billion bushels of corn and

soybeans from the 2004 record crops as well as the second largest harvests ever expected for 2005. As of October 31, U.S. farmers had harvested 92 percent of their soybeans and 80 percent of their corn. Farmers without sufficient storage capacity face the prospect of on-ground storage, paying for commercial storage if it can be found, or selling at lower cash market prices.

As the hurricanes disrupted the marketing system, the national average corn basis–the local cash price minus the futures price–widened substantially. The long-term national average corn basis, as measured using data from Data Transmission Network (DTN), is 19 cents per bushel. However, the basis usually widens in the fall as harvest selling begins. This year, there are several reasons to suggest a wider-than-normal fall basis: corn carryover from last year's record crop is exceptionally large; the second-largest corn crop ever is estimated for this year; and energy prices were already high, adding to transportation costs. The national average corn basis was 38 cents per bushel on November 4, 2005, compared with 26 cents a year earlier.

Basis changes differ by region and do not strictly reflect transportation costs to the Gulf. For example, the North Central Iowa corn basis was 54 cents per bushel on November 4, over double the 24 cents of a year earlier. The weaker prices in Iowa probably reflect that State's larger than average corn supplies relative to storage capacity. Iowa is expected to face a storage deficit of 470 million bushels, requiring on-ground storage. Meanwhile, in Central Illinois, where drought reduced production from trend, the corn basis on November 4 was 24 cents, only slightly wider than 20 cents a year earlier.

The combination of current low prices and upward revisions in the size expected for this year's grain and oilseed production has led USDA to lower farm price expectations for 2005/06. USDA forecasts an average U.S. farm price for corn of $1.85 per bushel for the marketing year that began September 1, 21 cents below the 2004/05 marketing year average. Soybean prices are expected to average $5.40 per bushel, 34 cents below last year's average. The lower farm prices and higher prices for energy-related products such as diesel, propane and fertilizer are cutting into farmers' bottom lines.

Food Prices. Data on consumer food spending indicate that the farm value represents about 19 percent of the retail cost of food, with the remaining 81 percent attributable to food processing, transportation, wholesaling, and retailing. The energy component of the marketing bill for food was last estimated to account for 3.5 percent of retail food expenditures in 2000, with eating places incurring nearly 40 percent of the fuel and electricity costs of food marketing. The rail and transportation costs accounted for another 4 percent of food marketing costs, but only a portion of those expenses are energy-related costs. The spike in energy costs in recent years has raised questions about the effect of higher energy costs on retail food prices. Because energy and energy-related costs represent a relatively small share of the retail cost of food, we expect that higher energy prices to have only a small effect on food prices. The Consumer Price Index for food rose 2.6 percent during the first half of 2005, and in September was 2.4 percent above September 2004 on a seasonally unadjusted basis. This year's rate of increase is likely to be at the lower end of a range of 2.5-3.5 percent, well below the 3.4 percent rise in 2004.

Farm program costs. A sharp increase in loan deficiency payments and countercyclical payments triggered by low market prices will help offset some of producers' lost income.

Through loan deficiency payments alone, corn producers could capture about 45-cents per bushel. This will, of course, add considerably to farm program spending, which was already up. Commodity Credit Corporation outlays, which dropped to $10.6 billion in fiscal 2004, were expected to be $19.5 billion in 2005 and nearly $22 billion in 2006, even prior to Hurricanes Katrina and Rita. On November 3, 2005, USDA estimated government payments to farmers would be $22.7 billion for calendar year 2005, the second highest ever. The November estimates reflect an increase in marketing loan benefits of $1.3 billion compared with payments expected to be made prior to the hurricanes.

Competitiveness of U.S. Exports. The Mississippi Gulf region is a crucial export region for movement of U.S. grains and oilseeds to overseas markets. Data recently released by the U.S. Bureau of the Census indicates that the value of U.S. agricultural exports through the Port of New Orleans fell by $366 million (52 percent) in September compared with a year earlier. Grain inspections for export through Mississippi Gulf ports in September were down 100 million bushels, or over 50 percent compared with September 2004.

This loss in exports and the adverse effects on farm prices have raised questions about the competitiveness of agricultural exports for 2005/06. The adverse effects on trade depend on (1) the length of time port operations are affected, (2) the extent that foreign buyers can delay purchases from us, and (3) the extent to which grain might be diverted to other ports or to alternative uses, including short term storage. Fortunately, all of these factors are working to mitigate export losses. The quick actions taken by the U.S. Army Corp of Engineers to replace navigation aids on the Mississippi River and to re-open the ports helped minimize the disruption by hurricanes Katrina and Rita. While grain inspections for export fell sharply after the hurricanes, combined inspections from the Mississippi Gulf, Texas Gulf and the Pacific Northwest from the week ending August 25 through the week ending October 27 were 94 percent of the 4-year average for that period. Total U.S. Gulf vessel loadings returned to the previous 4-year average by the week ending October 13, although the pace has slipped some since. USDA has helped this recovery with a range of programs to move and store grain. We also do not know of cases where major foreign buyers have indicated they were going to switch to a foreign source because of the disruption to Mississippi Gulf ports. Finally, USDA's U.S. Export Sales report for the week of October 27, 2005 indicates that accumulated U.S. corn exports this marketing year are at last year's pace, although soybeans were running about 76 percent of last year's pace.

Based on the above considerations, USDA has not reduced its official forecasts of the volume of corn exports for the 2005/06 crop year. As of October, 12, USDA's estimate of this year's corn exports is 2.0 billion bushels, the same as the early September estimate and up slightly from the early August estimate. While actual exports were below expected levels in September, USDA believes the shortfall will be made up as the year progresses. The season-average corn price forecast has been reduced for the 2005/06 crop year, from $2.00 per bushel in early August to $1.85 in early October, which does reduce the value of exports. (Note that price forecast is for the full year and includes forward contracted prices.) But, much of the reduction in the price forecast is due to an increasing corn production forecast, which is now placed at 10.9 billion bushels, the second largest crop ever.

What can farmers do? USDA believes that the Mississippi River system will be able to handle this year's grain movements, although it will take longer to move grain down the river and it will cost more to do so. USDA is working to help producers deal with the slowdown in barge traffic and storage problems. In the short run, farmers are limited in what they can do to mitigate the effects of lower farm and higher energy prices. Higher loan deficiency and countercyclical payments will help offset lower farm prices for eligible producers.

Over the longer term, research indicates energy savings are possible in a number of areas. For example, under conservation tillage, it has been estimated farmers can save 3.9 gallons of fuel per acre by going from conventional tillage to no-till. Energy savings can also come from better irrigation water management, including low-energy precision application; improved pesticide management; improved nutrient management; shifting to grazing systems instead of baled feed; adding windbreaks; adopting precision agriculture; purchasing energy efficient equipment; and generating energy on the farm using anaerobic digesters. Some producers may also be able to switch to less energy-intensive crops. In addition, U.S. farms and ranches have increasing opportunities to produce biomass for biofuel and electricity production.

Another way many producers have reduced input costs is though input purchase strategies. USDA's Agricultural Resource Management Survey for 2004 indicates 24 percent of commercial farms report locking in fuel prices before delivery, 21 percent report negotiating fuel price discounts, 31 percent report negotiating fertilizer price discounts, 8 percent report entering into fuel and fertilizer contracts, and over 20 percent buy fuel and fertilizer through cooperatives.

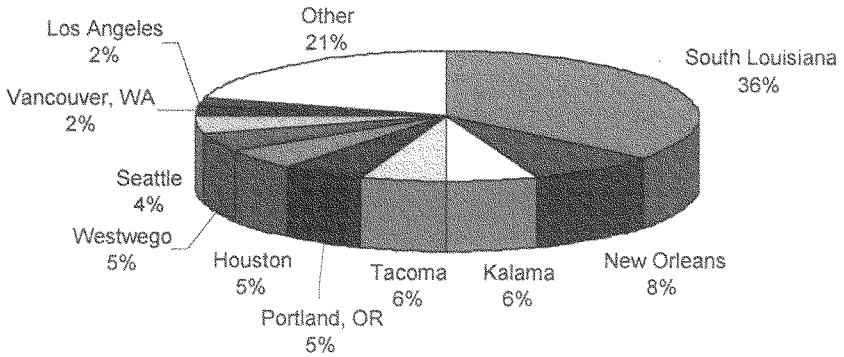
Conclusion

This year's devastating weather has damaged crops, livestock and livestock products and the agricultural production and marketing infrastructure in the Gulf Coast area. These disruptions combined with higher energy costs have slowed farm marketings, lowered prices of some farm commodities, and raised farm production and marketing costs. While these impacts will reduce many producers' farm incomes, farm product demand remains strong, and farm programs are cushioning the income drop for many producers. USDA continues to estimate 2005 U.S. net cash farm income to be second only to 2004. Agriculture's overall financial strength is indicated by this year's debt-to-asset ratio, which is expected to be the lowest since 1961.

While energy costs in particular will be a financial problem for producers this and next year, as long as gross farm income remains strong the farm economy should be able to absorb these costs. Substantial work remains to restore the marketing system. USDA will continue its assistance efforts with other Federal, State and local agencies and will monitor the energy situation closely. While farmers and ranchers face many challenges for 2006, we are confident that the underlying financial strength of U.S. agriculture will enable them to deal with the uncertainties ahead.

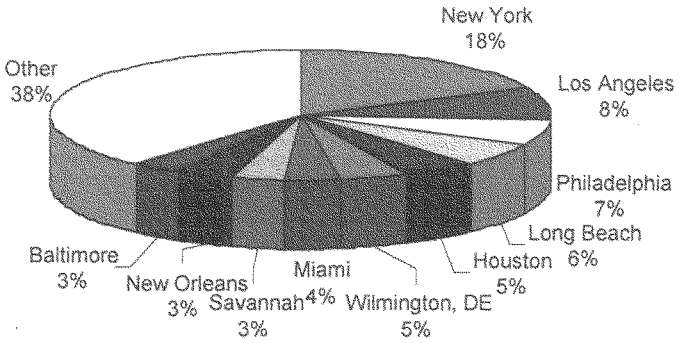
That completes my statement, and I will be happy to respond to any questions.

U.S. Ports Moving Agricultural Exports, 2004



Source: Port Import Export Reporting Service (PIERS), Journal of Commerce
Data is calculated by weight

U.S. Ports Moving Agricultural Imports, 2004



Source: Port Import Export Reporting Service (PIERS), Journal of Commerce
Data is calculated by weight

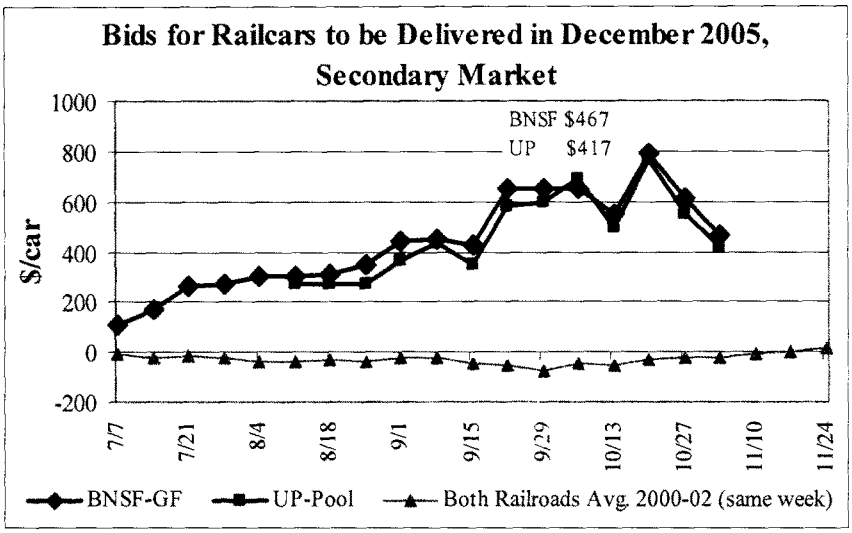
Total 2004 Agricultural Exports
New Orleans, South Louisiana, and Westwego, LA

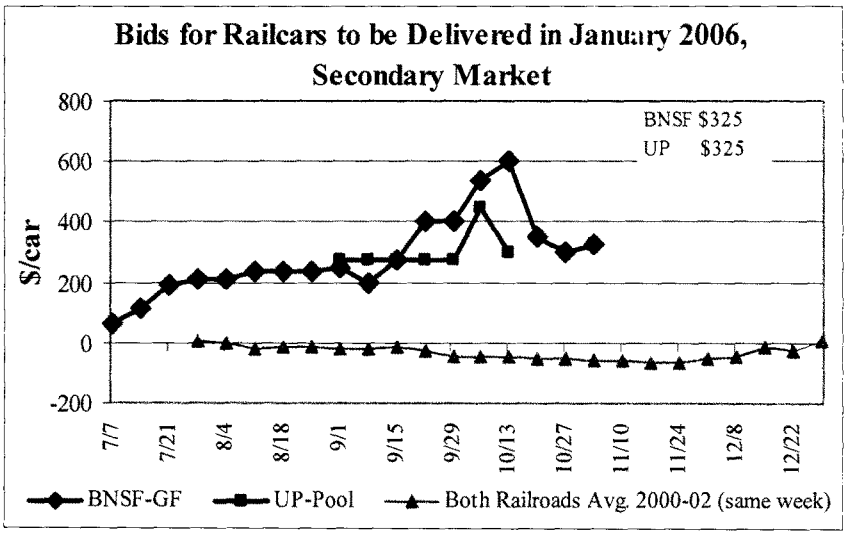
Commodities	Thousand Metric Tons	Share	U.S. Share
Bulk grain	29,365	44%	48%
Soybeans	17,500	26%	68%
Grain products, flour	7,536	11%	82%
Vegetables	5,660	9%	60%
Animal feed	3,879	6%	48%
Rice, crackers, pasta	1,176	2%	42%
Soybean oil	269	0%	83%
Bulbs and seeds	266	0%	31%
Poultry	262	0%	12%
Corn oil	236	0%	70%
Other	436	1%	4%
Total	66,585	100%	49%

Top 10 Agricultural Commodities Exported through Texas Gulf Ports*, 2004

Commodities	Thousand Metric Tons	Share	U.S. Share
Bulk grain	7,906	76%	13%
Tallow, grease	546	5%	68%
Rice, crackers, pasta	32	3%	12%
Bulbs and seeds	245	2%	29%
Grain products, flour	174	2%	2%
Edible nuts	145	1%	30%
Soybeans	121	1%	0.5%
Poultry	112	1%	5%
Cotton	104	1%	6%
Corn oil	79	1%	23%
Other	703	7%	2%
Total	10,464	100%	8%

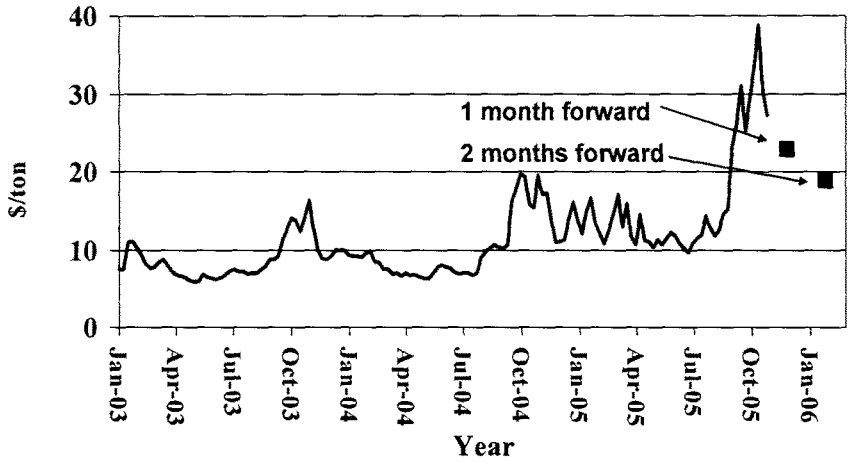
* Texas Gulf ports include: Houston, Galveston, Freeport, Corps Christi, Beaumont, Pt. Arthur, Point Comfort, Brownsville


Bids for Railcars to be Delivered in December 2005, Secondary Market
BNSF $467
UP $417
$/car
1000
800
600
400
200
0
-200
7/7
7/21
8/4
8/18
9/1
9/15
9/29
10/13
10/27
11/10
11/24
BNSF-GF
UP-Pool
Both Railroads Avg. 2000-02 (same week)


Bids for Railcars to be Delivered in January 2006, Secondary Market
BNSF $325
UP $325
$/car
800
600
400
200
0
-200
7/7
7/21
8/4
8/18
9/1
9/15
9/29
10/13
10/27
11/10
11/24
12/8
12/22
BNSF-GF
UP-Pool
Both Railroads Avg. 2000-02 (same week)

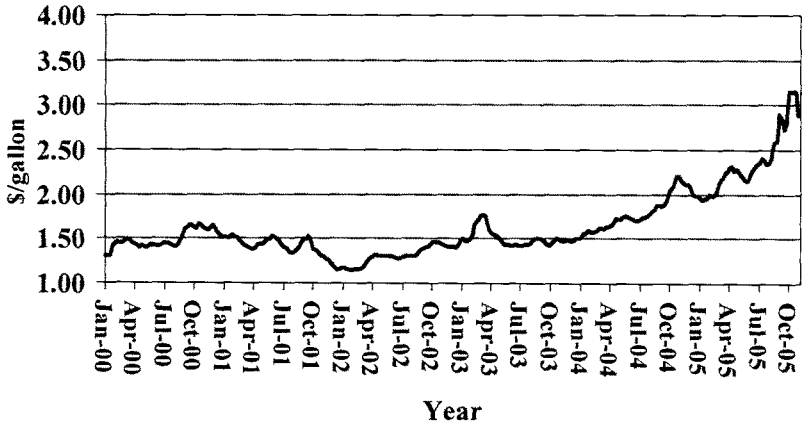
Barge Rate Quotes, 2000-05

Illinois River to New Orleans, as of 10/26/05

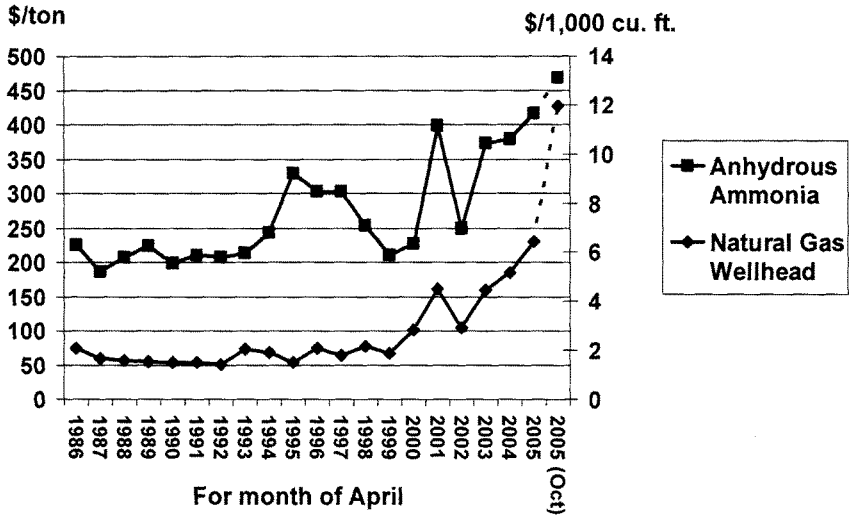


Retail Diesel Prices, 2000-05

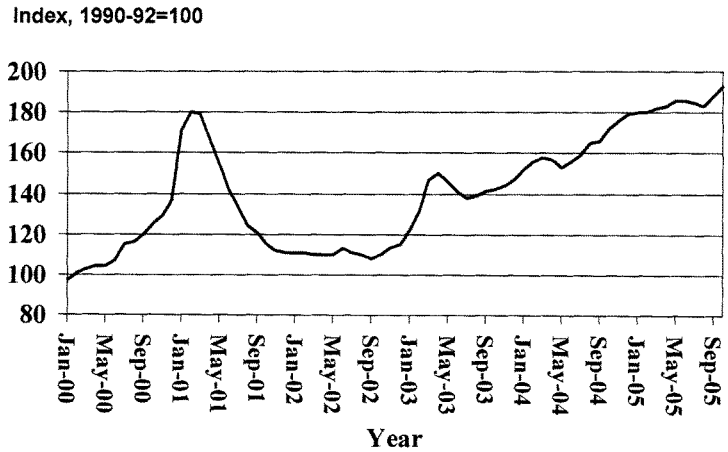
On-Highway, US Average, Weekly through 10/3/05



Anhydrous Ammonia and Natural Gas Prices



Monthly Nitrogen Prices, 2000-05

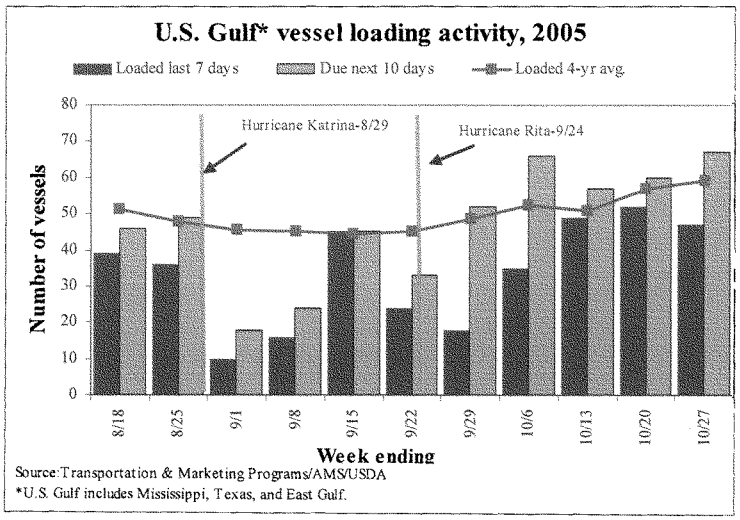


Grain Inspections 2005 and 4-yr Average

Week Ending	Mississippi Gulf 2005	Mississippi Gulf 4-yr avg	% Chg.	Texas Gulf 2005	Texas Gulf 4-yr avg.	% Chg.	Total (MS, TX, & PNW) 2005	Total (MS, TX, & PNW) 4-yr avg	% Chg.
				- 1,000 bushels -					
08/25/05	32,126	40,882	↓ 21	5,455	4,695	↑ 16	61,551	59,756	↑ 3
9/1/2005*	6,232	30,382	↓ 79	9,318	5,499	↑ 69	30,601	49,220	↓ 38
09/08/05	9,436	41,112	↓ 77	5,794	5,402	↑ 7	33,708	57,449	↓ 41
09/15/05	27,139	37,960	↓ 29	15,307	5,527	↑ 177	58,445	56,278	↑ 4
09/22/05	31,483	38,335	↓ 18	6,935	4,369	↑ 59	57,827	56,779	↑ 2
9/29/2005*	20,968	39,788	↓ 47	1,024	5,770	↓ 82	42,543	58,578	↓ 29
10/06/05	41,025	42,598	↓ 4	11,637	3,331	↑ 249	73,966	60,996	↑ 21
10/13/05	53,389	43,689	↑ 22	8,522	5,324	↑ 60	79,660	67,555	↑ 18
10/20/05	46,951	59,065	↓ 21	7,328	4,737	↑ 55	80,482	85,143	↓ 5
10/27/05	41,912	55,164	↓ 24	9,351	5,533	↑ 69	76,932	81,366	↓ 5
8/25/05 - Present	310,661	428,973		80,671	50,185		595,715	633,120	
2005 as % 4-yr avg.	72%			161%			94%		
YTD 2005	1,454,264	1,641,783		254,402	264,668		2,620,072	2,737,756	
2005 as % 4-yr avg	89%			96%			96%		

* Hurricane Katrina, Aug. 29; Hurricane Rita, Sept. 24.

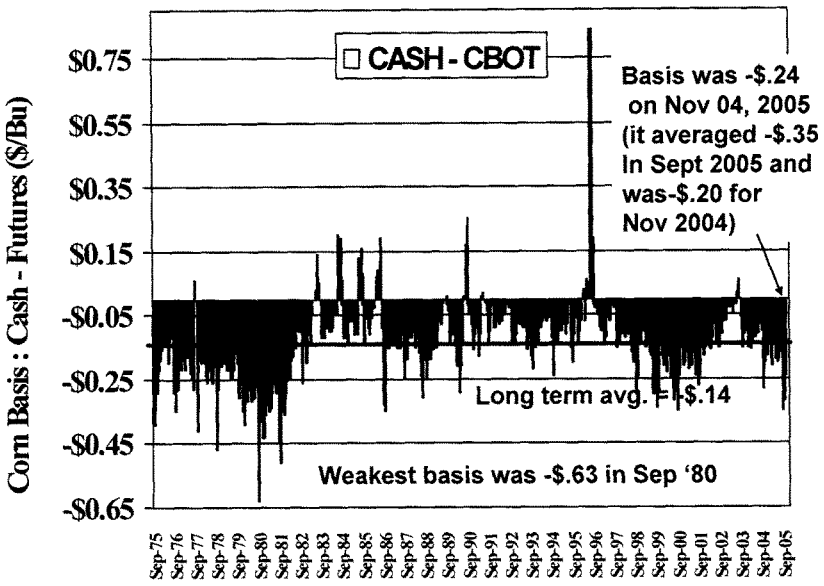
Source: USDA, FGIS



Source:Transportation & Marketing Programs/AMS/USDA

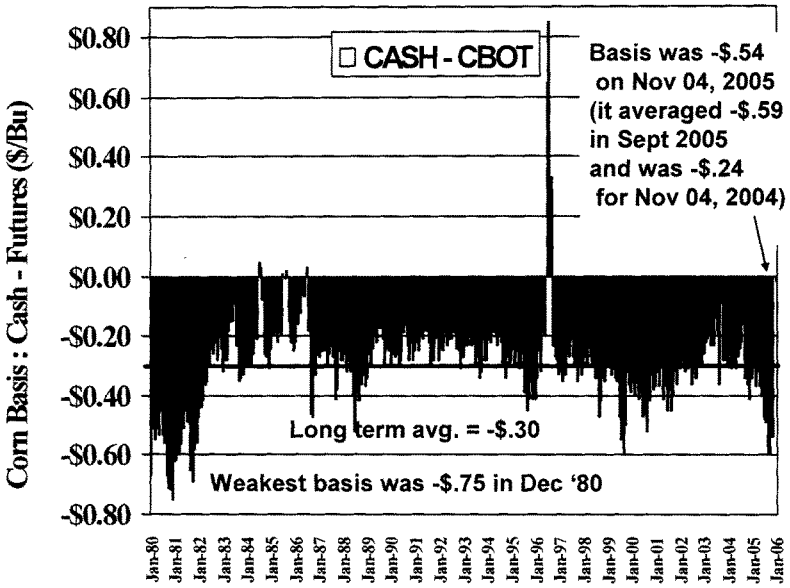
*U.S. Gulf includes Mississippi, Texas, and East Gulf.

Central Illinois Corn Basis

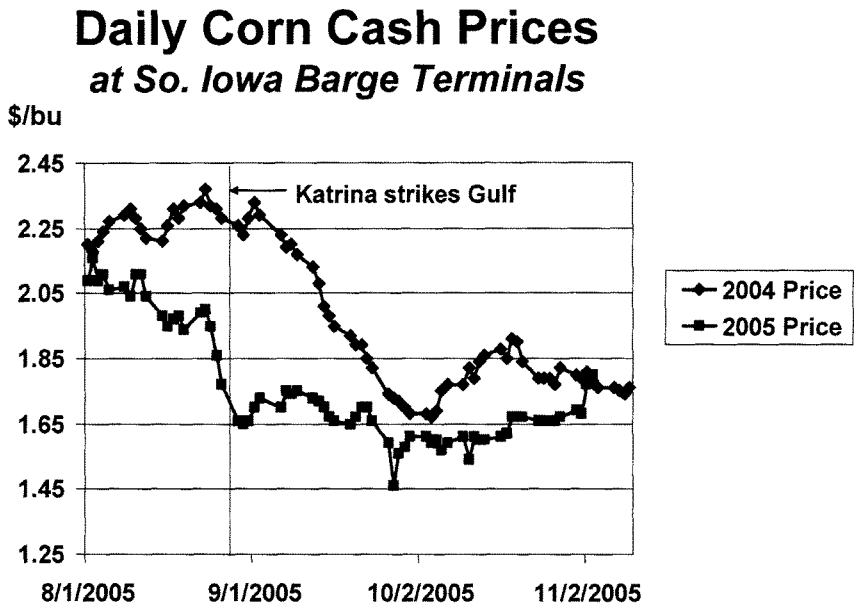


* Sources: USDA/AMS and CBOT

Northcentral Iowa Corn Basis



Sources: USDA/AMS and CBOT


Daily Corn Cash Prices
at So. Iowa Barge Terminals
$/bu
2.45
2.25
2.05
1.85
1.65
1.45
1.25
Katrina strikes Gulf
8/1/2005
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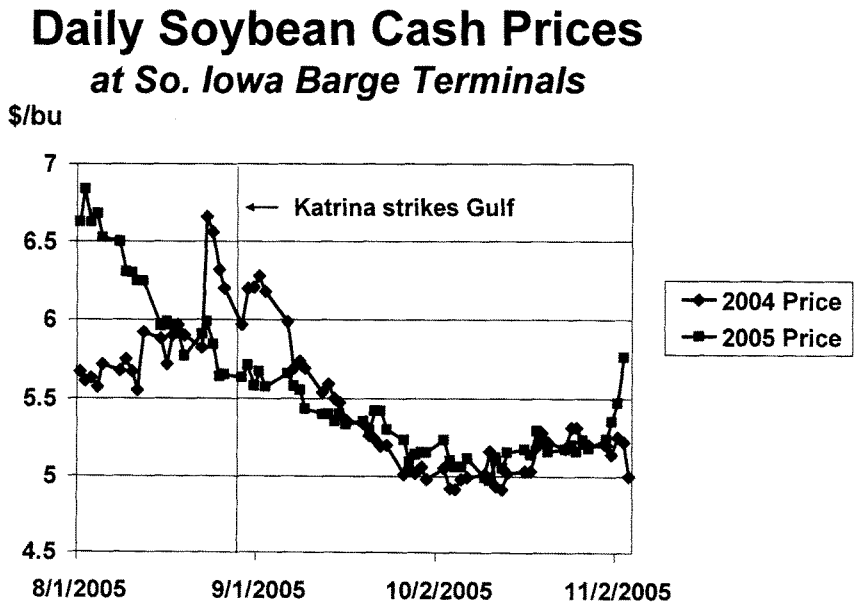
2004 Price
2005 Price


Daily Soybean Cash Prices
at So. Iowa Barge Terminals
$/bu
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Katrina strikes Gulf
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11/2/2005
2004 Price
2005 Price

Statement of Senator Harkin (D-IA) on Energy and Transportation in U.S. Agriculture

November 9, 2005

"Good morning. I'd like to thank our distinguished Chairman for holding this important and timely hearing today. Several of us on the Committee had asked him to hold such a hearing and he has followed through. I'd also like to thank all of our witnesses for appearing before us today, particularly those that have traveled some distance to get here. I am looking forward to hearing from each of you about the critical matters facing American agriculture with respect to transportation and energy.

"Let's start with energy. The country is indeed facing an energy crisis. Oftentimes we see more than a little hyperbole about issues – but in this instance it is certainly on the mark to call the energy situation a crisis.

"Prices paid by farmers for fuel are up 57 percent from September 2004 to September of this year. The rising costs of energy account for nearly 60 percent of the increase in total farm production costs in 2005. The numbers are even more stark if you look at specific commodities important to agriculture. Natural gas prices have risen more than 200 percent over the past several years, while diesel fuel costs 150 percent more than it did just two years ago.

"Of course the increased energy expenses extend beyond agriculture. The Midwest is likely to see the highest energy cost increases of any region in the country. For example, the Energy Information Administration predicts home heating with natural gas in places like Iowa could rise as much as 71 percent this winter. It is vital then that Congress properly fund the LIHEAP program that helps low income families pay high energy bills.

"Despite the great strides in agriculture to reduce energy costs and become more energy efficient, with these prices there's still going to be a lot of hurt. Farmers cannot pass on their higher costs since they don't set the prices for the products they sell and farming is energy-intensive. That's a fact.

"Agriculture faces significant challenges in transportation as well. Although the most serious impacts of Hurricanes Katrina and Rita were in the Gulf region, the indirect effects have also been quite widespread. The Gulf serves as a transportation hub for much of the central United States. County elevator prices have fallen in part because of shipping disruptions and higher costs. Iowa corn and soybean prices have fallen by 27 percent and 11 percent respectively since the end of August.

"We can ill afford to cut the programs that are in place right now that can help farmers save money on energy. Nor should we cut farm income protection. We should not reduce the agriculture budget so severely when our farming and rural communities are suffering.

Unfortunately I do not see the commitment in this Administration and Congress to address this energy crisis in rural America.

"Renewable energy is another key to success, both in terms of reducing farmer costs and increasing income. More must be done to bolster our domestic energy security through farm-based renewable energy like ethanol, biodiesel, and wind power.

"Our nation's agriculture community can help dramatically to reduce our dangerous dependence on foreign oil and lead our nation toward energy independence. We need wise policies to facilitate that. I assure you that I will do everything I can to make this vision a reality."

Before the

Agriculture, Nutrition and Forestry Committee
United States Senate

Statement of

Fletcher R. Hall
Executive Director

The Agricultural and Food Transporters Conference
Of
The American Trucking Associations, Inc.

On

Agricultural Transportation and Energy Issues

(November 9, 2005)

AFTC
AGRICULTURAL AND FOOD TRANSPORTERS CONFERENCE

ATA
AMERICAN TRUCKING ASSOCIATIONS

2200 Mill Road
Alexandria, VA 22314

The Agricultural and Food Transporters Conference (AFTC) of the American Trucking Associations, Inc. (ATA) is pleased to provide testimony to the Senate Committee on Agriculture, Nutrition and Forestry. The ATA is a federation of motor carriers, state trucking associations, and national trucking conferences created to promote and protect the interests of the trucking industry. ATA's membership includes more than 2,000 trucking companies and industry suppliers of equipment and services. Directly and through its affiliated organizations, ATA encompasses over 37,000 companies and every type and class of motor carrier operation. The trucking industry hauls nearly 70% of all the domestic freight transportation tonnage in the United States on an annual basis, equating to 9.8 billions tons.

The AFTC, founded in 1995, is the national organization representing commercial transporters of agricultural commodities, food, forest, and mineral products, and one of the groups within the ATA.

In any discussion of agricultural transportation and energy issues it is essential to consider the role the trucking industry plays in the transportation of agricultural commodities in the United States today.

The trucking industry and the United States agricultural sector have a significant impact on the total United States economy. Energy issues significantly affect both trucking and agricultural transportation. The United States agriculture sector accounts for about 13 percent of the United States' gross domestic product (GDP) and 18 percent of domestic employment according to a Government Accounting Office (GAO) report in 2003.

To give you some idea of the economic impact that the trucking industry has, consider it as the industry that keeps America moving...an industry that represents approximately 5 percent of the nation's GDP and collected $671 billion dollars in revenues in 2004. It is an industry that directly and indirectly employs 10 million people—that's one out of every 14 civilian workers or 7 percent of the civilian workforce. Commercial motor carriers move the vast majority of agricultural commodities and products shipped on a daily basis throughout the United States.

The United States agricultural sector depends extensively upon truck transportation for a number of reasons. Agricultural production typically occurs in areas substantially removed from the final markets of agricultural products. Production and processing are generally dispersed over wide areas or regions. Agricultural commodities and products also tend to require a wide range of transportation services which are significantly impacted by energy issues and energy prices. Agricultural commodities and products such as grains, are bulky and of low value. Others, such as fresh fruits and vegetables, and meats, are highly perishable and of high value. Still others, such as livestock, require specialized handling and equipment. Modern commercial agriculture is also

input-intensive, using a broad range of products from fertilizers to feed additives. These inputs generate demands for truck transportation, and their costs are affected by the price and availability of various forms of energy.

According to United States government estimates, the transportation of agricultural commodities and products accounts for a significant portion of all United States freight traffic. In fact, defining agricultural movement to include movements of farm inputs, raw agricultural commodities, and processed agricultural commodities, agriculture is a primary user of transportation services in the United States at over 23 percent of total tonnage and over 31 percent of the total ton-miles, moved annually.

The trucking industry is essential to agriculture as trucks are now the primary transport mode for the movement of all major agricultural commodities.

- Trucks are the leading transport mode for the movement of fresh fruits and vegetables in the United States, with a market share of over 90 percent.
- Trucks are the largest carrier of produce to ocean ports for export.
- Ninety-five percent of livestock transportation is handled by truck, and fresh dairy products are primarily handled by trucks over relatively short distances.
- According to the U.S. Department of Agriculture (USDA)'s latest grain transportation modal share analysis released in October 2004, trucks transported 68.4 percent of all domestic grain movements in the United States during the year 2000. This fact reflects a significant change in modal share from 1978 – 2000, particularly between rail and truck modes. All modes showed an increase in absolute tons moved. However, rail and barge shares decreased, while truck shares increased through 2000, making trucks the dominant mode for grain transport in the United States. The 2004 report is the latest data available from USDA on grain transport modal shares.
- The latest trucking industry forecast calls for trucking to continue to lead all domestic freight transportation modes in freight tonnage moved in the United States by the year 2016. This obviously includes a significant share of all agricultural traffic.

Considering the importance of the trucking industry as the primary mode of transportation for all major agricultural commodities, it is essential to understand that for most commercial transporters of these commodities, fuel costs are significantly affecting the bottom-line of these carriers because it often represents the second-highest cost for these companies after driver wages. Fuel costs can often account for up to 25 percent of total operating expenses according to ATA's Economics Department.

Rising fuel costs have the potential to create a ripple effect through the economy whereby consumers are likely see higher costs for whatever they are purchasing which is either grown on a farm or delivered by truck. This is

significant because 80% of communities in the United States get their goods solely by truck, as reported by ATA, as there is often no other mode of freight transportation services in these areas.

Commercial trucks consume 49.8 billion gallons of fuel each year. About 35 billion gallons, or 70 percent, is diesel. The remaining 30 percent is gasoline, according to ATA.

Just a one-penny increase in the price of diesel annualized over an entire year costs the trucking industry an additional $350 million a year, according to ATA's Economics Department.

We appreciate the efforts by the Senate Agriculture Committee to examine the ramifications of the recent surge in energy costs and how they impact agricultural transportation. Consider that the United States Energy Information Administration (EIA) reported on October 24, 2005 that the national average price of retail on-highway diesel fuel was $3.16 cents. This is the maximum price for diesel fuel since the government starting keeping records in 1994.

The EIA also predicted that the average price will rise to $2.45 per gallon this year from the year-to-date average of $2.35. The trucking industry is on pace to spend $23 billion more on fuel in 2005 than we spent in 2004. In 2004, the industry spent $62.6 billion on fuel, or $10 billion more than was spent on fuel in 2003, according to ATA's Economics Department.

In view of serious energy cost spikes, in May, ATA wrote a letter to U.S. Department of Energy Secretary Bodman outlining the need for a forward-looking energy strategy to ensure that higher energy costs don't stifle economic growth. In that letter, ATA called for a single national diesel fuel standard, which would help reduce the magnitude of price spikes. Also, various state 'boutique fuels' exacerbate shortages and generate higher prices in specific geographic locations. For example, in California, the state with the largest agricultural sector of all 50 states, if a refinery goes out, it would be very hard for the state to import fuel that would meet its rigid specifications.

Another important fact to consider when referencing fuel consumption by transportation mode in the United States, as reported in 2003, by ATA and the Bureau of Transportation Statistics (BTS), trucking is the leading consumer of fuel at 49.8 percent, with aviation consuming 13.0 percent and marine, 7.1 percent, and rail 3.8 percent.

It is not surprising that in a recently unveiled survey by the American Transportation Research Institute (ATRI), the trucking industry's not-for-profit research organization, the high cost of diesel fuel and driver shortages were the leading issues in a survey of over 2,000 trucking industry executives. Both of

these issues significantly impact the transportation of agricultural commodities and products.

In a farm state like Nebraska, where diesel fuel was reported at $3.23 per gallon on October 28, 2005, by the *Omaha Herald*, both farmers and truckers felt the economic effect. Due to the demands of the harvesting season, diesel prices edged even higher. Diesel fuel is used to power farm vehicles like combines, as well as trucks that are hauling commodities from the field to shipping points and processing facilities. It is also important to note that small trucking companies and independent drivers, both of whom are involved in agricultural transportation, are especially vulnerable when fuel costs take big jumps.

As we are learning from the current hurricane season, the first priority is to restore power to all affected regions so that normal operations may resume. However, looking further out, higher diesel prices will raise the cost of harvesting and post-harvesting treatment *e.g.*, drying, moving and storing of crops in and from the field. For those areas that have been indirectly impacted by hurricane Katrina's damage to the region's marketing infrastructure, (which includes truck movements), increased energy costs will make the overall cost of marketing agricultural products more expensive, while also making truck and rail transport more costly options relative to barge transport.

Another effect of higher energy costs in agricultural transportation will be that food prices will rise. USDA reports that retail food prices will rise slightly for the rest of the year due to the late-summer surge in crude oil prices. USDA officials have said that food prices might raise as much as 3.5 percent from last year, when they increased 3.4 percent – a sharp acceleration from modest increases that averaged 2.5 percent per year in the preceding decade. Fresh fruit and vegetable prices are up more than 6 percent for this year, the largest increase among agricultural commodities. Also, cereal and bakery goods were up 1.4 percent. Again the dependency on trucks for the movements of agricultural commodities and food affects food prices due to ongoing energy cost issues.

In view of rapidly increasing energy costs, the Board of Directors of the ATA has unanimously endorsed an energy resolution outlining the organization's efforts to combat escalating fuel prices and help shape a comprehensive national energy plan.

Current economic conditions require strong actions as part of a comprehensive national energy plan that enables us to deliver America's goods. The national economy, including agricultural transportation, depends upon a healthy and viable trucking industry.

For years the United States has under-invested in domestic refining capacity increasing United States dependency on foreign sources of crude oil.

and refined petroleum products. This occurred despite the fact that United States oil refiners operated at near full capacity. At the same time, fuel price spikes have been more extreme than necessary because the lack of a single nation diesel fuel standard generates regional price disparities and heightens localized supply shortages.

The trucking industry will soon see the introduction of new engine technologies and low – sulfur diesel fuel emissions standards set by the Environmental Protection Agency (EPA). Since these new engines are expected to be less fuel efficient, motor carrier operating costs will be further increased.

ATA's Board of Directors recently revised the association's alternative fuels policy to support a single national diesel fuel standard and the voluntary use of biodiesel in blends up to 5 percent. The new policy serves as one part of ATA's efforts to combat rising fuel prices and help shape a comprehensive national energy plan. Biodiesel represents an important part of a long-term energy plan designed to increase the nation's fuel supply and reduce our dependence on foreign oil.

Biodiesel fuel, meeting the acceptable quality standard and blended with petroleum-based diesel, in amounts up to 5 percent, works in any diesel engine. As the nation transitions to Ultra Low Sulfur Diesel (ULSD) fuel in 2006, biodiesel use will help ensure that engine components adequately lubricate. At current prices, the trucking industry, which consumes 35 billion gallons of diesel each year, is on pace to spend an unprecedented $85 billion on fuel this year. For many motor carriers, fuel often represents the second-highest expense after labor and can account for as much as 25 percent of total operating costs.

ATA President and CEO, Bill Graves, at a news conference recently on Capitol Hill highlighted the importance of opening Alaska's Arctic National Wildlife Refuge (ANWR) as part of a comprehensive national energy plan.

Graves joined Senators Ted Stevens (R-AK) and Lisa Murkowski (R-AK) along with Department of Interior Secretary Gale Norton and Karen Kerrigan, President and CEO of the Small Business and Entrepreneurship Council in detailing how opening ANWR will help reduce U.S. reliance on foreign energy sources. Representatives from the American Legion, Teamsters, the Republican Jewish Coalition and a delegation of Alaskan Inupiaq also attended the news conference.

An uninterrupted fuel supply is essential to meet the nation's transportation needs. ANWR represents one very important component of this comprehensive strategy. As a domestic energy source, ANWR can provide a means to further protect the nation from disruptions and fluctuations in the foreign oil markets.

ANWR represents America's best hope for the nation's next major oil discovery. The U.S. Department of Interior estimates that ANWR holds between 9 billion and 16 billion barrels of recoverable oil. ANWR represents a secure American supply of oil that could help reduce U.S. demand for foreign oil for 25 years or more.

AFTC is pleased to join ATA in calling upon the Bush Administration to implement strategic plans that would prevent fuel prices from limiting the long-term potential of the economy and disrupting the nation's transportation system, including the essential movement of agricultural commodities and products.

The Agricultural and Food Transporters Conference of the American Trucking Associations appreciates this opportunity to share with the Senate Agriculture, Nutrition and Forestry Committee our perspectives on the important and complex energy issues affecting agricultural transportation. Due to the dependency of agriculture on trucking as the primary mode of transportation of agricultural commodities and products, the nation's energy policy, going forward, must take into account the many factors affecting the availability of energy supplies, alternative fuel sources, costs of energy and increased productivity and efficiency. We stand ready to work with government , at all levels, to ensure America remains the "bread basket" for the world and can ensure all our of our citizens can expect the best in food and fiber from field to fork.

DOCUMENTS SUBMITTED FOR THE RECORD

NOVEMBER 9, 2005

STATEMENT OF SHERMAN J REESE
President, National Association of Wheat Growers
Before the Senate Committee on Agriculture, Nutrition and Forestry

On behalf of the the National Association of Wheat Growers and our producer members, I want to commend Chairman Chambliss for holding this hearing highlighting the devastating impact that spiking fuel and fertilizer costs are having on family farmers, such as myself, out in farm country. And I would like to commend Senator Ken Salazar for working with you to focus on the impact that what Senator Pat Roberts has called a Category Five Fuel and Fertilizer Hurricane bearing down on agriculture.

During the course of this hearing, you are likely to hear from highly qualified economists who will speak in dry statistical terms about net farm income, cost of production indices and the like. I fear such dry statistics mask the real personal and economic pain currently being felt in farm country by the "Perfect Storm" confluence of record high fuel and input prices combined with stagnant or declining commodity prices (but not enough to trigger a countercyclical payment).

Another factor masking this economic pain was presented in a March 2005 report entitled "Six Common Errors in Presenting Farm Statistics" by Timothy Wise, Deputy Director of the Global Development and Environment Institute at Tufts University. Among these errors were the inclusion of "Rural Residence Farms" in the income totals for the farm sector. These Rural Residence Farms represent two-thirds of all "Farms" in the US yet yet do not derive their main source of income from farming. Another error was the inclusion non-farm income in analyses of farm programs, and using averages for the farm sector as a whole when presenting income data.

SCOPE OF THE PROBLEM

I farm in the Pacific Northwest. For the first time since the Great Depression, a gallon of diesel fuel is more expensive than a bushel of wheat. The President of the Kansas Association of Wheat Growers pointed out how this crisis was illustrated last month when on the same day that gasoline prices went up 20 cents at the gas pump, the price of wheat went down 8 cents. Gasoline prices have since come down a bit, but diesel generally has not.

One of our Minnesota growers wrote me to report his diesel costs are 54% higher than one year ago and concluded by noting "Unlike other sectors of the economy, I cannot add a 'fuel surcharge' to my bushel of wheat when I sell it at the local elevator…Soon it will be time to secure credit for the next crop year. Sound banking practices will likely prevent many producers from planting another crop."

Another of our North Dakota growers reported it costs him $1,500 each day just to run his combine. I could go on, but the testimonials I have been receiving are all saying the same thing and suggest we are facing a growing financial crisis. One conclusion reached in the above referenced report was the following. "The majority of family farmers operate on the edge of viability, squeezed between low prices for their products and rising prices for their inputs. They stay above the poverty line by supplementing meager farm incomes with off-farm earnings."

NAWG has been supportive of efforts to expand our oil and natural gas supply through a more aggressive drilling program and an expansion of refining capacity. But many of our members may no longer be farming to take advantage of a greater supply of $60 to $70 per barrel oil.

In a hospital setting, the point where the skyrocketing line of input costs exceeds the flat or declining line of commodity prices would land a patient in intensive care. I would further suggest that the outsourcing of our food and fiber needs is not in the national security interests of the United States.

Jimmy Westerfield, president of the McLennan County Texas Farm Bureau was recently quoted in a Rockford Illinois Rock River Times editorial raising an alarming prospect, "What if, one by one, many farmers are forced into the painful decision that they can't afford to plant this year and the next? How many such decisions will it take to produce nation wide, the bare grocery shelves brought about by Katrina and Rita?" Westerfield added that in that circumstance food would be imported, but said, "Do we really want our food supply at the mercy of producers outside our own borders?"

This is why we need assistance now to avoid testing that hypothesis. This is not a budget issue, Mr. Chairman, it's a survival issue.

STOP THE BLEEDING – A PROPOSAL

Any assistance that can be provided to cushion this body blow of spiking input costs is urgently needed and would be greatly appreciated. The scale of help necessary to avoid widespread foreclosures is equal to the level of the Decoupled Direct Payment received by producers. The Direct Payment mechanism is well understood by producers and their creditors, and simple to administer.

I understand that many other industries are impacted by rising fuel costs but again, unlike other industries, production agriculture has no way of passing those costs on. We are at the end of the tailpipe.

Mr Chairman, you have been a great friend of agriculture, I know and trust you will do all you can within your means to bring relief to a beleaguered industry. Thank you for your consideration of my concerns.

Sincerely,

Sherman Reese
President, National Association of Wheat Growers

National Association of Wheat Growers

415 2nd St., NE, Suite 300 • Washington, DC 20002 • Tel:.202-547-7800 • Fax:202-546-2638

The Urgent Need for Emergency Farm Energy Assistance

October 14, 2005

- *Staggering increases in fuel and fertilizer costs are leading to loss of operating credit, profitability, and ultimately, the loss of farm businesses in rural America.*
- *NAWG recommends and requests Emergency Farm Energy Assistance, so that American agriculture can continue to provide the safest, cheapest food & fiber in the world to consumers.*

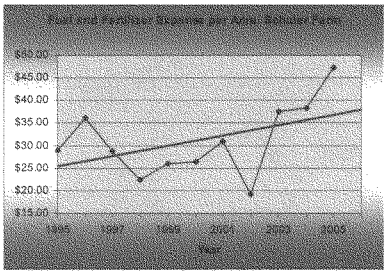
Farmers are faced with skyrocketing prices for two of their critical high-volume inputs in the wake of Gulf Coast hurricanes and other energy market pressures. Fertilizer costs have gone up by double digits, and for the first time since the Great Depression, a gallon of diesel fuel is more expensive than a bushel of wheat.

Farmers face this impact uniquely because, unlike any other participant in the food chain, they have no ability to pass along these costs in the form of surcharges. In fact, farmers end up paying increased fuel costs to get goods delivered to their farms, and pay fuel surcharges to get their goods to market – in short, they pay everybody else's fuel surcharges in addition to their own increased costs. For this reason, farmers are uniquely in need of help.

One typical farmer is Dale Schuler of Carter, Montana. Schuler is a professional farm businessman and family farmer, and the 1st Vice President of the National Association of Wheat Growers (NAWG) – but faces the real possibility of not being in business next year due to these cost increases and the resulting inability to secure operating credit.

Schuler's per-acre fuel and fertilizer costs have averaged $31.02 over the past 10 years, but have exceeded that in each of the past three years. Fuel and fertilizer costs are 52% higher in 2005 than the 10-year average (see chart). Initial projections call for this capable family farm to suffer a $100,000 loss in 2005/06, even with no reductions in existing farm programs.

His is one case among thousands. Across the country, farmers are being denied credit by seed and fertilizer suppliers and bankers. We're aware of some farmers who have had to pledge the cash value of their personal life insurance policy as collateral for an operating loan.



A report produced by Washington State University tabulates fuel price increases at 67% from last year, and fertilizer price increases at 20-23% for wheat growers in eastern Washington. Coupling the energy and wheat price changes from September 2004 to September 2005, the WSU study shows a farm earning a 2¢/bushel return in 2004 will lose 35¢/bushel in 2005 (see table). On a 2500 acre farm with 60 bushel yields – both numbers are conservative for eastern Washington – that's a loss of $150,000 in 2005.

Stop the Bleeding

In response to this dire situation, NAWG is calling for Emergency Farm Energy Assistance. At stake is whether an entire rural infrastructure providing food and fiber to consumers around the world will remain in business, and whether that infrastructure will be able to continue to provide the safest and

cheapest food in the world to American consumers.

Adding up the costs of increased fuel use on the farm, higher fertilizer prices, fuel surcharges on inputs delivered to the farm, and fuel surcharges on goods shipped from the farm – all of which are paid by farmers – the scale of help necessary to avoid widespread foreclosures is equal to the level of the Decoupled Direct Payment received by producers. The Direct Payment mechanism is well understood by producers and their creditors, and simple to administer. NAWG urgently recommends and requests that a supplemental Emergency Farm Energy Assistance payment be provided as quickly as possible.

Cost of Growing Summer Fallow - Winter Wheat in the 14" - 16" Rainfall Area of Whitman County - September 2005 Energy Prices and SWW Wheat Price.

	Unit	Cost/Unit	Quantity	Total Cost
Variable Costs		$		$
Seed	Lb.	0.12	90.00	10.80
Chemicals	Acre	26.53	1.00	26.53
80' Sprayer	Acre	1.75	2.00	3.50
Aqua-Nitrogen	Lb.	0.49	55.00	26.95
Aqua-Sulfur	Lb.	0.38	10.00	3.80
Fertilizer Applicator	Acre	1.25	1.00	1.25
Dry Nitrogen	Lb.	0.50	8.00	4.00
Dry Phosphorous	Lb.	0.35	10.00	3.50
Dry Sulfur	Lb.	0.32	7.00	2.24
Crop Insurance	Acre	3.50	1.00	3.50
Machinery Repairs	Acre	11.10	1.00	11.10
Machinery Fuel	Gal.	2.50	6.00	15.00
Machinery Lube	Acre	2.25	1.00	2.25
Labor	Hour	14.00	1.66	23.24
Overhead	Acre	6.88	1.00	6.88
Interest on Op. Capital	Acre	6.14	1.00	6.14
Total Variable Costs				150.69
Fixed Costs				
Machine Depreciation	Acre	14.92	1.00	14.92
Machine Interest	Acre	13.91	1.00	13.91
Machine Insurance	Acre	0.99	1.00	0.99
Machine Taxes	Acre	2.95	1.00	2.95
Machine Housing	Acre	1.64	1.00	1.64
Land Rent*	Acre	45.83	1.00	45.83
				80.51
Total Cost	Acre			230.92
Average Yield	65.00			
Average Price	3.20			
Average cost per bushel	3.55		Profit (2 yrs)	(0.35)

* Land Rent = 1/3 (Yield x Price) - 1/3 Fertilizer Cost - 1/3 Chemical Cost - 1/3 Crop Insurance Cost

Table excerpted from The Effect of Increasing Fuel and Fertilizer Prices on the Profits of Eastern Washington Wheat Producers, October 2005. Author: Herbert Hinman, Farm Management Specialist, Washington State University.

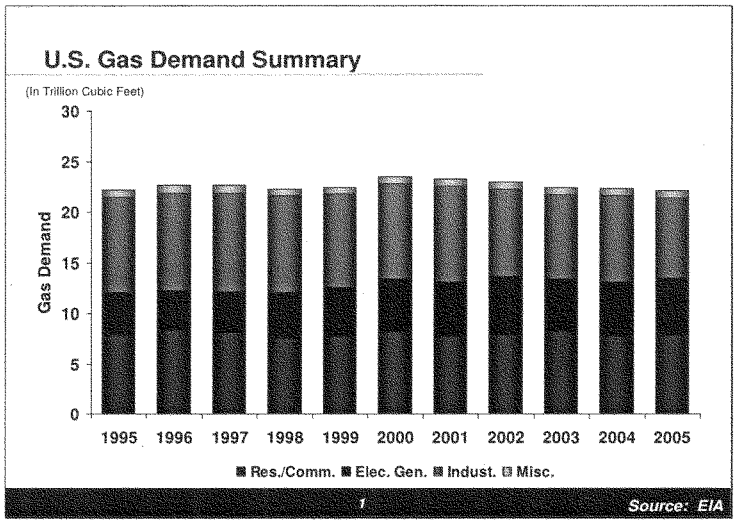
TESTIMONY OF
PETER R. HUNTSMAN
PRESIDENT AND CEO
HUNTSMAN CORPORATION

Mr. Chairman, I am Peter Huntsman, President and Chief Executive Officer of Huntsman Corporation, one of the world's largest chemical companies. Our company thanks you for holding hearings on the skyrocketing energy costs that threaten the well being of every homeowner, every consumer, every farmer and, indeed, the entire manufacturing sector of the U.S. economy. I shall focus my comments today on natural gas.

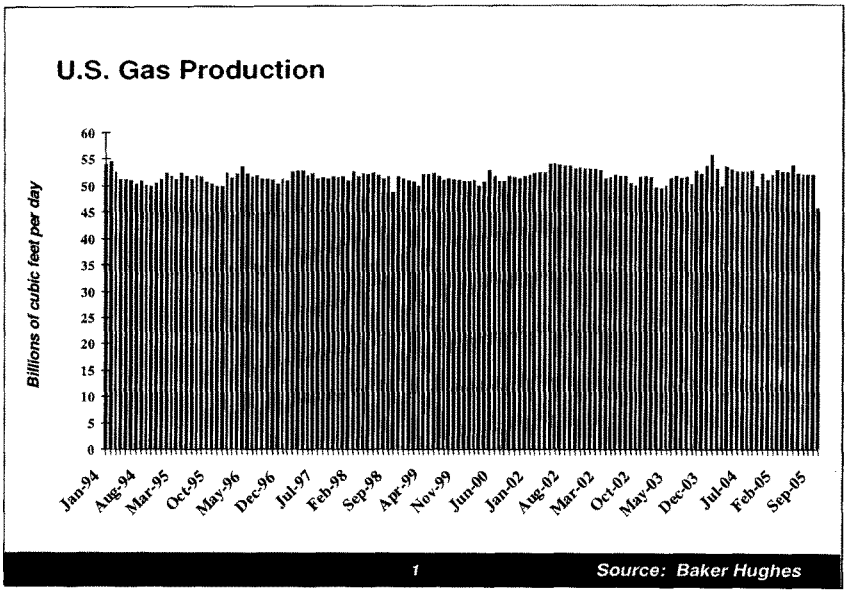
The United States has the world's highest and most volatile natural gas prices. Our company consumes natural gas in the form of both fuel and feedstock, and has experienced first hand the devastating effects of these prices. They have cost us hundreds of millions of dollars and forced us to eliminate more than one thousand jobs. And we are just one company. What we have experienced has been and is being repeated time and again in businesses large and small all across America.

We applaud and support the efforts of those who are advocating increasing the nation's natural gas supply. Increasing supplies doubtless will help longer term. We also stand four-square behind conservation initiatives and are working aggressively to cut our energy consumption to the greatest extent possible.

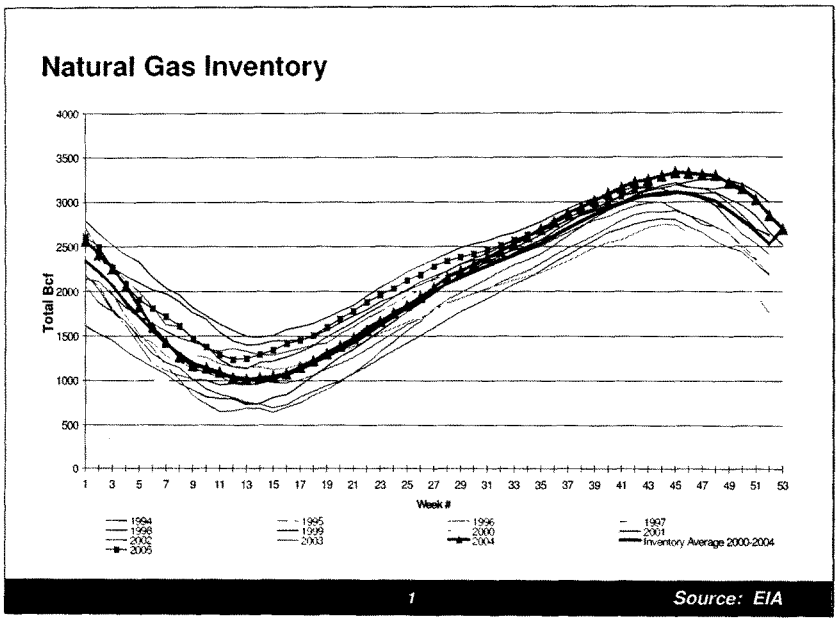
However, Mr. Chairman, there is another aspect of the energy crisis that demands attention and to which, to date, few lawmakers and government regulators seemingly have paid attention. Energy Information Agency statistics show that overall natural gas demand in the United States has steadily *decreased* for at least the last five years.



At the same time production has remained relatively constant.



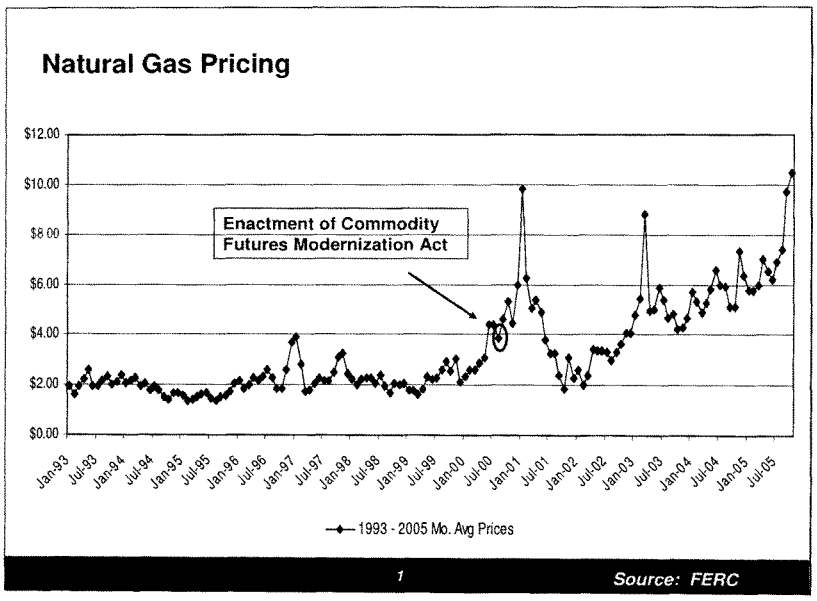
The country has near-record amounts of gas in inventory, in spite of two hurricanes.



The basic laws of supply and demand, on which every business must operate, would dictate that if demand is down, supplies are constant and inventories are high, prices should decrease. But just the opposite is happening.

We believe the answer to this conundrum lies in the manner in which natural gas is traded on the New York Mercantile Exchange (NYMEX). Natural gas futures trading, which greatly influences the price that consumers must ultimately pay, is badly out of control.

In the decades leading up to 2000 the price of natural gas in the United States averaged about $2.30/mmbtu.



Prior to 2000 the NYMEX was subject to real time oversight by the Commodity Futures Trading Commission (CFTC). With the enactment of the Commodities Futures Modernization Act in December of 2000 NYMEX became a self-policing entity, able to change its rules as it pleases and simply notify CFTC after the fact. It has done so several times with its natural gas contract, each time increasing volatility. The result has been prices that badly hurt homeowners, farmers and consumers of every kind. They have cost, and continue to cost, the manufacturing sector of the U.S economy tens of thousands of jobs. The only ones who profit are NYMEX traders and, of course, the Exchange itself.

Mr. Chairman, we believe Congress can deal with this aspect of the energy crisis that is harming consumers of every kind by returning reason and sensibility to natural gas futures trading. We recommend the following steps:

- Requiring any transaction involving natural gas to be traded on a contract market regulated by the Commodity Futures Trading Commission (CFTC)
- Returning CFTC oversight to pre-2000 levels
- Returning natural gas trading stops to pre-2000 levels (the equivalent of 8%)
- Increasing the criminal and civil money penalties for violations of the Commodity Exchange Act
- Barring a member of the CFTC from becoming an employee or agent of any entity regulated by the CFTC for one year after leaving the CFTC

Thank you, Mr. Chairman, and thank you again for putting the light of public scrutiny on the nation's energy crisis.

ENVIRONMENTAL LAW & POLICY CENTER

Illinois Indiana Michigan Minnesota Ohio Wisconsin

TESTIMONY OF HOWARD A. LEARNER

FARM BILL's INNOVATIVE CLEAN ENERGY DEVELOPMENT PROGRAMS: A WIN-WIN-WIN FOR FARMERS AND RANCHERS, RURAL ECONOMIC DEVELOPMENT AND THE ENVIRONMENTS

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COMMITTEE ON AGRICULTURE, NUTRITION AND FORESTRY
UNITED STATES SENATE
NOVEMBER 9, 2005

Mr. Chairman, Senator Harkin, and Members of the Committee,

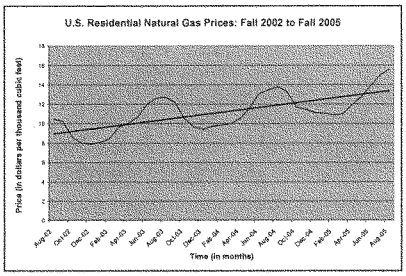
I am Howard A. Learner, the Executive Director of the Environmental Law and Policy Center of the Midwest ("ELPC"), the Midwest's leading environmental and energy advocacy and eco-business organization. ELPC worked with the members of this Committee and your staff in helping to develop the innovative new clean energy programs in 2002 Farm Bill. We have subsequently worked with farmers and ranchers, farm and commodity groups, rural economic development officials and environmental groups, as well as with the USDA, to successfully implement several of the key clean energy development programs on-the-ground. We commend this Committee's leadership efforts in advancing the development of clean, renewable energy and energy efficiency that is providing strong value for small- and medium-sized farmers and ranchers, for rural communities and for all of our environment and national energy security.

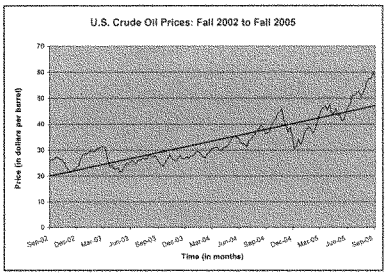
INTRODUCTION

I appeared before this Committee on June 28, 2001, at the request of Senators Lugar and Harkin, to testify at the first set of public hearings on the 2002 Farm Bill. At that time, ELPC encouraged the Committee to establish aggressive and achievable clean energy policies in the Farm Bill and in other legislation to secure healthy farming communities, a stronger agricultural economy, national environmental benefits and economic growth. ELPC worked closely with the Committee on the development of a new suite of results-oriented energy policies, and we were very pleased when Congress for the first time included a new Energy Title IX in the Farm Security and Rural Investment Act of 2002 and also included renewable energy development opportunities in the Rural Development Title VI.

Much has changed since I appeared before this Committee four years ago:

- America is in the midst of a full-fledged energy crisis. Skyrocketing prices for oil, gasoline, natural gas and electricity are creating economic and political turmoil and depressing our economy. Farmers are feeling the brunt of the pain as significantly higher energy and fertilizer costs eliminate already-thin profit margins.





- Wind power, bioenergy, energy efficiency and other clean energy resources continue to mature and expand throughout the country, especially in the Midwest, Great Plains and South. These clean energy resources reduce pollution, improve the environment and public health, and mitigate the threat of global warming.

- Recent decisions by the World Trade Organization, and the ongoing Doha Round of agriculture negotiations, strongly suggest that the United States will have to reduce the level of certain commodity crop subsidies in the near future.

- Continuing dependence on oil imports undermines our national security. Closer to home, communities throughout the country continue to depend too heavily on polluting forms of domestic energy, much of which is generated or produced hundreds or thousands of miles from the very communities that use the energy.

- Stagnant farm incomes, declining rural economies and job losses are jeopardizing the rural communities' economic and social well-being.

- The national budget deficit underscores the need for even more cost-effective, successful programs to expand clean energy development throughout the agriculture sector.

Americans from across our nation, whether living in cities or rural areas, share common interests in a secure energy future, robust economic development, a clean environment, and a stable farm economy. Farms have always provided food for our nation's breadbasket and fiber for our textile mills. Farms now also have the near-term potential to supply a significant portion of our national energy needs, from electricity generated by wind turbines and biomass and biodiesel "energy crops" produced from a range of new agriculture feedstocks:

- According to Battelle Pacific Northwest Laboratory, wind power is capable of supplying at least 20% of our nation's electricity. Wind speeds over a quarter of the U.S. land area "are strong enough to provide electric power at a direct cost equal to that of a new natural gas or coal power plant" (Harnessing the Wind, Stanford University, 2003).

- Biofuels production could reduce gasoline consumption by at least 50% by 2030, with cellulosic biofuels contributing to one-fifth of those reductions. (Interim Report of the Role of Biomass in America's Energy Future, June 2004).

- Easily-achievable efficiency improvements can significantly reduce demand for all energy.

Just as we have done with fossil and nuclear energy, we now have the opportunity to ramp up production of 21st century energy from agricultural sector. Our national circumstances demand it, and with the right investments and consistent commitments, we can achieve more economic and energy independence and a cleaner environment.

THE 2002 FARM BILL ENERGY TITLE PROGRAMS: POSITIONING AGRICULTURE ENERGY FOR THE FUTURE

The 2002 Farm Bill's Energy Title programs are a model for successful federal agriculture and energy policy. The programs which have received actual appropriations, such as the Section 9006 renewable energy and energy efficiency incentives program, have been successful, and they

should serve as the foundation for improved and expanded clean energy development initiatives in the 2007 Farm Bill. The cornerstone Section 9006 program, for example, which provides financial incentives to small- and medium-sized farmers, ranchers and rural small businesses to invest in new renewable energy and energy efficiency projects, is achieving its goals and is increasingly over-subscribed. Section 9006 and the other Energy Title programs are producing new income streams for farmers and ranchers, creating jobs and enhancing rural economic development, and generating environmental quality benefits for everyone.

Let me briefly address two of the new programs in the 2002 Farm Bill that are now achieving strong successes across the country: Section 9006 and Section 6401.

Section 9006 - Renewable Energy Systems and Energy Efficiency Improvements

Section 9006 provides nearly $23 million each year in merit-based incentive funding to farmers, ranchers, and rural small businesses for renewable energy and energy efficiency projects. Notably, despite the Administration's annual proposals to significantly reduce funding for this program during the last three years, Congress has steadfastly continued to appropriate the full $23 million authorized and originally appropriated in the 2002 Farm Bill.

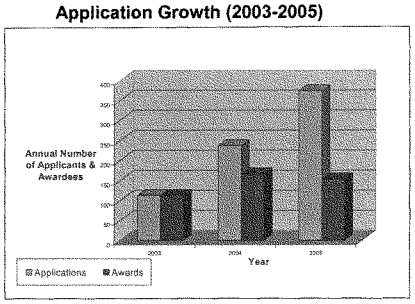
Section 9006 is a strong success. The USDA has awarded nearly $66 million in grants nationwide supporting more than $450 million of investment in close to 400 clean energy projects. These projects are in more than 40 states. For your convenience, I have attached to this testimony a list of all of the Section 9006 grant awards.

When completed, these projects will achieve impressive energy, environmental and economic benefits. For example, based on USDA data from the first year of the Section 9006 program, the 400 projects would achieve the following benefits:

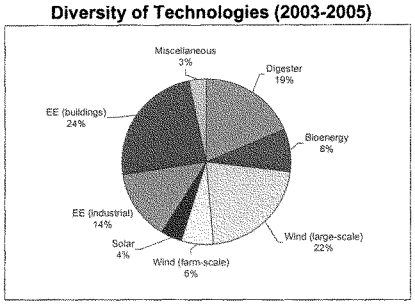
- **Over $1.2 billion** in lifetime clean energy production or energy savings;
- Enough annual power or energy savings (depending on the project) for about **95,000 households** (900 gigawatt-hours of power);
- CO_2 emissions reductions of more than **2.2 million tons**; and
- **750+ jobs**, boosting income and economic growth in rural communities.

The following two charts depict the success of the Section 9006 program, first by showing the popularity of the program, and second by showing the diversity of technologies in the program.

Application Growth (2003-2005)



Diversity of Technologies (2003-2005)



Even with its successes, Section 9006 could be more successful *if* the Administration continues to aggressively implement the program and *if* Congress continues to appropriate significant funding for this program and significantly expand it in the next Farm Bill.

Accordingly, ELPC and its allies and coalition supporters across the country strongly oppose the House Agriculture Committee's recent proposal in its 2006 Budget Reconciliation bill to completely eliminate the baseline authorized funding for this program in FY 2007. Cutting the funding for this successful rural clean energy development program is especially unwarranted in light of the national energy crisis and challenging economic conditions across rural America. Now is precisely the wrong time to eliminate funding for the successful Section 9006 program, which demonstrably benefits all Americans by increasing our nation's energy independence, economic development, and environmental quality. ELPC commends this Committee's decision to retain full funding for Section 9006 in its Budget Reconciliation package, and we encourage the Committee to stand firm and continue to oppose any funding cuts to this program.

Section 6401 - Value-Added Producer Program

The Section 6401 Value-Added program also helps produce significant clean energy benefits. This program was created in the Agricultural Risk Protection Act of 2000, and it offers competitive grants to producers to develop business plans and marketing strategies for value-added agricultural products.

The 2002 Farm Bill improved this program in several ways, especially by defining value-added products to include farm- or ranch-based renewable energy. Thus, Section 6401 now offers business plan and feasibility study opportunities to farmers and ranchers who want to develop clean energy projects.

Like Section 9006, the Section 6401 program is a clean energy success. USDA has issued $16 million in feasibility study grants for about 100 renewable energy projects in the last four years. For your convenience, I have attached to this testimony a list of all of the Section 6401 grant awards related to renewable energy. Although the 2002 Farm Bill authorized $40 million in annual funding for this program, it has received less: $15 million - $20.5 million annually in the

last three years. Full funding for this program would allow our nation to more quickly achieve our energy security, economic growth and environmental quality objectives.

ELPC opposes the House Agriculture Committee's decision to eliminate funding for Section 6401 in 2007 in the Budget Reconciliation package. ELPC supports full funding for this important program, together with continuing to include renewable energy within the scope of the definition of value-added products. We again commend this Committee for preserving the important Section 6401 program from any funding cuts in its Budget Reconciliation package.

Other Farm Bill – Clean Energy Development Programs

The 2002 Farm Bill includes a number of other worthwhile programs, some of which have never received funding. For example, Section 9003 would accelerate the commercialization of new and emerging technologies, including lignocellulosic biomass, for converting biomass into transportation and other fuels, chemicals, and electricity from renewable resources. Congress has not yet appropriated any funds for this important program. ELPC supports a first-time appropriation to get the Section 9003 program moving forward.

Section 9005, the Energy Audit and Renewable Energy Development program, is another potentially valuable new clean energy program enacted in 2002. Section 9005 authorizes USDA to issue competitive grants to organizations to assist farmers, ranchers and rural small businesses by conducting and promoting energy efficiency audits and renewable energy assessments linked in part to incentives available under Section 9006 and other financial assistance programs. This program works hand in hand with Section 9006, and would significantly boost cost-effective clean energy development in the agriculture sector, yet it has never received funding. ELPC strongly encourages a first-time appropriation to get the Section 9005 program moving forward.

WTO CONSIDERATIONS

Ongoing WTO negotiations on agriculture supports, subsidies and market access will likely cause the United States to reduce the level of certain commodity subsidies in the near future. A recent analysis by ELPC explains the opportunity for more farm-based "green box" clean energy investments to replace some portion of the agriculture subsidies. ***WTO Legal Impacts on Commodity Subsidies: Green Box Opportunities in the Farm Bill for Farm Income Through the Conservation and Clean Energy Development Programs*** concludes that clean energy development programs in the Farm Bill that encourage farmers to invest in renewable energy production and energy efficiency improvements are permissible environmental incentives under current and likely future WTO rules and trade agreements. That is because these energy programs:

- Have clear environmental or conservation objectives;
- Do not distort international trade through direct price supports; and
- Meet program-specific criteria.

To further insulate these programs from WTO attack, however, ELPC's report recommends that:

- Congress should confirm, in legislation, that these programs serve clear environmental and conservation purposes; and
- The government should document the environmental benefits of the programs.

For your convenience, I have also attached the ELPC report to this testimony.

POLICY RECOMMENDATIONS

ELPC commends the Committee's interest in developing farm-based clean energy solutions to the nation's energy, economic and environmental challenges. The Energy Policy Act of 2005 contains a number of important policy statements on renewable energy development, coupled with a renewable fuels standard and extension of the production tax credit for certain renewable energy sources, however, it does not go far enough to boost agriculture-based clean energy programs, and funding is very uncertain for many of the programs in that legislation.

The upcoming 2007 Farm Bill reauthorization process offers a legislative vehicle and an opportunity to improve federal agriculture-based clean energy programs and expand the successful investments. ELPC suggests the following elements of a policy agenda for the next Farm Bill, and we welcome the opportunity to discuss these ideas with the Committee Members and your staff in the coming months.

1. Significantly increase funding for Section 9006, the popular and effective Renewable Energy and Energy Efficiency Improvements Program. The House Agriculture Committee's proposal to eliminate the baseline funding authorization for this program in 2007 is unfortunate and should be reversed.

2. Fund the Section 9005 audit/assessment program, thereby improving USDA's ability to offer technical support to farmers and ranchers with energy audits and feasibility studies.

3. Expand and improve the Title VI Rural Development programs that support clean energy development.

4. Expand and fully fund loan guarantees and other incentives for biorefinery development in Section 9003 of the Farm Bill. This is one of the best investments our nation can make to significantly reduce our dependency on foreign oil.

5. Provide equal treatment of "energy crops" and commodity crops under Farm Bill programs. This issue requires careful study and review; however, many farmers are interested in learning more about how targeted incentives for biomass and biodiesel energy crops can supplement or replace threatened commodity crop subsidies challenged in the WTO process.

6. Increase energy payments within the Conservation Security Program. Demand for energy payments is high as more than two-thirds of applicants in this program in 2004 requested energy payments.

7. Develop more effective incentives and financing mechanisms to encourage rural electric cooperatives to develop their renewable energy and energy efficiency resources base.

8. Fully fund and expand commercial demonstration projects in the Section 9008 Biomass Research and Development Act program.

CONCLUSION

Energy production is poised to become the "third leg" of agriculture success in this country, together with food and fiber production. The new Energy Title in the 2002 Farm Bill, and the related clean energy development provisions in Title II and Title VI, established a statutory infrastructure to be improved, built upon and expanded in the upcoming 2007 Farm Bill. The track record of Section 9006 and certain other clean energy development programs has demonstrated the new opportunities, led to successful projects, and helped to promote a rapidly growing interest in renewable energy and energy efficiency developments across the agriculture sector. These successes provide strong support for a stronger and more expansive Energy Title in the next Farm Bill. Our current national circumstances demand it.

Thank you for the opportunity to present these important opportunities to you today. We commend the Committee on its leadership in developing the Energy Title in the 2002 Farm Bill and your continuing strong support. ELPC looks forward to working with this Committee to strengthen and expand the Energy Title in the next Farm Bill and improving agriculture-based clean energy production and efficiency gains in the United States. Thank you for your consideration.

QUESTIONS AND ANSWERS

NOVEMBER 9, 2005

Questions from Senator Harkin

for Dr. Keith Collins, USDA

#1

The recently passed Energy Policy Act of 2005 includes language, which I worked with Senator Lugar, Senator Coleman and others to include, promoting aggressive biomass R&D, and federal biobased product procurement. We envision this language as an agriculturally based oil displacement initiative. At the end of that section in the law, we require USDA to complete a study within a year's time on the economic potential of widespread production and use of industrial biobased products by the year 2025.

How are you progressing on that study and will we have it within a year's time?

#2

What has been the financial impact to farmers in the Midwest of the lower commodity prices due to higher transportation and energy costs?

How much of that will they get back in the form of higher LDP's or other farm program payments? Overall, what is the net negative impact on the farm economy of higher transportation and energy costs?

Why has USDA concluded it necessary to offer financial incentive for grain companies to remove damaged grain and damaged barges from the Gulf region? Why don't they have a financial interest to do so without being paid by USDA?

for Daniel T. Kelly, Agriculture Energy Users Alliance

#1

In your testimony you talk very forcefully about the importance of increasing our natural gas supply from Alaska. Let me ask you about the Alaska natural gas pipeline in particular. Just about everyone is in agreement it has to be built and without delay. Yet, even after Congress has passed legislation in the past few years providing the required financial incentives, a deal still has not been struck by the major parties involved.

What are your recommendations to ensure that we get the pipeline built as soon as possible?

#2

I want to explore with you whether speculation in the over-the-counter energy derivatives markets contributes to price volatility and higher natural gas prices for consumers.

Natural gas prices have risen much faster than anticipated. The available data are clear that there are supply issues with natural gas. However, I also see that the structure of the energy markets has changed dramatically since the Commodity Futures Modernization Act was passed in 2000. We should revisit some of the exemption provisions of the CFMA with an eye to increasing pricing transparency and ensuring effective CFTC oversight.

In your opinion, does the unregulated status of over-the-counter energy derivatives increase the potential for volatility or even manipulation in the energy markets?

for Richard Calhoun, North American Export Grain Association and National Grain and Feed Association

#1

The proposed Senate Water Resources Development Act includes an authorization for enlarged locks on the Upper Mississippi to expand its capacity. There is some debate whether we need that added capacity. However, I fear the potential for major bottlenecks on the river if we do not make the upgrades.

Can you tell us if your industry periodically sees inefficiencies now because of the lock capacity? What do you perceive is the result, both in the impact on barge shipping and the economic consequences, if we do not expand the 5 locks on the upper Mississippi?

#2

I receive complaints from grain elevators about very poor service and often very high rates for the movement of grain. In most cases, those shippers have no effective alternative other than a single railroad that serves them. Your testimony mentions the need for more balanced regulatory oversight by the Surface Transportation Board. Could you elaborate on what specific changes are needed at the STB? And, do you think we need a legislative solution?

for R. Neal Elliott, American Council for an Energy Efficient Economy

#1

Dr. Elliott, I thought your group's study of the impact of energy efficiency and renewable energy on natural gas markets, updated earlier this year, was fascinating. Basically it found that energy efficiency and renewable energy investments could significantly reduce natural gas prices and price volatility.

What I thought most important to note in that study is the speed by which we could get natural gas prices down. It would provide a pretty quick benefit to agricultural and other consumers wouldn't it? Can you describe the savings to various sectors of the economy, especially agriculture, in further detail?

#2

I commissioned a GAO study a year or so ago about the economic potential of wind power for rural communities. The report concluded the potential is great but it did not assess the other many benefits of wind power expansion resulting from corresponding decreases in energy costs elsewhere.

Now I know your organization isn't focused on renewable energy, but on energy efficiency. Yet, you have a very large degree of expertise in this area. Can you tell me then what your view is on the current federal investments in wind power and whether they are sufficient to ensure the kind of price reduction impacts we'd like to see on other energy commodities such as natural gas?

#3

Your testimony noted the huge impact the first ever energy title included in the 2002 farm bill had on agriculture and energy. Can you elaborate on this for us just a bit? For example, you mention that the modest investments we are making at the federal level has leveraged those dollars many times over elsewhere. You also indicated that the energy title re-vitalized interest and a commitment to clean energy technologies and energy efficiency throughout the agricultural and energy sectors. How so? Should we view this as a positive sign for the next farm bill's energy title?

Questions of Senator Blanche Lincoln
for
Agriculture Committee Hearing

11-9-05

Questions for Dr. Keith Collins:

1. My farmers are facing low crop prices, high energy prices, and severe drought. Will the Administration support a disaster relief package for U.S. farm families coping with these conditions and conditions suffered due to Hurricane Katrina and Rita?

2. With high energy prices, low crop prices, drought and other natural disasters, my farmers are scared to death of the U.S. proposal to cut 60% of their Farm Bill safety net in exchange for "market access" that may never materialize if past experience is any indication. Under the current conditions, including high energy prices, what would be the economic impact on farmers and our rural communities if Farm Bill support was cut 60%? How would this impact their ability to invest in renewable fuels projects, like biodiesel, which is so important to our energy independence and rural economic development?

3. Dr. Collins, you are one of the most professional and hard working people in this town so this is not directed at you. But I wanted to respond to the Secretary's comments about who benefits from the Farm Bill because I think they are very misleading. I think it is important to set the record straight on this point because when we talk about farmers contributing to our energy independence, you cannot take away the tool that allows them to make equity investments in renewable fuels and that is the Farm Bill. In any case, the Secretary likes to make two points about the Farm Bill: First, he says that a small percentage of farmers receive most of the payments. But Dr. Collins, you and I know this is terribly misleading. The Secretary is using USDA's definition of a "farmer" which is anyone who produces $1,000 or more per year on the farm. USDA also says that only about 16% of this total number of U.S. farmers actually makes their income on the farm. The remaining 84% make "virtually all income" off the farm, according to USDA. So is it really any wonder why a large share of payments go to farm families making their living on the farm? USDA says 98% of U.S. farmers are family farmers. Second, the Secretary says that some two thirds of farmers receive little or no payments at all. You know that some producer groups benefit by safety net programs that do not cost money but still help them. Dairy and sugar are examples. You also know that some producers have declined to participate in the Farm Bill safety net program when it has been offered to them, preferring to have planting restrictions, with access also to section 32 funds, the Market Access Program (MAP), school lunch and the Food Stamp program. Fruits and vegetables are examples here. Others enjoy other kinds of benefits, including access to water and grazing, the market access program, inspection services, and also school lunch and Food Stamps, and the like. Our livestock producers are good examples in this case.

Now I don't begrudge any of these benefits whatsoever. I want whatever works best for each producer. But what I do object to is using the choices producers themselves have made to paint current policy as somehow deliberately being unfair. It occurs to many people as deliberately seeking to pit groups against one another to intentionally divide them. I think that debate is important on any public policy issue, including agriculture. But only if the debate is above board and based on the facts. You have an incredible reputation for integrity and professionalism, Dr. Collins, and there is not a person in this town on either side of the aisle that doesn't have an immense respect for you. So, I hope you will take a moment to bring some clarity to this issue for the Members of this Committee and the Secretary.

4. Dr. Collins, given the high energy prices, my farm families are telling me how critically important the current Farm Bill is. Unfortunately, I keep hearing reports coming back from that Secretary Johanns is making claims that farmers are saying they want something different, despite media reports coming back from those same farm bill listening sessions saying exactly the opposite. I am concerned that this is a clear misrepresentation of the facts. So I would ask you to have USDA send a qualitative assessment of each Farm Bill listening session (in addition to the transcript, which we can already access) from the Department's point of view on what exactly USDA believes farmers are asking for at these hearings. In other words, provide to us the qualitative assessments USDA is undoubtedly assembling from these listening sessions.

for Howard Gruenspecht, Energy Information Administration

#1

In June this year, you updated your analysis of the costs and benefits of a policy adopted in the Senate version of the energy bill to establish a 10% national Renewable Portfolio Standard, or RPS. The RPS would require electric utilities to generate 10% of their power from renewable energy sources such as wind.

Is it correct that the study found that the 10% RPS would reduce the price of both natural gas and electricity to consumers, and that electricity and natural gas customers would save a total of $22.6 billion by 2025?

During the Senate debate, some characterized your study as finding an $18 billion tax on consumers. Is it correct that the $18 billion was actually the cost to industry to implement the RPS, not consumers, and that consumers would actually save money from the RPS? Didn't EIA subsequently correct this figure to $8.3 billion in costs to industry, due to an original overestimate of the investment in solar photovoltaics?

Can you say what pricing projections you used for natural gas prices in that study? Is it likely that if gas prices remain closer to today's levels (~$14/mmBTU), that the RPS would probably save even more money for consumers?

#2

EIA is perhaps the leading government agency, here or abroad, for the issuance of accurate and timely energy data. This data is of great importance as you know to aiding the efficiency of the energy markets. However, EIA admits that the reliability of its data in key surveys has fallen to 70%.

My concern is that your agency's actions and reporting impacts consumers, including agriculture and other industries. About this time last year, for example, EIA's natural gas storage report erroneously reported a larger than expected withdrawal. The result was NYMEX futures prices immediately jumped 60 cents, costing consumers an estimated $200 to $1 billion. Meanwhile the Administration has requested less money for EIA in FY 06 than what many say is needed to ensure better data collection and reporting across energy sectors.

Can you provide the Committee a detailed assessment of how much it would cost to address quality control, system upgrades, and staffing needs at EIA so that it can do its job as effectively as possible, avoiding the kind of problems mentioned above in the future?

United States Senator Debbie Stabenow
Agriculture Committee Hearing on Agricultural Transportation and Energy Issues
November 9, 2005

Questions for the Witnesses

Question for Dr. Keith Collins, Chief Economist for USDA

1. Your testimony focuses on the impacts of Hurricane Katrina to grain. Coming from a primarily specialty crop state, I am also interested in any information on the impacts of the Hurricanes to transportation and export of fruit and vegetables. Can please provide me with this information and tell me of any steps USDA is taking to help specialty crop farmers specifically?

Questions for Mr. Howard Gruenspecht, Deputy Administrator of Energy Information Administration

1. Why have diesel prices increased so that diesel is more expensive than gasoline? Is this happening nationwide, or only in certain regions?

2. Is there any evidence that oil companies are raising the price of diesel in order to lower the price of gasoline?

3. How much diesel do farmers use per year compared to other industries such as trucking? What industry uses the most diesel nationally?

4. Other than increased drilling for oil and natural gas, which will not help petroleum supplies immediately, what other options exist to help reduce the cost of natural gas and diesel fuel?

ANSWER OF GRETTA IRWIN

Iowa Turkey Federation

To Question Of

SENATOR TOM HARKIN

What are the National Turkey Federation and other poultry producer associations doing to plan for a public information effort, in conjunction with federal, local and state governments, in the case of an avian flu outbreak?

The National Turkey Federation, the National Chicken Council and the Egg Safety Center already have teamed up on a Web site, www.avianinfluenzainfo.org, to educate the public about the facts surrounding avian influenza, emphasizing the fact that we never have had a case of the Asian-type flu in the United States. NTF and others in the poultry industry have an established track record of working with federal, state and local governments in the event of an outbreak. We also have a strong record of fulfilling all our obligations to our trade partners and of working through the media to provide all necessary information to the general public Our industry's record during the 2002 outbreak of Low Pathogenic Avian Influenza (LPAI) in Virginia is a prime example. In short, we have the communications plans and models in place, we have experience from previous Low Pathogenic outbreaks, and we would be ready in the highly unlikely event of a more serious outbreak.

Senator Tom Harkin
Avian Flu Hearing Questions

Question for Dr. Stan Kleven, Professor, University of Georgia

As you state in your written testimony, the longer the H5N1 type of avian flu remains uncontrolled in Asia, the risk of a pandemic in humans increases.

> **What role has the academic community here in the U.S. and in Asia played in developing plans to control and eradicate H5N1 in Asian poultry populations? What have been the successes? What major open issues and challenges remain?**

There is a great deal of veterinary expertise on avian influenza in the academic, government, and private industry communities in the U.S. We are experienced in dealing with avian influenza, and a great deal of planning has gone into setting up functioning programs for monitoring of flocks, rapid diagnosis, rapid characterization of isolates, and control and eradication methods. Most states have contingency plans for preventing and controlling outbreaks, as does USDA APHIS. The National Poultry Improvement Plan has a program in place, but the formal acceptance of the program is hung up somewhere in the rule making phase.

The USDA ARS Southeast Poultry Research Laboratory in Athens, GA, headed by Dr. David Swayne, is probably the foremost laboratory in the world for avian influenza. They have provided on the ground expertise and advice in controlling the Asian outbreaks, and they have been instrumental in characterizing many viruses from the region, helping to establish genetic lineages and to aid in the epidemiology of tracing sources of outbreaks. Unfortunately, they are severely hampered by lack of space. Rob Webster at St. Jude's Children's Hospital in Memphis has also been in the forefront. CDC is also active, but more on the human than on the bird side.

There is a willingness on the part of the academic community to participate further, but I'm not aware that very much such help has been requested. I believe that much of the input from the U.S. and western countries has been more from the medical community and that the participation from the veterinary community, especially those with poultry industry expertise, has been underutilized.

Senator Tom Harkin
Avian Flu Hearing Questions

Question for Dr. Donald Waldrip, Wayne Farms

I agree with your assertion that we need to tackle H5N1 at its source.

> Has the U.S. poultry industry participated in or advised these international efforts to eradicate avian flu in agriculture? How? Have offers of advice and participation by U.S. industry been well-received and accepted?
>
> How can the government and international organizations effectively use industry resources for avian flu control efforts abroad? Is the industry receptive to using its own resources for this?

QUESTION FROM SENATOR STABENOW

Q1. Why have diesel prices increased so that diesel is more expensive than gasoline? Is this happening nationwide, or only in certain regions?

A1. There is no inherent reason why diesel fuel prices should be lower (or higher) than those for gasoline. Each fuel is valued by the market based on its supply/demand balance at any given time. As such, historically, diesel fuel has tended to be less expensive than gasoline in the summer, when gasoline demand is strongest, and more expensive in the winter, when heating oil usage increases overall demand for distillate fuel (which includes diesel fuel), and gasoline demand is relatively weak.

In recent years, as demand for distillate fuels has increased faster than that for gasoline (in the United States and globally), diesel fuel has grown relatively more expensive compared to gasoline. Through the first 11 months of 2005, the average U.S. retail price of diesel fuel has been higher than that of regular gasoline for all but 6 weeks. Though the differential varies somewhat regionally, with diesel fuel prices relatively stronger in the West Coast and Rocky Mountain regions, the general trend is similar nationwide.

QUESTION FROM SENATOR STABENOW

Q2. Is there any evidence that oil companies are raising the price of diesel in order to lower the price of gasoline?

A2. Prices for both gasoline and diesel fuel in the United States are set by the market, generally reflecting the balance between supply and demand for each fuel at any point in time. It is unlikely that a seller could successfully raise the price of one fuel to offset a reduction in the price of the other. While the Energy Information Administration (EIA) is not empowered to investigate competitive conditions in the marketplace (such investigation would fall under the purview of the Federal Trade Commission), EIA has seen no evidence that the relative prices of gasoline and diesel fuel are reflective of influences other than supply and demand fundamentals.

QUESTION FROM SENATOR STABENOW

Q3. How much diesel do farmers use per year compared to other industries such as trucking? What industry uses the most diesel nationally?

A3. Based on EIA's summary statistics published in the *Fuel Oil and Kerosene Sales 2004* and the *Annual Energy Review 2004*, the 1.5 billion barrels (62 billion gallons) of distillate fuel oil (which includes both diesel and fuel oils) sold in the United States were allocated as follows:

Table 1. Sales of Distillate Fuel Oil by Energy End Use in the United States, 2004

End-Use Sector	Distillate Fuel Oil (thousand gallons)	Share (as a percent)
On-Highway	37,125,239	60
Residential	6,644,939	11
Commercial	3,383,061	5
Farm	3,189,014	5
Railroad	3,047,491	5
Off-Highway	2,746,960	4
Industrial	2,326,604	4
Vessel Bunkering	2,139,643	3
Electric Power	823,380	1
Oil Company	472,920	1
Military	358,682	1
Total	**62,257,934**	**100**

Source: EIA form EIA-821, "Annual Fuel Oil and Kerosene Sales Report," for 2004.

Nearly 98 percent of the Farm use is diesel. About 90 percent of the On-Highway use is for trucking. Consequently, trucking use is about 10 times greater than farm use.

QUESTION FROM SENATOR STABENOW

Q4. Other than increased drilling for oil and natural gas, which will not help petroleum supplies immediately, what other options exist to help reduce the cost of natural gas and diesel fuel?

A4. Prices for crude oil, petroleum products, and natural gas are projected to remain high during the remainder of 2005 and through 2006 because of tight international supplies and hurricane-induced supply losses. Consumers can help lower their energy costs by taking steps to reduce the demand for natural gas and diesel fuel.

The Department of Energy is aggressively promoting efforts to encourage more efficient use of energy in all sectors of the U.S. economy. In October 2005, Energy Secretary Samuel W. Bodman launched a national "Easy Ways to Save Energy" campaign, a comprehensive national campaign to highlight how American families, businesses and the Federal Government can save energy in response to rising winter energy costs. An informative "Energy $avers" guide outlining easy ways to improve home energy efficiency is available through the Department of Energy or online at www.energysavers.gov or by calling DOE's Energy Efficiency and Renewable Energy toll-free hotline at 1-877-EERE-INF (1-877-337-3463).

QUESTION FROM THE COMMITTEE ON
AGRICULTURE, NUTRITION AND FORESTRY

Q1. In June this year, you updated your analysis of the costs and benefits of a policy adopted in the Senate version of the energy bill to establish a 10% national Renewable Portfolio Standard, or RPS. The RPS would require electric utilities to generate 10% of their power from renewable energy sources such as wind.

Is it correct that the study found that the 10% RPS would reduce the price of both natural gas and electricity to consumers, and that electricity and natural gas customers would save a total of $22.6 billion by 2025?

During the Senate debate, some characterized your study as finding an $18 billion tax on consumers. Is it correct that the $18 billion was actually the cost to industry to implement the RPS, not consumers, and that consumers would actually save money from the RPS? Didn't EIA subsequently correct this figure to $8.3 billion in costs to industry, due to an original overestimate of the investment in solar photovoltaics?

Can you say what pricing projections you used for natural gas prices in that study? Is it likely that if gas prices remain closer to today's levels (~$14/mmBTU), that the RPS would probably save even more money for consumers?

A1. As noted in the June 2005 report to Senator Bingaman, EIA projects that the proposed 10 percent RPS would reduce the cumulative consumer expenditures on both electricity and natural gas by $22.6 billion through 2025 when compared to the reference case. The $22.6 billion figure represents the electricity and natural gas bill savings to consumers over the entire period, although electricity prices in some years are higher under the proposed 10 percent RPS.

The original report to Senator Bingaman on the RPS mistakenly reported the estimated power industry cost as $18 billion due to misplacement of a decimal point in one of the cost components. The correct figure, $8.3 billion, was

submitted to Senator Bingaman shortly after the original report. This figure represents the estimated net cost to the electric power industry of implementing the program. However, our report states that these costs would not generally be passed on to consumers in the form of higher electricity prices. Essentially, our analysis suggests that the costs associated with the RPS program would largely be borne by non-renewable electricity generators and natural gas producers rather than by electricity and natural gas consumers.

Natural gas prices in the study were based on the natural gas supply assumptions used in the *Annual Energy Outlook 2005*, but the resulting prices differ because of the impacts of the RPS policy on the use of natural gas for electricity generation. These assumptions account for the ability of natural gas supplies to increase – primarily through increased exploration, drilling, and importation – and demand to decrease – primarily through fuel switching in the electric power sector – both of which tend to mitigate large spikes in natural gas prices. In this study the average wellhead price of natural gas decreased from $4.98 per thousand cubic feet in 2003 to $4.79 (2003 dollars) in 2025.

Over the longer term, if natural gas prices were expected to be higher, EIA modeling suggests that coal becomes an increasingly preferred fuel, while renewables also capture a larger market share. However, it is not clear that an RPS would save consumers more money if natural gas prices were higher. Since higher natural gas prices by themselves would stimulate more renewables, the

RPS would have less impact in spurring additional renewable generation, reducing its impact on consumer costs. Furthermore, since any incremental renewable generation that is stimulated by the RPS would displace a generation mix that includes a larger share of coal generation, the amount of natural gas generation displaced would also be smaller--again reducing the consumer cost savings impacts of the RPS. Although the displaced gas would be valued at the higher price, the reduced displacement from both of these factors would tend to dampen the impacts of an RPS program.

QUESTION FROM THE COMMITTEE ON
AGRICULTURE, NUTRITION AND FORESTRY

Q2. EIA is perhaps the leading government agency, here or abroad, for the issuance of accurate and timely energy data. This data is of great importance as you know to aiding the efficiency of the energy markets. However, EIA admits that the reliability of its data in key surveys has fallen to 70%.

My concern is that your agency's actions and reporting impacts consumers, including agriculture and other industries. About this time last year, for example, EIA's natural gas storage report erroneously reported a larger than expected withdrawal. The result was NYMEX futures prices immediately jumped 60 cents, costing consumers an estimated $200 to $1 billion. Meanwhile the Administration has requested less money for EIA in FY 06 than what many say is needed to ensure better data collection and reporting across energy sectors.

Can you provide the Committee a detailed assessment of how much it would cost to address quality control, system upgrades, and staffing needs at EIA so that it can do its job as effectively as possible, avoiding the kind of problems mentioned above in the future?

A2. We greatly appreciate your recognition of the Energy Information Administration's (EIA's) role as a leader in the provision of timely and accurate energy data that is critical to the efficient functioning of energy markets, especially during times like the present, when energy supplies are strained. I can assure you that EIA works hard to improve the quality and reliability of the information we collect and disseminate within the resource constraints set by the Congress.

Your question cites a 70 percent reliability goal for EIA data. Apparently, you are referring to the performance target for relevance and reliability of the EIA Information Program for FY 2005 and FY 2006, as declared on page 563 of the FY2006 Congressional Budget, which states that "70 percent of key EIA survey frames will have sufficient industry coverage to produce accurate supply, demand,

and price statistics." In FY2005, 86 percent of EIA's survey frames (25 out of 29) had sufficient industry coverage, exceeding the established target. The significant structural changes in the energy industry in recent years, such as electric industry restructuring and the reformulation of motor fuels, add greatly to the challenges of keeping each survey frame, which represents the "universe" of entities engaged in the activity that is the subject of a particular survey, current. While updated frames could improve the quality of our survey data, the reliability of the data in key EIA surveys has not, in fact, fallen to 70 percent.

Your question also references an erroneous report made by a respondent to EIA's weekly natural gas storage survey, and cites an estimate that the reporting error cost natural gas consumers between $200 million and $1 billion. This situation highlights the importance of accurate reporting by respondents, which EIA has consistently emphasized. Following this incident, EIA reminded respondents of their obligation to report accurately. It also instituted a public comment process that led to adoption of a new policy that allows revisions to be made much more quickly should a future problem occur. The Federal Energy Regulatory Commission investigated the incident and found EIA's actions to be appropriate.

EIA's $86.2 million FY 2006 appropriation, a $2.4 million increase over FY2005, will allow EIA to continue its focus on improving petroleum and natural gas data reliability, quality, and security. (However, we understand that Congress is considering a rescission that could impact EIA's funding level.) Nearly half of

the increase will be directed to quality control, strengthened data handling and control, and information processing system upgrades that will result in more timely and accurate petroleum and natural gas production data. The rest of the increase will support the quadrennial energy consumption surveys. These efforts will improve the delivery of key data needed for efficient energy markets and begin addressing the concerns of the financial media, traders, and industry.

EIA estimates it would require an additional $450,000 to address the petroleum marketing survey frames maintenance and $420,000 to restore the two petroleum surveys dropped in FY 2006: the EIA-856 Monthly Foreign Crude Oil Acquisition Report and the EIA-182 Domestic Crude Oil First Purchase Report.

EIA will work tirelessly to deliver the best program possible with the resources that are available.

Responses to questions for
R. Neal Elliott, American Council for an Energy-Efficient Economy
Submitted December 7, 2005

Response to Question #1: *Can you describe the effects on natural gas prices as well as the savings to various sections of the economy from expanded energy efficiency and renewable energy?*

The North American natural gas markets in recent years have been unexpectedly tight, which has led to record prices and volatile market conditions, causing significant harm to gas-intensive industries and families dependent on gas heat. ACEEE responded to this challenge beginning in 2003 with a series of analyses which showed that increasing our commitment to energy efficiency would reduce wholesale gas prices and improve our economic health. Our December 2003 report showed that, if policy initiatives to increase investment in energy efficiency and renewable energy were implemented, gas prices would fall by about 20% within five years, saving over $100 billion. Our findings were in-line with the recommendations of the National Petroleum Council's major report on the future of natural gas in the United States and the Secretary of Energy's call for increased focus on energy efficiency. However, no significant policy action was taken.

We released an updated analysis in April 2005 based on a May 2004 reference forecast. Compared with our 2003 study, this updated analysis reflected a further tightening in natural gas markets. As a result, the price response to changes in natural gas demand from energy efficiency and renewable energy investments is greater than in the previous analysis (see Figure 1). With this report, we also extended the analysis period from five years in the 2003 analysis to 15 years. As was seen in the 2003 study, a significant price response is seen in the first five years of the analysis period as a result of current, very tight natural gas markets. In the initial five years, energy efficiency produces most of the benefits. However, as we move into the second five years, the importance of renewable energy increases, with renewables becoming the dominant incremental effect in the final years of the study.

Since the release of this study we have seen further tightening of the natural gas markets due to disruptions in natural gas production and increased oil prices. We would anticipate that the natural gas price response to a future reduction in natural gas demand will have increased correspondingly.

Consumers would experience savings from reduced energy consumption and falling natural gas prices as markets are rebalanced. The energy efficiency measures proposed in this analysis are cost-effective based on reduced consumption alone, without the added benefits of reduced prices. It is important to note that while the direct benefits of energy efficiency investment flow to participating customers, the benefits of falling prices accrue to all customers. The national energy efficiency scenario will cost consumers $11 billion annually in 2010 and result in over $32 billion in consumer savings (see Figure 2).

The agricultural sector would experience the benefits from these energy efficiency and renewable energy investments indirectly in the form of reduced prices for fertilizer and

agricultural chemicals that are largely produced from natural gas. The industrial sector would be the largest beneficiary of these savings, because of the importance of natural gas as both a fuel and a feedstock, particularly for the chemical industry. The benefit to residential customers would be to blunt the recent increases in home heating bills that have increased by over 20% in the past year, and are forecast to increase another 13% over the next year.

Figure 1. Change in the Wholesale Natural Gas Price as a Result of Expanded Energy Efficiency and Renewable Energy Investments

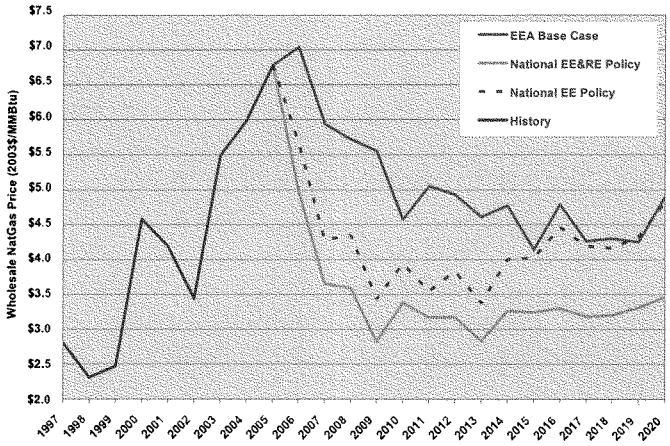
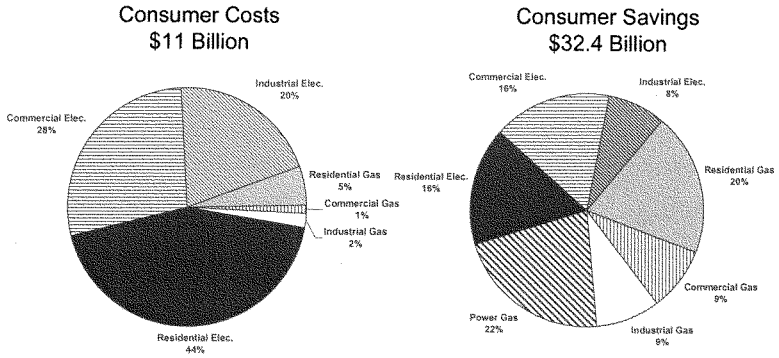


Figure 2. Total Investment Costs for Energy Efficiency Investments and Resulting Consumer Benefits in 2010



Response to Question #2: *Can you explain what your view is on the current federal investments in wind power and whether they are sufficient to ensure the kind of price reduction impacts we'd like to see on other energy commodities such as natural gas?*

The extension of the renewable production tax credits in the *Energy Policy Act of 2005* was an important step in supporting the continued expansion of wind energy. My previous analysis of tax credits for energy investments reviewed the history of federal incentives on wind as an example of success. Two findings from that review respond to your question:

1. It is critical that the presence of tax credits persist in the long-term, because the assurance that they will be present in the future is critical to market investment decisions. The fact that the wind production tax credit has been present for the most part for over 20 years has been critical to the success in developing a healthy wind industry. The lack of persistent incentives for other renewable technologies has hampered their market development.
2. The presence of matching state credits or similar incentives (such as utility green credits or a state renewable portfolio) has been a critical contributor to motivating investment in wind energy in those states. States that have made their corresponding commitment have seen wind thrive while those that have not have seen only modest investments.

In those states with a robust wind industry, the barriers to further expansion that are emerging relate not to the presence of incentives, but rather to electric transmission constraints that have resulted from under-investment in our electric infrastructure. This challenge represents the biggest current gap in the federal policy response to expanding wind energy.

Response to Question #3: *Your testimony noted the huge impact the first ever energy title included in the 2002 Farm Bill had on agriculture and energy. Can you elaborate on this for us just a bit? For example, you mention that the modest investments we are making at the Federal level have leveraged those dollars many times over elsewhere. You indicated that the energy title re-vitalized interest and commitment throughout the agricultural and energy sectors. How so? Should we view this as a positive sign for the next farm bill's energy title?*

Energy efficiency activities for the agricultural sector began to decline in the early 1990s as a result of declining energy prices and the depletion of oil overcharge funds in many states that funded many of these efforts. The passage of the 2002 Farm Bill (Sec. 9006 in particular) and increasing energy prices renewed interest in energy efficiency in the agricultural sector. In many states such as Iowa and Vermont, the promise of federal co-funding motivated existing energy efficiency and agricultural programs to mobilize. They began identifying energy efficiency and renewable opportunities, and helping farmers and ranchers to apply for the federal grants. What has actually come to pass is that under Sec. 9006 funding is quite limited as well as eligibility for smaller efficiency projects. So once the efficiency or renewable energy opportunities have been identified some of these state groups that have been aiding farmers and ranchers have stepped in to provide the funding needed to help projects move forward that either were not approved or didn't meet the minimum project-size criteria. Because of the success of these leadership states, other states are responding by setting up their own efforts to try to get their "fair share" of the federal funding in future grant rounds by identifying opportunities and assisting their farmers and

ranchers with grant writing. This surge in activity has occurred in parallel with increased farmer and rancher interest as a result of the price increases discussed at this hearing.

While many of the program administrators, farmers and ranchers we have spoken to have voiced complaints over the early application process, their sense is that USDA is getting it right quickly. Some of the programs have expressed concerns about the small pot of available funds as well as their inability to get their "fair share." These programs expressed that there are growing needs for (1) a public awareness campaign by USDA about energy efficiency/renewable energy opportunities and funding; and (2) funding for energy audits to identify energy efficiency and renewable energy opportunities. ACEEE had hoped that Section 9005 (Energy Audit and Renewable Energy Development Program) would have met these needs, through funding that was appropriated for this Section.

With respect to future energy provisions for the Farm Bill, as with the wind credits you mentioned in your previous question, it is important that the energy efficiency and renewable energy incentives in the Farm Bill persist so that these programs that have emerged in response to the credits are encouraged to continue and expand. As other funding sources enter this arena, demand for funding will grow, though as noted above, this funding will be leveraged by state and local funding. Perhaps of equal or greater importance is support of these state and local programs with resources that allow them to more effectively meet the needs of the rural communities, as was envisioned with Sec. 9005.

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