Testimony of Theresa Schmalshof
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Before the
House Subcommittee on Energy and Mineral Resources
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Good morning, Chairman Gibbons and members of the subcommittee. Thank you for the opportunity to testify on the impact of high natural gas prices on farmers.

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

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

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

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

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

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

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

Ethanol Production
Higher natural gas prices will also negatively impact this country's growing ethanol industry. The second biggest cost in

ethanol production – second to feedstock – is the cost of energy, generally natural gas. Energy costs typically make up about 15 percent of a dry-mill plant's total costs. The corn industry becomes more energy efficient every year, but we still must have adequate, reliable and affordable natural gas to fuel the industry.

Market Watch and Impact

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

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

Congressional Action Needed

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

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

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

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

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

Conclusion

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

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