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RECENT SUPPLY SHORTAGES OF GASOLINE AND DIESEL IN THE UPPER GREAT PLAINS

HEARING

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

ONE HUNDRED TENTH CONGRESS

FIRST SESSION

SPECIAL HEARING

NOVEMBER 20, 2007—BISMARCK, ND

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RECENT SUPPLY SHORTAGES OF GASOLINE AND DIESEL IN THE UPPER GREAT PLAINS

TUESDAY, NOVEMBER 20, 2007

U.S. SENATE,
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT,
COMMITTEE ON APPROPRIATIONS,
Bismarck, ND.

The subcommittee met at 2:30 p.m., in the Missouri Room, Student Union at Bismarck State College, 1500 Edwards Avenue, Bismarck, North Dakota, Hon. Byron L. Dorgan (chairman) presiding.

Present: Senator Dorgan.

OPENING STATEMENT OF SENATOR BYRON L. DORGAN

Senator DORGAN. I'll call the hearing to order today. This is the hearing of the Energy and Water Subcommittee of the U.S. Senate Appropriations Committee. I'm Senator Byron Dorgan, chairman of the subcommittee and I appreciate all of you being here today, especially those who are appearing as witnesses.

The purpose of this hearing is to explore the origin of a problem that has occurred in North Dakota and what I understand has caused the problem and what some solutions might be to prevent this from occurring again.

I want to put up a couple of charts for you to show some of the headlines that we have witnessed in this State, farmers and drivers and many have experienced what these headlines mean. A fuel shortage, worst in 30 years. The diesel shortage this summer and fall has been the worst. The Fargo Petro USA manager said it's as bad as he's seen in 30 years, in an article in the Fargo Forum. Here's one in the Bismarck Tribune. Diesel supply is low during peak use seasons. The ability of farmers to pick up the phone in the morning and get a load of diesel by the afternoon has all but dried up.

The third chart shows another example of what we have seen and heard and what we understand of that experience. The diesel fuel supply low is in Jamestown. Carl Ketchmark, who drives for Bloom Oil, said he waited 44 hours in his truck at the NuStar terminal. One load, that's all I got, he said.

A number of weeks ago, I was driving from Fargo to Bismarck and I saw 18-wheelers lined up at a terminal facility, lined up for perhaps three quarters of a mile, end to end, waiting—just waiting because apparently some diesel had arrived and they were there to try to find out, could they get some of it?

Now, we are a State that uses a substantial amount of fuel, gasoline and diesel fuel. As I began reading and hearing about these

problems, I met with gasoline dealers across the State, a couple of times this year. I talked to many of them as they traveled and many of them described for me the difficulty of accessing an adequate supply of fuel. We know that during this year, it was reported that North Dakota had the second highest price for retail gasoline, next to the State of Hawaii. We know that the consequences of not having a supply of fuel when you need it means that prices rise. It means that many independent dealers are struggling to find a way to keep alive and to survive at a time when they can't find adequate product or have to pay much, much more for the product and pass that along to their customers.

As I indicated, North Dakota is a State that uses a lot of fuel. We are an agricultural State. When farmers need diesel fuel, they need diesel fuel. When it's time for spring's work, when it's time for harvest, when it's time to get in the fields to do the various things they need diesel fuel—farmers need it. And the inability to have an adequate supply of fuel, diesel fuel and gasoline when we need it is not an acceptable consequence for our State.

So the question is what has happened? What does it mean? And what are the potential solutions to that? What might we do to try to make sure it doesn't happen again? I've read and some that I have talked to said, "well Byron, this is just a perfect storm," meaning apparently that a number of things happened this year—maintenance at various refineries and other things happened in a way that they normally don't happen in the same circumstance and this year it did and this year it caused us some problems. But likely this may not happen again.

Well, if I can prevent it, it will not happen again and should not happen again. Now there are interesting and serious questions, it seems to me, about this so-called perfect storm but I want next year for us at this time not to be asking questions about whether we had adequate supplies of fuel at reasonable prices during the year when there was not a national shortage with respect to the supply of fuel.

So I have asked at this hearing to have testimony from Leon Westbrock, the executive vice president and chief operating officer of Cenex Harvest States; Kim Penner, the vice president of Light Industries, Flint Hills Resources; Bruce Heine, director of government and media affairs, Magellan Midstream Partners; Mike Rud, president of North Dakota Retail Petroleum Marketers and Ms. Dawna Leitzke, executive director of the South Dakota Petroleum Marketers Association.

First we will hear from Dr. Howard Gruenspecht, the Deputy Administrator of the Energy Information Administration at the U.S. Department of Energy in Washington, DC. That is the agency that tracks refinery outage information on an ad hoc basis across this country. We appreciate Dr. Gruenspecht—perhaps I'm pronouncing it wrong. It may be Gruenspecht. We appreciate Dr. Gruenspecht coming to North Dakota to present some thoughts.

Following that, I will ask for the second panel to present and then I would like to ask a series of questions and Dr. Gruenspecht, if you would, following offering your testimony, if you would be willing to stay at the table, I would like then to have the other tes-

timony and then be able to answer—be able rather, to ask you questions as well, with the other witnesses.

Dr. GRUENSPECHT. Okay.

Senator DORGAN. So Dr. Gruenspecht, thank you very much for coming. I understand your role at the Department of Energy. I understand basically what the Energy Information Administration does but I hope you will tell us as well, in the context of the things I have just described about what North Dakota has experienced during the last year. Dr. Gruenspecht, you may proceed.

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

Dr. GRUENSPECHT. Thank you. I will try, sir. I appreciate the opportunity to appear before you today. The Energy Information Administration is the independent statistical and analytical agency within the Department of Energy. We don't promote, formulate or take positions on policy issues and our views should not be construed as representing those of the Department of Energy or the administration.

My written testimony outlines the national context that drives the crude oil and petroleum product prices this year. Turning to the recent situation in North Dakota, which I know is your primary interest, the best place to start is with regional data for the Midwest that is consistently available across weekly, monthly and annual EIA oil data surveys. Petroleum Allocation for Defense District No. 2, also referred to as PADD 2, covers the entire Midwest and is served not only by refineries in the Midwest but also by refineries on the gulf coast. About 25 percent of the gasoline and diesel used in the Midwest comes from the gulf coast. One major pipeline, the Explorer, moves product from the gulf to Midwest areas east of the Mississippi. Another pipeline, the Magellan System, serves areas mainly west of the Mississippi, including North Dakota. It is fed mostly by refineries in Oklahoma, Kansas, Minnesota and Wisconsin, with some limited supplies from the gulf. Figure 2 of my testimony shows the portion of the Magellan System serving the Midwest.

For the first half of 2007, refining outages on the gulf coast and in the Midwest were about half a million barrels a day higher than the averages for the 5 years from 2001 through 2005—2006 was sort of a special case because that was post-Katrina.

Outages continue to affect these areas. In September and October, the information that we have indicates that Midwest outages average about 370,000 barrels per day, which is more than twice the 5-year historical level for that time of year.

Midwest gasoline demand typically peaks during the months of June, July and August, while distillate demand peaks in September and October, varying somewhat depending on the harvest season. The unusually large refinery outage situation in 2007 resulted in the cutoff of product flow to terminals at the pipeline extremes, which means trucks must travel further to reach terminals with product. Additionally, inventories were drawn down as gasoline and then distillate demand peaked.

The areas that generally experience the most supply problems when supply is limited are those that are at the ends of the dis-

tribution system. I'm sorry to say that North Dakota is one of those places. Michigan would be an analog in the other part of the Midwest.

For example, from 2003 through 2006, gasoline prices in Michigan and North Dakota on average tended to fluctuate a penny or two around the national average. For instance, in 2006, both States averaged about one cent a gallon below the national average gasoline price. However, from June through early November 2007, they averaged about 16 and 15 cents per gallon over the national average, respectively.

North Dakota receives supplies from the Magellan, as I've already indicated, and NuStar pipeline systems. It also receives product from a number of northern refineries such as the Tesoro refinery located in Mandan, North Dakota—I don't know if I pronounced that right but I hope so——

Senator DORGAN. You did.

Dr. GRUENSPECHT [continuing]. And some of the other refineries in Montana.

A number of the refineries that provide supplies to North Dakota experienced outages, both planned and unplanned. The Coffeyville refinery in Kansas that flooded this past summer feeds directly into Magellan. Outages outside the system that is directly feeding the upper Midwest also had an impact, because any area needing supply will draw on areas that have supply, affecting all prices. Some of the largest Midwest refinery outages were at refineries that serve areas further east, such as the outage at BP's Whiting, Indiana refinery, which began this past summer and has continued. This leads to increased competition for product from refineries in the upper Midwest that can move product into areas served by Whiting. Second, there's increased competition for supply from pipelines like the Explorer that move product up from the gulf. If you're on the gulf, you could put product into Magellan. You also could put product into Explorer to serve more of the area served by Whiting and other refineries as well. There is competition, so that's a way in which, even though Whiting doesn't serve the upper Midwest, this part of the Midwest, the outage there had an impact here.

Under such circumstances, the Federal and State governments look for options to relieve the situation. A waiver was granted in August to North Dakota to use some gasoline from Canada that was slightly off specification for the United States. Diesel prices were also very high. The State and Federal government officials looked at the matter and determined that a diesel waiver would not provide any relief since no supplies were available. That's an EPA decision, but it was looked at and I think some of the DOE people were involved.

Terminal outages in the summer and early fall required truck drivers to travel long distances. North Dakota and other affected States issued executive orders extending service hours for truck drivers—and the Federal Government, the Motor Carrier Safety Administration, approved them—to help make that situation more practical. So again, the Federal and State governments do try to work together.

Demand is starting to wind down. It's still relatively strong, particularly in North Dakota. There were still some outages in early-November but we understand the situation is starting to improve. I'll let the refineries talk about their own situation. Right now, we're out of turnaround at Flint Hills. That refinery has some good news for you.

Refineries are returning to more normal operation. Prices in North Dakota have backed down somewhat relative to the national average. As of Sunday, North Dakota had the 24th highest gasoline prices in the Nation and the 8th highest diesel prices. I know this is the race that you would like to be 50th and 49th in, not 24th and 8th. But it's better than being first, indicating some improvement in the balance. But with crude prices pushing up all prices throughout the Nation, gasoline and diesel prices remain high in the State and that's something to keep in mind. Prices in the rest of the country have risen a lot. You haven't gotten that much relief in North Dakota but, relative to the rest of the country, you are in a somewhat better situation than you were.

PREPARED STATEMENT

We expect things to get somewhat better in 2008. Gasoline and diesel prices should reflect that trend. That concludes my statement, Mr. Chairman, and I'd be happy to answer any questions you may have. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF DR. HOWARD GRUENSPECHT

Mr. Chairman and members of the committee, I appreciate the opportunity to appear before you today to discuss supply and price concerns in the upper Midwest, including North Dakota.

The Energy Information Administration (EIA) is the independent statistical and analytical agency within the Department of Energy. While we do not promote, formulate, or take positions on policy issues, we do produce objective, timely, and relevant data, projections, and analyses that are meant to assist policymakers, help markets function efficiently, and inform the public. Our views are strictly those of EIA and should not be construed as representing those of the Department of Energy or the administration.

Before turning specifically to the Midwest and North Dakota, I will briefly discuss the national market situation that was affecting the entire United States. This past year has brought unusually tight market situations both in the upstream (crude production) areas as well as the downstream (refining). As the lowest line in Figure 1 shows, crude oil prices have climbed steadily throughout the year, pushing prices up to average nearly $34 per barrel higher in November than they were in January 2007.

Retail petroleum product prices have not only reflected this crude oil price increase, but rose even faster than crude during the spring and early summer, reflecting tightness in the gasoline supply-demand balance. From late January through the middle of May, national average retail gasoline prices rose from $2.17 to $3.22 per gallon, an increase of $1.05. Crude oil, however, only rose about 30 cents per gallon during this same time period.

The main reason for the surge in gasoline price over crude oil seemed to be unusually extensive U.S. refinery outages, which also pushed the limits of gasoline import availability. In the face of rising demand for gasoline and distillate products (e.g., diesel fuel and heating oil), supply was not able to keep up, drawing product inventories down, while the price differential to crude oil increased.

Turning to the Midwest, refinery outages affected this region more than usual. One useful regional breakdown of oil data that is used consistently across weekly, monthly, and annual EIA oil data is the Petroleum Allocation for Defense Districts, often referred to as "PADDs." PADD 2, which covers the entire Midwest, is served not only by refineries in the Midwest, but also by refineries in the gulf coast that move products into the Midwest through pipelines. About 25 percent of the gasoline

used in the Midwest comes from the gulf coast. For example, one major pipeline, the Explorer, moves product from the gulf to areas east of the Mississippi. Another pipeline, the Magellan system, serves areas mainly west of the Mississippi, including North Dakota, and is fed mostly by refineries in Oklahoma, Kansas, Minnesota, and Wisconsin rather than by gulf coast refineries. The Magellan system runs from Texas and has branches through Oklahoma, Kansas, Missouri, Nebraska, South Dakota, North Dakota, Minnesota, Wisconsin, Iowa, and Illinois. Figure 2 shows the portion of the Magellan system serving the Midwest. The Magellan system connects to the Explorer Pipeline in Glenpool, Oklahoma, allowing some additional access to refineries on the gulf coast.

For the first half of 2007, refining outages on the gulf coast and in the Midwest averaged 1.2 million barrels per day, which is 500,000 barrels per day higher than average for the 5 years from 2001 through 2005. The gulf coast (PADD 3) refineries had outages that were about 50 percent higher than their 5-year average outages, affecting supplies into the Midwest as well as other areas, and PADD 2 refineries ran 30 percent over their 5-year average outages. Outages have continued to affect these areas. In September and October, preliminary information indicates Midwest distillation unit outages averaged about 370,000 barrels per day, which is more than twice the 5-year historical levels for that time of year.

Midwest gasoline demand typically peaks in the months of June, July, and August, while Midwest distillate demand peaks in September and October, varying somewhat depending on the harvest season. The unusually large refinery outage situation in 2007 resulted in the cutoff of product flow to terminals at the pipeline extremes, which means trucks must travel further to reach terminals with product. Additionally, inventories were drawn down as gasoline and then distillate demand peaked. Towards the end of August, EIA weekly data showed Midwest gasoline inventories had dropped to their lowest level in 7 years. The areas that generally experience the most supply problems are those that are at the ends of the distribution system, such as North Dakota and Michigan. For example, from 2003 through 2006, gasoline prices in those States on average tended to fluctuate a penny or two around the national average. In 2006, both States averaged about 1 cent per gallon below the national average gasoline price. However, from June through early November 2007, they averaged about 16 and 15 cents per gallon over the national average, respectively.

North Dakota receives supplies from the Magellan and the NuStar pipeline systems. In addition, it receives product from a number of northern refineries such as the Tesoro refinery located in Mandan, North Dakota, and the Cenex refinery in Laurel, Montana, via a proprietary pipeline.

A number of the refineries that provide supplies to North Dakota experienced outages, both planned and unplanned. The Coffeyville refinery in Kansas that flooded this past summer feeds directly into the Magellan system. Outages in other refineries affected the area as well. Any area needing supply will draw on areas that have supply, affecting all prices. Some of the largest Midwest refinery outages were at refineries that serve areas further east, such as the outage at BP's Whiting, Indiana, refinery, which began this past summer and has continued. This has several impacts. First, there will be increased competition for product from refineries in the upper Midwest that can move product into areas served by Whiting. Second, there will be increased competition for supply from pipelines like the Explorer that move product up from the gulf coast. This pull on supply competes with volumes that might otherwise move further west.

Planned outages can be less disruptive than unplanned outages, but still can contribute to tighter supplies. Refiners generally try to schedule planned outages during off-peak demand seasons in late winter and again in the fall. Refiners usually line up alternative supplies to meet their contractual needs in advance of a planned outage, but this still can leave less supply in an area than might otherwise be the case because many refineries also provide opportunistic or non-contractual volumes to wholesalers that rely at least partially on spot purchases. A refiner planning an outage generally would not arrange alternative supplies for potential spot buyers. In addition, sometimes the duration of a planned outage will be longer than originally expected. One reason is that unanticipated problems may be discovered when maintenance begins. When a planned outage goes into overtime, the supply that had been arranged may not be adequate to cover the additional time out of operation, causing the refiner to buy more product on the spot market, adding to short-term price pressure. Also, when unplanned outages and/or unusual demand overlap with planned outages, the planned outages cannot always be postponed. The outage may be necessary for safety reasons, and tight supply of the skilled labor required to perform the maintenance may preclude rescheduling.

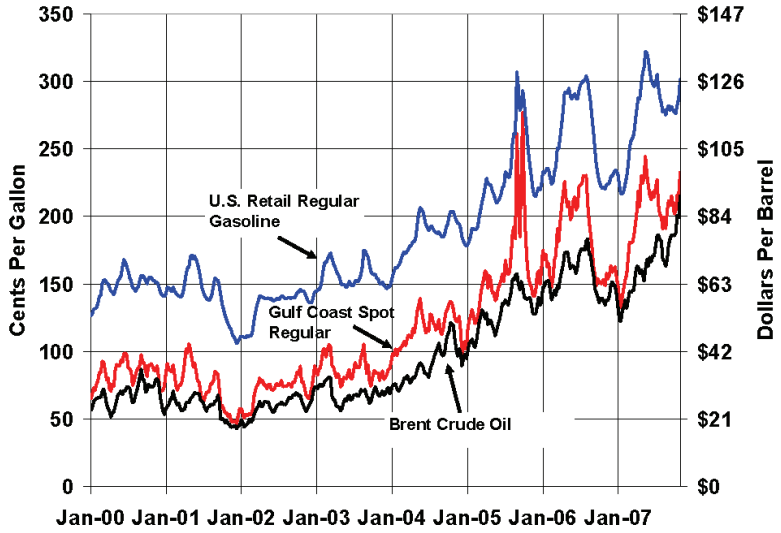
During times such as we've seen this past summer, the Federal and State governments look at options to relieve the situation. At the end of August, the Federal Government granted North Dakota's request for a waiver to use some gasoline supplies from Canada that were thought to be slightly "off-spec" from U.S. summer gasoline requirements. Still, gasoline supplies remained tight. Meanwhile, diesel prices were also rising with growing harvest demand. I understand that State and Federal government staff discussed the distillate supply and determined that a waiver would not provide any relief since distillate supplies were not available to respond to a waiver. In addition, refinery supply from some of the outage loss was returning. Terminal outages this past summer and early fall required truck drivers to travel long distances to find product. As a result, North Dakota and other affected States issued executive orders extending service hours for truck drivers delivering fuel supplies (also approved by the Federal Motor Carrier Safety Administration) to help make this situation more practical.

While demand will be winding down in the Midwest, we understand it still is relatively strong, particularly in North Dakota. Early-November PADD 2 outages were high in the Midwest and, while the situation is now starting to improve, we are aware that North Dakota is still experiencing terminal and retail shortages. Refineries are returning to more normal operation, which will ease the tight balance in North Dakota, but we cannot predict exactly when the problems will cease. Prices in North Dakota have backed down somewhat, relative to the national average, indicating an improvement in the balance, but with crude prices pushing up all prices, gasoline and diesel prices remain high in the State.

Looking ahead into 2008, both crude prices and refinery constraints should ease somewhat. Today's very high crude prices are expected to fall back to average close to $80 per barrel in 2008. At the same time, refinery availability should improve. Both BP's Whiting and Texas City refineries may return to more normal operations, adding as much as 325,000 barrels per day of capacity to PADDs 2 and 3 next summer over this past summer. In addition, the United States could see another 100,000 barrels per day of capacity from more normal reliability and some small expansions. Increased use of ethanol in gasoline should also add to U.S. gasoline supply in 2008. EIA is projecting that overall regular gasoline prices may average $2.97 per gallon in 2008, which is 18 cents per gallon higher than the 2007 average mainly due to higher crude prices, but lower than the $3.11 seen on November 12. Similarly, 2008 diesel prices are projected to average $3.09 per gallon, which is 23 cents per gallon higher than in 2007, but lower than the $3.42 reported by EIA on November 12.

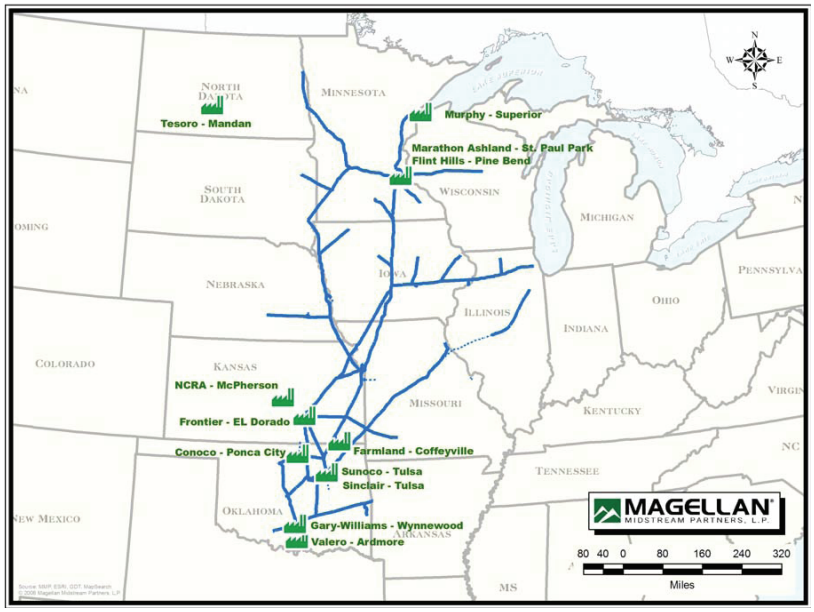
This concludes my statement, Mr. Chairman, and I will be happy to answer any questions you and the other members may have.

Figure 1. Gasoline and Crude Oil Prices



Source: Reuters Weekly Average Brent crude oil spot price and Gulf Coast regular gasoline spot price; EIA U.S. regular gasoline retail price.

Figure 2. Magellan Pipeline System Serving the Midwest



Senator DORGAN. Dr. Gruenspecht, thank you very much. I'm going to ask you a couple of questions and then I'm going to hold other questions for you until later.

Dr. GRUENSPECHT. Okay.

REFINERY OUTAGES

Senator DORGAN. What do you anticipate and what do you see looking forward to next year with respect to refinery outages and the kinds of things that you described that had caused the disruptions and the problems this year in supply?

Dr. GRUENSPECHT. Well, we certainly see no reason why we should have unusually high refinery outages next year. Our expectation would be something closer to the 2001 through 2005 experience, which would be a lot better than what we had this year. We'll also have the benefit of some expansion that I think you will hear about.

Senator DORGAN. The EIA is an agency that observes, is that correct? I mean, you essentially observe and then what you have done today is you have reported and used that to present to the Congress, in various reports. Is that essentially a good description of what you do?

Dr. GRUENSPECHT. I think that is a fair statement. We are not a policy agency.

Senator DORGAN. Right. And your observations, for example, if they describe regional problems, outages that can be troublesome and so on, does that information from the EIA go to the Secretary of Energy or is there anything done with that information, other

than just providing the information generally across the country by published reports?

Dr. GRUENSPECHT. We have not provided a lot of information on outages. There is a provision in a bill that is pending before the Senate that would require us to review available information on outages and determine if those planned outages would have a significant impact on prices. This asks us to look at commercially available data to compare outage plans with typical historical outages and with other factors. We'd have to do it at least twice a year and maybe more, as needed. If we see potential for extra price or supply pressure, which an unusually large outage might cause, we are then to alert the Secretary of Energy and the Secretary will consider the need for further action.

There are a couple things to keep in mind. Refiners really can't coordinate among themselves—they can't call each other up—you know, are you going to be out here and there? But there is some implicit coordination, I think, that goes on because there's a limited availability of skilled specialized labor for outage maintenance and that already tends to reduce some of the overlap across projects.

There are also always going to be outages that are so-called forced outages, unplanned outages rather than planned ones, for safety reasons or a problem with a unit, just like what happens in a powerplant. It also happens to refineries, which are very complex systems. Those can occur and they, maybe for legal, safety or other reasons, they wouldn't be discretionary action.

It's very difficult, I think, to determine whether planned outages will impact prices because it's often hard to connect the outage of a particular unit with the loss of production from a refinery. For example, Exxon Mobil had a big refinery when they lost their distillation tower. It is the first unit at the front of the refinery that takes crude oil and then breaks it up and feeds the other refinery units. But they were actually able to keep all those downstream units going, including the gasoline production units, because they arranged for other intermediate supplies to keep those units operating.

So just because you see something is going to be out, you don't necessarily know for sure that that's going to translate into this much gasoline loss, this much diesel loss, if a plan has been made to go around that problem. So it's not straightforward to analyze outages. But again, this is something that the Senate bill is supposed to deal with and should that become law, we would certainly be doing that.

OUTAGE SAFEGUARDS

Senator DORGAN. I don't suggest that any outages were coordinated or planned or there was anything with respect to any disruption in supply anywhere that raised questions. I must tell you that I chaired the hearings in the Senate Commerce Committee with respect to Enron and had Ken Lay in front of me and he took the Fifth Amendment. We later found out that there were planned outages with respect to electricity in southwestern America. We have the transcripts. We have all of the evidence that they had planned outages to jack up prices and to extract billions of dollars from customers.

Now, I don't suggest that has happened here but what kind of safeguards do we have put in place to make sure that doesn't happen or are there any safeguards if most of the refineries or too many of the refineries close down for maintenance at the same time, which could have an impact on supply and price? Is there anything in the Department of Energy that relates to those issues?

Dr. GRUENSPECHT. I think that the primary jurisdiction over those issues would be the Department of Justice or the Federal Trade Commission. I think they kind of split the jurisdiction over industrial competition issues. I believe that the Federal Trade Commission does more with the oil industry.

Senator DORGAN. Well, we're still looking for the people that we're paying at the Federal Trade Commission. We can't find them on most issues.

Dr. GRUENSPECHT. By the way, when I use the term planned outages, I meant not in terms of coordination planned—in terms of let's all shut down together. I meant in terms of—we know we have to change the catalyst in this unit or we have to upgrade that piece of equipment, and by unplanned outages, I meant something went wrong unexpectedly and we need to shut down and fix it.

ENERGY BILL

Senator DORGAN. In this energy bill that is now through the Senate there are about 8 or 10 of us, between the House and Senate, negotiating on the final bill. Hopefully we get that in December. The provision you described is, I believe, section 280 of that bill and that provision will direct your agency to take whatever refinery outage information that you can collect on an ad hoc basis and present it to the Secretary of Energy if, in fact, it appears there's information that would suggest there would be regional or national supply shortages. Has the Department of Energy taken a position on that provision, do you know?

Dr. GRUENSPECHT. I think that the Department of Energy is interested in working with the Senate to improve that provision but I think it's a provision that could be helpful. I was trying to point out in my earlier answer that it's not always so easy to determine if a unit being out will translate into a particular shortage. But we would like to work with the Senate and try to make that language work and we would be happy to take on that role. I mean, we take on the roles the Congress directs.

PIPELINE

Senator DORGAN. Dr. Gruenspecht, I have heard previously about where we are in the pipeline, the end of the pipeline. You describe it as a pipeline extreme, which I had not heard used before. Maybe perhaps others use pipeline extreme. But it seems to me like the pipeline is the pipeline and all that are served by the pipeline are competing for all the product in the pipeline. Is that a naive assumption? I mean, you do indicate in your testimony that when anywhere on that pipeline there is a shortage, it affects the price of everyone on that pipeline because those that are short are going to have to pay a higher price to extract the product somewhere else on that pipeline. Is that correct?

Dr. GRUENSPECHT. I think that's correct, though I notice you have a couple of pipeline witnesses on this panel. I don't have operational experience with pipelines but my understanding is that is what is done when the pipeline is very low on supply, it actually will shut down certain terminals and people will have to drive their trucks further. So in that sense, there is a difference between being at the pipeline extreme and being attached to the electricity grid. Unlike an electricity grid, physical volumes of a product matter, and filling up the line becomes an issue as well.

So I believe that in several cases, certain terminals become operational and serve as best they can in a tight supply situation. The terminals toward the extreme ends of the pipeline may not get product, that does happen, I believe. But I would project that the pipeline witnesses might be able to do a better job than I can in explaining how that works.

Senator DORGAN. Yes. The pipeline is the common carrier, right? Well, I'll ask those questions of the other witnesses. If you don't mind, I have other questions I want to ask you but I think what I'd like to do is ask those in the setting of some of the discussions from the pipelines and others. So if you would be willing to stay at the table and I would ask others to come forward and we would take the other testimony.

Dr. GRUENSPECHT. Shall I move to the side?

Senator DORGAN. No, why don't you just stay where you are, if you would and we will ask others to join you. We may need another chair. I guess we're all right.

We have Leon Westbrock, who is the executive vice president and chief operating officer of CHS, Inc., which is formally the Cenex Harvest State Cooperative. You own an 85,000 barrel per day refinery in rural Montana and have a partnership in the Kansas-based Coffeyville refinery. CHS fuels are sold at more than 1,600 retail outlets, including Cenex convenience stores. You also operate about 1,200 miles of pipeline and are the third largest propane retailer in the country. Mr. Westbrock, thank you very much for being here.

STATEMENT OF LEON WESTBROCK, EXECUTIVE VICE PRESIDENT AND CHIEF OPERATING OFFICER, CHS, INC.

Mr. WESTBROCK. Thank you, Senator and just one correction—its 55,000 barrel a day in Laurel and 85,000 barrel a day in McPherson.

Senator DORGAN. Thank you.

Mr. WESTBROCK. Senator Dorgan and members of the audience, I am Leon Westbrock. I'm an officer of the Nation's largest member-owned business and its largest cooperative energy business, which in the scale of things, is still pretty small but I'm a cooperative business ownership at large. Our board consists of 17 full-time members and farmers, 3 of whom are from North Dakota.

As a background, I grew up in Minnesota, just south of Fairmont, North Dakota. During my 32-year career with Cenex and now CHS, I spent a year working in North Dakota at Michigan, North Dakota. I understand all the energy needs of your State's consumers. For nearly 65 years, CHS has owned a petroleum refinery in Laurel, Montana, just west of Billings. Much of the gasoline

and diesel fuel produced in Laurel is shipped via our pipeline, beginning in Laurel and ending in Fargo, North Dakota. CHS also owns terminals at Laurel, Grand Forks and Minot. Nearly 2 years ago, CHS approved a $325 million upgrade project at Laurel, which when it concludes early in 2008, will result in production of up to an additional 150 million gallons of gasoline and diesel from the same amount of crude oil.

Part of the plan 2½ years ago was to schedule a complete shutdown of the refinery in June 2007 to conduct major maintenance and to install all piping and valves essential for the connection to this new upgrade called the coker. We had to do this while the refinery was "cold."

Earlier this year, we realized that we could not hire enough skilled labor to complete the entire maintenance project in June and had to schedule another unplanned shutdown in August. Despite these challenges, during the late summer and fall of 2007, CHS did its best to deliver.

Brandon, North Dakota customers received 123 percent of August 2006 volume, 96 percent of September 2006 volume and 101 percent of October 2006 volume. In total for these 3 months, we supplied 6 percent, more branded product in North Dakota than in the previous year when our refinery was operating.

It was not easy and often times these deliveries were not made from preferred terminals closer to the customer, resulting in additional costs to our customers as well as the CHS. However, I believe our staff made extraordinary efforts to supply this volume and no Cenex branded customers were without product.

Much has been said and will be said about a combination of events that led to the supply situation just experienced in North Dakota. North Dakota is not alone. We at CHS have experienced the impact that planned and unplanned maintenance problems the refining industry have had in Kansas, Nebraska, Colorado and Iowa this past year. There is no quick solution to the current U.S. refining capacity, given the significant lead times and investment needed to increase production.

Multiple efforts are underway in the industry. We find these projects higher in progress with some coming on stream soon, like our Laurel facility. Capacity increases are being planned and funded, like our 5 year project at our refinery in Kansas. We know—it is under construction by several companies, including U.S. Bioenergy, of which we own 20 percent. U.S. Bioenergy's 100 unit a gallon per your ethanol facility in Hankinson, North Dakota scheduled for completion in April.

These efforts by the industry will help but then again, it will not immediately solve the dilemma. I do not pretend to have the complete answer to these supply issues. I trust, however, that a combination of manufacturing expansion, both petroleum based and renewable based, along with fuel conservation and imports will play a role in addressing them. Conservation may happen with higher prices. Capacity will grow as the name grows and imports will respond to the market. I do not expect the supply issues in recent time could heal soon but I believe they will in time, as the market adjusts to the demand.

But new challenges lie around the corner. Specifically, as the immediate need for diesel fuel eases with the approaching winter, the acute need for heating fuel will surface. If the industry scrambles to meet the diesel demand, it may be similarly challenged with the heating fuel supply. As demand grows and unplanned interruptions continue, regional supply issues will surface. The market will respond to these outages as best as it can but seldom in a timely manner.

At CHS, we are trying to provide for both the power demand and heating demand. CHS will work with these multiple challenges and will meet the needs of our Cenex branded customers. I can think of no quick additional solutions to this spike in demand and unplanned interruptions that aren't already being practiced. I believe industry experts are trying to safely operate the refineries for maximum production, to increase storage and holding tanks, to protect customers, to get customers an inventory, to further capacity growth, to capture investment in renewable manufacturing and to import product on a global scale.

PREPARED STATEMENT

I'm confident that we at CHS and the overall energy industry will continue these efforts. We ask for your understanding as we work through these challenges. I will welcome any questions, Senator.

[The statement follows:]

PREPARED STATEMENT OF LEON WESTBROCK

Senator Dorgan and members of the audience: I am Leon Westbrock, executive vice president and chief operating officer of the energy division of CHS Inc., the Nation's largest member-owned business and its largest cooperative energy company. Our board consists of 17 full-time farmers, 3 of whom are from North Dakota.

As background, I grew up on a farm near Browns Valley, Minnesota—just south of Fairmount, North Dakota. During my 32-year career with Cenex and now CHS, I spent a year working in North Dakota. I understand well the energy needs of your State's consumers.

For nearly 65 years, CHS has owned a petroleum refinery in Laurel, Montana, just west of Billings. Much of the gasoline and diesel fuel produced at Laurel is shipped via our pipeline—beginning at Laurel and ending in Fargo. CHS also owns terminals at Laurel and Glendive, Montana, and Minot, North Dakota.

Nearly 3 years ago, CHS approved a $325 million upgrade project at Laurel which, when completed early in 2008, will result in the production of up to an additional 150 million gallons of gasoline and diesel fuel from the same number of crude oil barrels we are refining today.

Part of the plan 2½ years ago was to schedule a complete shutdown of the refinery in June 2007 to conduct major maintenance and to install all piping and valves essential for the connection to the new coker. We had to do this while the refinery was cold.

Earlier this year, we realized that we could not hire enough skilled labor to complete the entire maintenance project in June and had to schedule another unplanned shutdown in August.

Despite these challenges, during the late summer and fall of 2007, CHS did its best to deliver. Our Cenex-branded North Dakota customers received 122 percent of August 2006 volumes, 96 percent of September 2006 volumes and 101 percent of October 2006 volumes. In total for those 3 months, we supplied 6 percent more branded product in North Dakota than the previous year.

It was not easy. Oftentimes, these deliveries were not made from preferred terminals closer to the customer, resulting in additional costs to our customers, as well as CHS. However, our staff made extraordinary efforts to supply this volume and no Cenex-branded customers went without product.

Much has been or will be said about the combination of events that led to the supply situation just experienced in North Dakota. North Dakota is not alone. We

at CHS have experienced the impact that planned and unplanned maintenance problems plaguing the refining industry have had in Kansas, Nebraska, Colorado and Iowa. There is no quick solution to given current U.S. refined capacity given the significant lead times and investment needed to increase production.

Multiple efforts are underway in the industry. Refinery projects are in progress, with some coming on stream soon like at our Laurel facility. Capacity increases are being planned and funded like the 5-year project at our other facility in McPherson, Kansas. Renewable energy capacity is under construction by several companies including US BioEnergy of which we own 20 percent. US BioEnergy's 100 million gallon per year ethanol facility in Hankinson, North Dakota, is scheduled for completion in April 2008. These efforts by the industry will help, but these alone will not immediately solve our supply dilemma.

I do not pretend to have the complete answer to these supply issues. I trust, however, that a combination of manufacturing expansion, both petroleum-based and renewable-based, along with fuel conservation, and imports will play a role in addressing them. Conservation may happen with higher prices, capacity will grow as demand grows, and imports will respond to the market.

I do not expect the supply issues in diesel to heal soon, but I believe they will in time, as the market adjusts to the demand. But new challenges lie around the corner. Specifically, as the immediate need for diesel fuel eases with the approaching winter, the acute need for heating fuel will surface. Just as the industry scrambled to meet the diesel demand, it may be similarly challenged with the heating fuel supply. As demand grows and unplanned interruptions continue, regional supply issues will surface. The market will respond to these outages, as best it can, but seldom in a timely manner.

At CHS, we are trying to both provide for the power demand needed now and the heating demand needed soon. CHS will work through these immediate challenges and will meet the needs of our Cenex-branded customers.

I can think of no quick additional solutions to these spikes in demand and unplanned interruptions that aren't already being practiced. I believe the industry and those connected to it are trying to safely operate the refineries for maximum production, to increase storage and inventories, to use hedging tools to protect customers, to get customers to carry more inventory, to fund capacity growth, to capture investment in renewable manufacturing, and to import product on a global scale.

I'm confident that we at CHS and the overall energy industry will continue these efforts and more. We ask for your understanding as we work through the challenges. I welcome your questions.

Senator DORGAN. Mr. Westbrock, thank you very much. You've obviously now raised my interest in the question of will there be a supply of heating fuel that is adequate and what will the price of heating fuel be this winter but I will ask you about that in a moment.

Let me call on Kim Penner, vice president of Light Industries, Flint Hills Resources—Koch Industries, Flint Hills Resources operates the Minnesota based Pine Bend Refinery that also serves North Dakota and has a total production capacity of 280,000 barrels per day of crude oil. Flint Hills owns other refining assets in Alaska and Texas, with a combined crude oil processing capacity of about 800,000 barrels of crude oil per day. I hope that was a reasonably good estimate. Hello, Mr. Penner and I thank you very much for being here.

STATEMENT OF KIM PENNER, SENIOR VICE PRESIDENT OF LIGHT PRODUCTS, FLINT HILLS RESOURCES

Mr. PENNER. Thank you, Senator—can you hear me now?

Senator DORGAN. Much better.

Mr. PENNER. Okay. I understand the focus of today's hearing is the recent supply situation in North Dakota and what can be done to prevent problems in the future.

Into the inquiry into this subject, we'll start with what the industry as a whole with what safety and environmental performance

plays in operating refineries. I notice on [inaudible] in our motion, demand that we operate our refinery so frequently. That's an expectation we take very seriously and hails resources.

Over the last 10 years, we have garnered numerous awards from EPA, OSHA and others for safety and environmentally responsible operation of our refineries. Safe and clean operations require regular maintenance and regular maintenance usually results in less fuel being produced during that time. We understand that our fall maintenance reduced the amount of fuel available in North Dakota. Our turn-around at Pine Bend this fall was especially challenging because of the tank rupture that occurred about 2 weeks before the scheduled start of maintenance. It prevented us from producing as much fuel as we would have liked before the maintenance began. The industry-wide fuel shortages resulted in hardship for the people of North Dakota and we think it is our responsibility to help to look for solutions in the future.

But it is important to remember that these oil resources can only be a part of the solution. We sell approximately 10 to 15 percent of the fuel used in North Dakota. We would like to be a larger part in the future. We are also putting the finishing touches on a project that will increase our current distillation capacity by approximately 50,000 barrels a day. That's about an 18 percent increase.

In 2006, we created the new hydro-tractor. That allows us to produce ultra-low sulfur diesel and more gasoline. In the midst of that, our company has done a major pipeline expansion in Minnesota that is going to bring more crude oil into our Pine Bend refinery. Between these projects and others, we will have invested close to $1 billion in a 5-year period to serve the grand demands of consumers in the upper Midwest.

PREPARED STATEMENT

I would like to compliment the chairman on hosting this important meeting. I've been with the other key stakeholders from the industry and government to better understand the issues and work toward solutions. I look forward to talking with you and exploring solutions. Thank you.

Senator DORGAN. Mr. Penner, thank you very much.

[The statement follows:]

PREPARED STATEMENT OF KIM PENNER

Mr. Chairman: Thank you for your invitation to participate in today's hearing and to discuss the refined products supply situation in North Dakota. My name is Kim Penner and I am senior vice president of light products for Flint Hills Resources. In that role, I am responsible for all marketing activities related to gasoline, diesel and jet fuel for our company.

Flint Hills Resources is based in Wichita, Kansas, and is a leading producer of fuels, petrochemicals and other petroleum products such as base oils for lubricants and asphalt. Our company employs more than 3,700 people who strive every day to create value for our customers and their communities. We primarily operate in the upper Midwest, Texas and Alaska. Since 2002, the company has expanded its operations through a number of capital projects totaling more than $3 billion. Our focus is to operate facilities with a long-term perspective by reinvesting 90 percent of our profits back into the business, with a primary focus on compliance and safety.

Flint Hills Resources' culture is based on Principled Entrepreneurship™, which means it strives to combine a solid commitment to acting with integrity and an unwavering desire to anticipate and cost-effectively satisfy customer needs and grow its businesses.

Our company has been supplying customers in the North Dakota market for many years. When compared to other fuel providers within the State, however, Flint Hills Resources is a relatively small supplier. Unlike others for whom North Dakota is a core market, our company's gasoline and diesel market share in the State is only 10–15 percent.

Refined products are produced at our Pine Bend refinery, which is located on the Mississippi River near Rosemount, Minnesota. The Pine Bend Refinery serves markets in Minnesota, Wisconsin, Iowa, Nebraska and South Dakota, in addition to North Dakota. This refinery has recently completed a larger-than-usual turnaround, which is what our industry calls scheduled repairs, replacements and additions. This recent turnaround at Pine Bend also included a major expansion to increase crude oil distillation capacity by approximately 50,000 barrels per day to help meet growing fuel demands in the Upper Midwest. Turnarounds generally result in a short-term reduction of output for a long-term increase in output.

Before directly addressing our recently completed turnaround, I would like to provide a broad picture of the North Dakota supply and demand balances to establish some greater clarity regarding the market. While subject to seasonal variations and production variances, the following estimates offer an overview of the inflow and outflow of gasoline and diesel supplies in the State.

—In addition to Tesoro's Mandan refinery there are three refined products pipelines that import product into the North Dakota market. There also is a pipeline that originates at the Tesoro facility with delivery points located in North Dakota and Minneapolis.

—We estimate in-state production at about 38,000 barrels per day of gasoline; the State's entire demand is estimated at 24,000 barrels per day, resulting in an excess inventory of about 14,000 barrels a day;

—Gasoline imports into the State average about 14,000 barrels per day, while exports out of North Dakota account for an estimated 28,000 barrels a day;

—Estimated diesel production in the State runs at about 21,000 barrels per day, while demand is estimated at about 27,000 barrels a day, presenting a shortfall of about 6,000 barrels a day; and

—Diesel imports into the State average about 18,000 barrels per day, while exports out of North Dakota account for an estimated 12,000 barrels per day.

These figures are subject to a host of circumstances, scheduled and unscheduled events, marketing decisions and production variances, but I wanted to share them with you because they are generally relevant in understanding North Dakota's recent supply difficulties.

Flint Hills markets products via two terminals owned and operated by Magellan. Our company delivers products into the Magellan pipeline at our Pine Bend refinery. Magellan delivers product to terminals in Fargo and Grand Forks, North Dakota, as well as other States in the region. We do not control physical delivery decisions for those terminals. Those decisions are made by Magellan.

The pipeline operators themselves are also subject to external supply rigors as well such as available supply, scheduled and unscheduled refinery turnarounds, natural events and increased consumer/commercial demand. For example, the increased number of unplanned weather-related refinery shutdowns earlier this year in the Midwest and Rocky Mountain region compounded terminal supply problems.

As I mentioned, we recently completed an extensive turnaround at our Pine Bend facility. While this project was indeed large, it was by no means unprecedented for this site or our company. However, we did face unforeseen challenges during this turnaround. A tank rupture in the summer prevented us from accumulating the amount of product inventory that we had planned and rain delayed our unit startup by 10 days at the end.

Our planning for a turnaround generally begins five or more years in advance of the activity. Extensive planning is required to minimize production down-time without compromising safety or compliance with laws. Extensive planning is also needed to arrange for the necessary skilled workforce. While the Pine Bend refinery typically employs about 700 individuals, the size of the on-site workforce grew to 1,700 or more during sustained periods due to the addition of contractors needed for turnaround activities. With such demand for skilled workers, the companies we work with must also make substantial commitments to field a workforce of this size. If they have pre-existing commitments to other refiners, they may simply tell a refiner that they are unable to do the work at the time requested.

By the third year preceding the turnaround activity, the company begins ordering long lead time equipment and piping. Reactor vessels, cokers and other components of refineries that may be replaced during a turnaround are special order items that require substantial engineering and manufacturing lead time. Some of the equipment is massive, and must be delivered as close to the time of the turnaround as

possible because of space and transportation logistics. In addition, an abbreviated period between the end of high summer fuel demand and the onset of winter also play a role in when turnarounds can optimally be scheduled.

As the time for the turnaround draws closer, the schedule of activities becomes more precise and the opportunities to change the schedule become more limited. By this time, the sequence of activities is set, the staging of contractors is set, and the arrival of equipment is set. Deciding to postpone at this point doesn't usually mean a delay of days or weeks, it generally means a delay of months, a year or even more. Such extended delays may simply be unacceptable from the perspective of safety and environmental compliance.

The goal of a turnaround is to replace equipment and materials before they fail, with an ample margin for safety. Monitoring of metal loss rates and unit performance is done regularly to determine when equipment and materials should be replaced, again with an ample margin for safety. As a refining and petrochemical company, Flint Hills Resources' first responsibility is to ensure that its employees, contractors and neighbors are safe, and that its operations comply with all laws and regulations. Thus, timely turnarounds are critical to maintaining safe, reliable operations—and supplying markets efficiently.

Flint Hills Resources, as well as the refining industry represented by trade groups such as the National Petrochemical & Refiners Association, understand that Senator Dorgan wants to explore ways for the Federal Government to approve and/or coordinate all refinery shutdowns. We are concerned that an effort to prevent multiple, simultaneous shutdowns, no matter how sincere and carefully considered, ultimately result in delays to successful refinery turnarounds and could potentially result in refinery accidents or an unplanned shutdown that further decreases production.

Legitimate questions have been raised as to how we and other refiners communicate with customers and pipeline companies about turnarounds, and how we allocate limited supply among customers. While we do not communicate turnaround activity with our competitors on advice of legal counsel that this communication would be a breach of anti trust laws—we do certainly discuss that information with our customers and pipeline companies in advance. We have contractual commitments to many of our customers, and they are alerted and served first, on an equitable basis, when supply is not sufficient to serve all customers. Other customers prefer the freedom to shop for the best price each day among Flint Hills Resources and its competitors, and do not have contractual commitments to purchase set supplies from our company. These customers are served after our contractual commitments are met, if there is sufficient supply.

In closing I want to commend Senator Dorgan for chairing and hosting this important hearing. By bringing together key stakeholders from industry and government, we can better understand the issues and work toward solutions. We look forward to talking with Senator Dorgan on his policy goals in this area and we hope to give him a boots-on-the-ground perspective of how regulations in this area might affect this market.

From Flint Hills Resources' perspective, we believe that many of these issues can be addressed through increased production capacity both regionally and nationally. To this end we are uniquely proud to have completed the expansion at our own Pine Bend Refinery and of the ability it provides us to supply additional products throughout the Upper Midwest.

Mr. Chairman, thank you for the opportunity to participate in this important hearing. I look forward to answering any questions you may have.

Senator DORGAN. Next we will hear from Mr. Bruce—is it Heine?

Mr. HEINE. Heine.

Senator DORGAN. Bruce Heine. Mr. Bruce Heine is the director of government and media affairs in Magellan Midstream Partners. They own gasoline and diesel terminals and storage in Fargo and Grand Forks. Their U.S. assets consist of an 8,500 mile refined petroleum products pipeline system, including 47 terminals, seven marine terminal facilities, 27 inland terminals and a 1,100 mile ammonia pipeline system. Mr. Heine, thank you very much for being here. You may proceed.

STATEMENT OF BRUCE W. HEINE, DIRECTOR, GOVERNMENT AND MEDIA AFFAIRS, MAGELLAN MIDSTREAM PARTNERS, LP

Mr. HEINE. Thank you, Senator, for that nice introduction of our company and we're out there in 22 States but none more important than the State of North Dakota. We own assets in North Dakota, in Fargo and Grand Forks so there are two petroleum distribution terminals and indeed, our pipeline system does end in Grand Forks, with only 88 miles of pipe here in North Dakota. But as you mentioned, we have some 8,500 miles of pipe throughout 13 Midwestern States.

We own another refiner. We don't own the products that we transport in our system. Those products are owned by others, primarily refiners, petroleum traders and marketers that ship out on our pipeline system.

Before I go into our operations and a description of what we do and how we earn our money, let me also tell you that our company is indeed a trailblazer as it relates to looking at new and creative methods to transport and blend renewable fuels. For example, in North Dakota, we were one of the willing investors in installing biodiesel blending infrastructure inside of our petroleum gates to provide quality blends anywhere from 2 percent to 20 percent biodiesel and a number of blends in between.

In regards to ethanol, our terminals in North Dakota are able to dispense anywhere from E10 blends to E85 very well. We're looking also as a pipeline company with opportunities to move renewable fuels more into the mainline distribution system of petroleum products and by that, I mean they're looking at the technical issues that have essentially prevented the transportation of ethanol and ethanol blended fuels over the past generations. Now that ethanol production has continued to increase, we're looking at the possibility of transporting ethanol blends and potentially crude ethanol via pipeline in the future.

There are indeed opportunities for the Senate to help and for the House of Representatives to help with all the sort of efforts to move that along. But our pipeline business is indeed a common failure pipeline, meaning that we take the loads from any shipper that wants to put product into the system. We strive to minimize outages but we're dependent upon the supply that we receive from refiners and other pipelines, which are connected to our system. Mechanically, our pipeline system has operated fine. The terminals connected to the pipeline system are operating fine. It's essentially a lack of supply, which has created the system—the circumstances that we're in today.

So what are we going to do? Have terminals without product or gasoline or diesel fuel? If there are maintenance programs and as my colleague with the EIA has adequately stated in his testimony, both planned and unplanned refinery down time due to maintenance or due to unexpected events such as the disastrous flood in Coffeyville, Kansas, that will, indeed, have a domino impact on our ability to fire a system.

In North Dakota, we generally are able to supply terminals with product out of the Northern Tier refineries. In times when there is maintenance or other unexpected outages, then we rely on product

coming in from as far away as Texas, Oklahoma or Kansas refineries.

If an outage does occur, we have a number of different notification systems in place, which are driven to notify our customers quickly and on a real time basis, to indicate that we've got an outage so they can plan accordingly. And we do operate the system on what we refer to as a hub and spoke system, trying to maximize the most product that we have in our pipeline system to be delivered to a terminal and ultimately into transport trucks.

PREPARED STATEMENT

So with that, I look forward to addressing any questions that you may have regarding our operations in North Dakota or South Dakota or elsewhere in our system.

Senator DORGAN. Mr. Heine, thank you very much.

[The statement follows:]

PREPARED STATEMENT OF BRUCE W. HEINE

Good afternoon Senator Dorgan and subcommittee staff. On behalf of our CEO and our North Dakota based employees, thank you for inviting Magellan to testify on the important subject of fuel availability in the State of North Dakota. Magellan owns and operates the Nation's longest refined product pipeline system along with 81 petroleum distribution terminals in 22 States. In North Dakota, we have distribution terminals in Fargo and Grand Forks. We also have two terminals in South Dakota and five in Minnesota. While we are neither a refiner nor are we affiliated with any petroleum company, we do have an important role in the transportation and distribution sector of our industry.

Along with our petroleum transportation and distribution infrastructure, Magellan has been a trailblazer in developing new infrastructure dedicated to renewable fuel distribution at our terminals throughout the Midwest. In fact, we were an industry leader with the installation of state-of-the-art biodiesel blending systems at our terminals in North Dakota. These systems allow us to provide our customers with quality biodiesel blends from B2 to B20. Our North Dakota terminals also have ethanol blending infrastructure. These sophisticated "sequential-blending" systems allow us to provide our customers with blend options ranging from E10 to E85.

We are also exploring new cost efficient methods to transport biofuels. Later this year, we are planning to transport a B5 biodiesel blend on our pipeline system. In addition, we are active with industry and governmental efforts to find solutions to technical challenges associated with the transportation of ethanol blended gasoline and neat ethanol via pipeline. Indeed, we see commercial opportunities in the future to transport biofuels within the mainstream petroleum transportation system.

As an open access common carrier pipeline company, we do not own the commodities we ship through our system. The gasoline, diesel fuel, and other refined products that we transport in our pipeline are owned by the refiners, traders, and wholesale marketers that are shippers on Magellan's pipeline. In other words, we are a company that transports the refined products from refineries to terminals. We constantly strive to minimize product outages, but our ability to achieve our goal is dependent on the volume of refined products we receive from refineries and at our connections with other pipelines.

Our pipeline system and our petroleum distribution terminals in Fargo and Grand Forks are operating normally from a mechanical standpoint. From our perspective, recent short term outages at our distribution terminals are not related to pipeline or distribution terminal operations. Quite simply, it's the lack of available supply. The majority of gasoline and diesel fuel delivered into our Fargo and Grand Forks terminals generally originates from refineries and pipelines connected to the northern tier[1] of our pipeline system. We also have the capability to supply our North Dakota terminals with volume from refineries in Texas, Oklahoma and Kansas. However, to meet demand in the Upper Great Plains, we need supply from northern tier refineries.

Recent outages at our North Dakota and other terminals in the Upper Great Plains have been due to lower supply from regional refinery origins and strong sea-

[1] The northern tier includes refineries located in Minnesota and Wisconsin.

sonal demand. If a refinery connected to our pipeline system has an expected or unexpected disruption in operations, we receive a lower volume of product to deliver to our terminals. In the case of an expected or planned operational disruption[2] (typically the result of required refinery maintenance), we are generally able to build inventory in advance and/or transport refined products from alternative origins to compensate for the shortfall in an effort to supply terminals. However, when several refineries connected to our system are down for maintenance at the same time or are encountering unexpected operational issues, we cannot always prevent short term outages at our terminals. Refiners connected to our pipeline system generally make us aware of their plans but they are by no means required to share their plans with us.

Last, recent demand for gasoline and diesel fuel has exceeded available supply at several of our terminals in the Upper Great Plains. During a time when available demand exceeds supply which results in a terminal outage, we notify the inventory owners (shippers) on a real-time basis of the outage. In addition, we update our "Terminal Information System" (TIM)[3] on a real-time basis. Our TIM system is a voluntary, value added service to our shippers, petroleum jobbers and their drivers. We believe the structure of this system is one of the best in the industry and we have received positive feedback from a variety of sources.

When the terminal is resupplied, we may initiate an allocation procedure which was developed with feedback from our shippers. The allocation procedure provides product availability based on historical volumes at a terminal. We believe this procedure provides equitable allocation of fuel.

Thank you again for the opportunity to comment on these important subjects and I would he pleased to answer questions.

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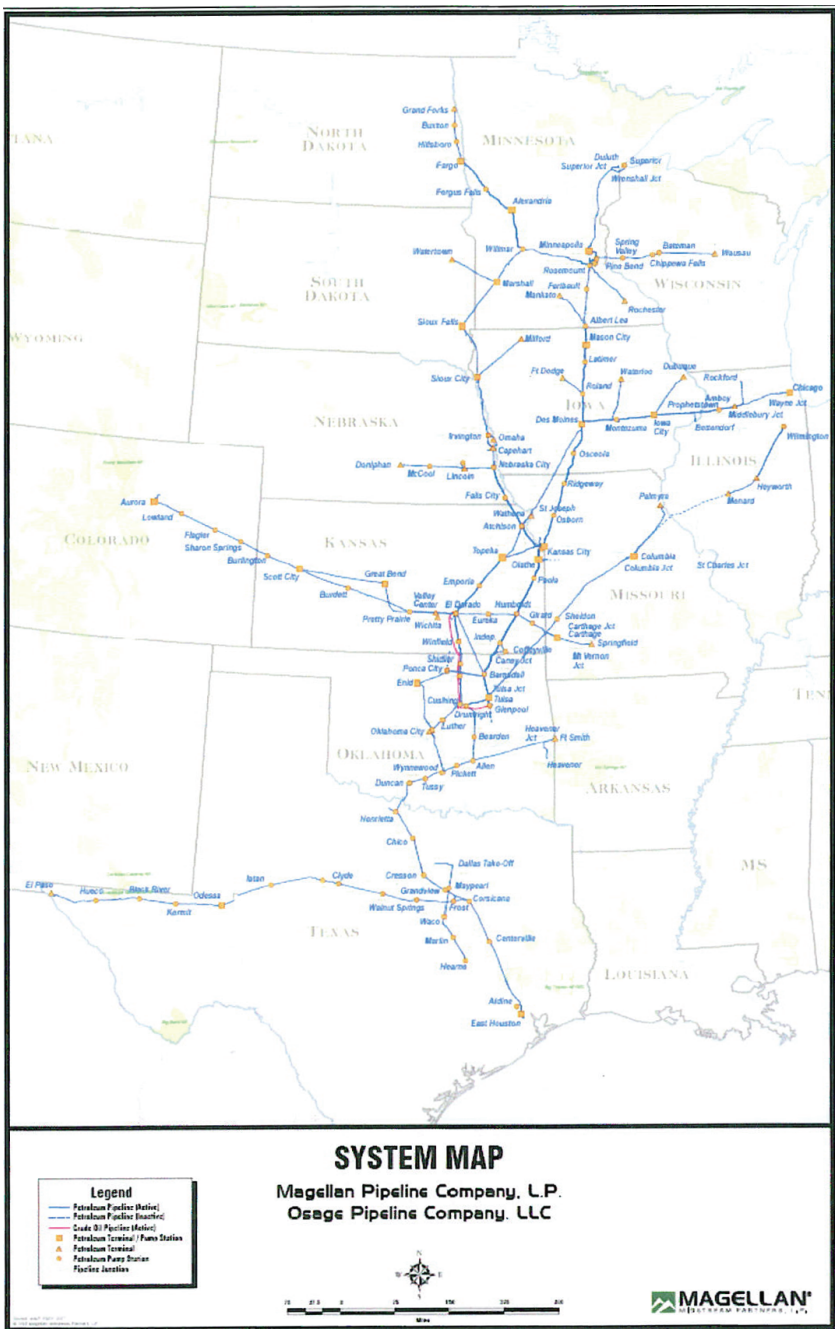
[2] A planned operational disruption in production is generally referred to as a refinery "turnaround".

[3] TIM is an audio system that provides updates regarding product availability at our terminals.



Senator DORGAN. Next we will hear from Mike Rud, the President of North Dakota Retail Petroleum Marketers Association in

North Dakota, comprised of 425 petroleum marketers from 162 different cities across the State. Mr. Rud?

STATEMENT OF MIKE RUD, PRESIDENT, NORTH DAKOTA RETAIL PETROLEUM MARKETERS ASSOCIATION

Mr. RUD. Thank you, Senator. On behalf of the 400 or so members of our associate members and marketer members, we thank you for taking the time to come to North Dakota and hear firsthand the dilemma facing our great State's retail petroleum suppliers and dealers regarding the fuel shortages.

How bad is the supply in North Dakota? That's a question I've been asked many times in the past few months by journalists from across the United States. I've come under fire from some officials in this State when I told reporters several of our long-time members call it worse than the oil embargoes of the 1970s.

People who have been in this business for 40 and 50 years will tell you that this is a very difficult situation and probably has been worse than what they faced in the 1970s with the oil embargo.

The North Dakota Petroleum Marketers and Suppliers have been fighting a lot to supply since late May and early June. It was at this time the NDPMA received information that up to eight refineries would be down in the Great Plains region for scheduled maintenance during the course of the summer and fall. Our association immediately began working with Governor Hoeven's office to secure an hours of service waiver for procuring and transporting product that started out mainly as a gasoline hours of service, then quickly turned into a diesel fuel hours of service which is still in effect at this time, through November 30. It's basically designed to bring product back from across State lines and back into our State.

It was again at this time when shipments in June, shipments in Grand Forks and Fargo became very sporadic at best. The Governor again took a proactive response and helped us greatly before the July 4th weekend, as he continued to help us with the hours of service waiver by extending that and helping us get through the traveling season, which was in full gear at that time.

The diesel shortages became more apparent as we moved closer to the harvest season. The hours of service waiver has allowed North Dakota gas retailers to get through the summer with very few outages reported. This only happened because of the great dedication and professionalism of the North Dakota Petroleum Marketers and Transport companies. Everyone paid a price, Senator, during this process. We saw prices in North Dakota probably running between 20 to 30 cents a gallon higher than what the rest of the country was and I think at one time, we had the highest priced gas in the country outside of Hawaii. So while the public did pay a severe price at the pumps, the general public had no idea transport drivers, many of them retail gas business owners themselves, were driving anywhere from 800 to 1,000 miles round trip just to secure product.

Sir, if I may, I would just like to deviate a little bit from my testimony and share with you a letter that I received from a marketer in Mandon, North Dakota last week. Her and her husband run a mom-and-pop business and have been in the industry since 1964. They're unbranded dealers so they don't fly a Cenex flag or any-

thing of that sort. The lady goes on to say, the year was the worst for high prices and shortages of produce that she can recall. July and August gas was very hard to get. We were able to get product in Fargo Morehead but we had to work hard to get a load, sitting in line 6 to 7 hours, waiting to get a load, sometimes coming home empty.

At the end of the August, the nightmare of diesel fuel shortages began. September 1, they were able to get two loads of diesel fuel from Fargo from a friend who was branded Cenex, however did not have product again until September 14 and that again was Cenex product only. That product lasted about a day and then Fargo was out for the next 3 weeks.

Morehead had a product they would release at 8 a.m. in the morning. Her husband would get in line at 3 a.m. Every day, he had to get in line earlier. It got to be where he was leaving the house at 3:30 in the afternoon and was in line by 5 o'clock that night and then waited until the product was released until 8 o'clock the next morning.

Her husband would sit in line for 15 to 16 hours at a time to get one load of product. In a 2-week period, he slept at home three nights. He didn't have a sleeper in the truck so he put a board between the seats and tried to get some sleep. Most of our marketers in North Dakota, their transport systems aren't really equipped with sleepers because of the gas industry, the way the product is moved on a daily basis. If you call in the morning in a normal situation, you probably could have a load by the afternoon. That obviously hasn't been the case here this summer and that's what most of our guys resorted to, I think. Kyle Ketchmark there will tell you the same thing. He slept on a board more times than he'd care to reveal.

Each day, Morehead released three to maybe nine loads of diesel fuel. Sometimes again, he'd sit in line for 15 or 16 hours and come home empty. So by September 25, there was no product in Morehead or Fargo. Trucks had to go to Alexandria, Minnesota; Sioux Falls or Roseville, Minnesota. Grand Forks has been out of product most of the summer.

Product is still very short but most of the crop is off and things are starting to slow down. There is no number 1 diesel in that area at this time. Our customers were never without fuel but we prayed for rain many days so we could get our supply built up. If we would not have our own semi and my husband sitting in line for hours, some customers would have been without product.

Please help the fuel dealers of North Dakota. We can't go through another year like this one. The unbranded dealers really need help. We have to be able to get product to our customers. And that, I think, would be the sentiment of many marketers out there in North Dakota right now. From an unbranded standpoint, it was especially hard in terms of coming up with product.

Again, the list goes on, Senator. I can share with you one of the sentiments that came into my office as the summer wore on, was well maybe we should let people run out of product and someone would stand up and take notice. That's easier said than done, I think. While a lot of people maybe had that thought to the fact that in a smaller State like North Dakota, a lot of our rural marketers

would be sharing church with their customers. The kids would be playing ball together. They're going to school together so you just can't walk away from a friend.

So instead of doing that, the North Dakota petroleum marketers did essentially the opposite during this whole ordeal. They worked with the Governor's office to get an EPA waiver on Canadian gasoline and the Canadians have been very cooperative with us and we certainly appreciate that. The refiners have done all they can, I think, up in that part of their county, to help us stem off some of the supply issues.

Governor Hoeven has been very good to work with regarding the hours of service waivers and I know he has continued to put pressure on refiners and terminals to try to bring product into the States and keep as much product in the State as possible. Again, the North Dakota marketers have worked with Canadian petroleum refineries in securing rail car shipments of gas and diesel to help ease the crunch down here in the United States.

Our marketers procured allocations of diesel with Canadian outlets. Some of this had to be trucked 12 hours in one direction to bring it back to the States but we got it back there and tried to keep people rolling down the road. Our members were forced to allocate product to farmers, ensuring the harvest season can be successfully completed in a timely manner by all ag producers. This did create some hardship with some of our larger farmers in the State who probably had ordered 10,000 gallons but only got 3,000 to 5,000 gallons but it was what our marketers felt they had to do in order to keep everybody happy and keep the harvest rolling forward so that everybody had a chance to get the crop off the field.

So that was very important as well. We had competitors who helped out fellow marketers who didn't have product. Sometimes that made the difference between keeping the school buses rolling on certain days or not. Those are the kind of lengths we went to, to keep this whole process working and at the same time, we've tried to be as price competitive as possible at the pump.

This has been hit. Like I say, it was 20 to 30 cents a gallon normally that we were above probably the national average but we did all we could to keep the price in line, given the fact that the high freight costs we were facing and the amount of labor that was being involved in sitting in a line at a terminal for 15 to 16 hours.

How long can we maintain this level of service excellence? I don't know. We've got tired marketers out there. We need to hopefully get this thing wrapped up as soon as possible. I can share with you a few more stories. I had a wife call me the other day in tears because her husband is older and she's worried if he's going to be hold up under the stress and pressure of what we've faced in the last 6 months and I think that's a real concern for a lot of marketers out there. Transport owners will tell you that they've had drivers who've been with them 20 to 25 years who have come back in from a few days off and said I can't do this anymore. I don't know if I want to continue down this road and keep sitting in lines, sleeping in a truck.

Those are all key issues. Small retail outlets have been drastically affected because of not only the supply issue in terms of getting the product but also the fluctuation in price because of de-

pending on where the product was coming from and on what day. Lord only knows how much they're going to pay for that product and how they can pass that on to their consumers and still be price competitive in the market.

I have several marketers who had called me about high priced diesel fuel. What should I do? I've got a 25 cent freight charge on my diesel fuel. You have to pass that on. You can't just give that away. I mean, it's just part of doing business but it's very hard to do, to remain price competitive when you're probably only going through a load a week or a load a month, some of these guys, in a very volatile fuel market.

Where do we go from here? We're still facing the shortages. We're starting to see the light at the end of the tunnel, which is a positive because the harvest is wrapping up but we've got marketers who are scrambling to find No. 1 diesel and heating oil as the winter nears. We've got marketers who are dealing with the EPA, trying to look at ways to maybe use jet fuel or kerosene and combine it with number 1 as a heating source. So we're looking at all—and continue to look at all different avenues that are out there that we can explore.

We desperately need product in the eastern part of the State in those terminals and on a regular basis as soon as possible. It has to happen, though. We can't continue down this road and more importantly, we need to try to work together to make sure this product shortfall doesn't happen again. The petroleum marketers are completely on board with section 280 of the energy bill that would call for some type of coordination of refinery maintenance. I'm with you. I'm not accusing anyone in this room or on this panel, of getting together and deciding on planned maintenance to drive the price of gas or fuel up. I have no desire to do that.

We've got great working relationships with Cenex as well as Tesoro and we want to maintain those working relationships along with Magellan and all the other people who are here at the table today. But it is a huge concern. If we can find a liaison, a clearing house agent that can do this work for us so that the refiners don't have to talk to one another but there's a coordinator that would be a huge plus for us in terms of the planned maintenance for that. We can't afford to have eight refineries going down sharp in the summer and fall when we're on the end of the pipeline. We can no longer stand by and just deal with taking the crumbs and the leftovers of what's in that pipeline. We can't do it and the public can't keep doing it either and paying the price that we're paying at the pumps.

PREPARED STATEMENT

Above all else, I would join you with GFCC oversight, stopping the speculation, the manipulation, and the over-speculation of the market in guiding a barrel of oil through the rough spots. Someone needs to explain to us how we went from $65 barrels on Labor Day to the $95 or $96 we're at today.

So with that, sir, I would answer any questions you might have.

Senator DORGAN. Mr. Rud, thank you very much.

[The statement follows:]

PREPARED STATEMENT OF MIKE RUD

Chairman Dorgan and members of the committee, for the record, my name is Mike Rud. I'm the president of the North Dakota Petroleum Marketers Association. On behalf of our nearly 400 member marketers and associate members, I thank you for taking the time to come to North Dakota and hear first hand the dilemma facing our great State's retail petroleum suppliers and dealers regarding fuel supply shortages.

How bad is the fuel supply shortage in North Dakota? That's a question I've been asked many times in the past few months by journalists from across the United States. I came under fire from some when I told reporters several of our long time members called it worse than the oil embargo of the 1970s. Here's a brief synopsis.

North Dakota petroleum marketers and suppliers have been fighting a lack of supply since late May and early June. It was at this time, NDPMA received information that up to 8 refineries in the Great Plains region would be going down for scheduled maintenance during the course of the summer and early fall.

Our association immediately began working with Governor Hoeven's Office securing an Hours of Service waiver for procuring and transporting product (mainly gasoline and later diesel fuel) from across State lines back into North Dakota. It was about this time when gas shipments to terminals in Grand Forks and Fargo became sporadic at best. The Governor's proactive response to this issue paid big dividends as the July 4 weekend rolled around and the peak summer traveling season swung into full gear. The diesel fuel shortages would start to become apparent as the harvest season neared.

The HOS waiver has allowed North Dakota gas retailers to get through the summer with very few outages reported. This only happened because of the great dedication and professionalism of the North Dakota petroleum marketers and transport companies. Aside from rising gas prices, the average person never felt the pinch of the supply issue because of the tireless work of the transport industry.

The general public had no idea transport drivers, some of them owners of the retail gas businesses themselves, were driving anywhere from 800–1,000 miles roundtrip in the process sitting in line for up to 12 hours or sleeping on boards laid across the truck seats hoping they might get a truckload of product before the terminal ran dry.

Unfortunately, the long days are taking a toll on marketers. Marketers and transport operators have called the association office saying maybe we should just let people run out of product so someone will take notice. Instead North Dakota petroleum marketers have done just the opposite throughout this whole ordeal. We've worked with the Governor's Office to get an EPA waiver on Canadian gasoline. Governor Hoeven continues to support the HOS waivers. NDPMA marketers have worked with Canadian petroleum refiners in securing rail car shipments of gas and diesel fuel to help ease the demand at local terminals. Our marketers have procured allocations of diesel with Canadian outlets and sent trucks up to 12 hours in one direction to bring this product back to the State. Our members have been forced to allocate product to farmers ensuring the harvest season can be successfully completed in a timely manner by all ag producers. Competitors have even joined forces at times to help out a fellow marketer who couldn't get product. In several cases, it's made the difference in whether school buses would run or not on certain days.

During this entire time the North Dakota gas retailer has worked to remain as price competitive as possible in giving the public the best deal at the pumps. How long can this level of service excellence continue? I don't know.

I had an independent retailer whose wife called me in tears saying she was worried about her husband holding up under all the stress and pressure. Transport owners talked to me about veteran drivers coming back from a few days off, coming into the office and telling the boss they didn't know if they wanted to drive anymore. Small retail outlets were looking for buyers or contemplating closing the doors because of the high costs of product due to soaring freight costs. A small marketer called my office one day panicking about how to price a load of fuel that carried a 25 cent per gallon freight charge. When you may only go through one load per month, it becomes extremely tough to be price competitive in this volatile fuel market. Where are we now and where do we go from here?

North Dakota retailers are still facing severe diesel fuel shortages. While we are beginning to see light at the end of tunnel regarding the harvest, we now face the prospect of finding No. 1 diesel fuel or heating oil as the winter months near. We desperately need some product to start flowing into the terminals in the eastern part of North Dakota immediately and on a regular basis.

More importantly, we need to make sure this product shortfall doesn't happen again. We can't afford and nor can the motoring public afford to have a large num-

ber of Midwest refineries going down at the same time, especially when you're on the end of the supply line. North Dakota can no longer stand by and just settle for the leftovers or crumbs when it comes to petroleum supplies.

Thank you for your time and consideration. I will do my best to answer any questions you might have regarding this issue.

Senator DORGAN. Finally, we are joined by a neighbor from the south. Ms. Dawna Leitzke from South Dakota who represents some 600 retail, wholesale and bulk fuel terminal operators in South Dakota. She's executive director of the South Dakota Petroleum and Propane Marketers Association.

STATEMENT OF DAWNA LEITZKE, EXECUTIVE DIRECTOR, SOUTH DAKOTA PETROLEUM AND PROPANE MARKETERS ASSOCIATION

Ms. LEITZKE. Good afternoon, Mr. Chairman. Thank you for the opportunity to come up here and talk to you.

Again, I am Dawna Leitzke. I am the executive director of the South Dakota Petroleum and Propane Marketers and I just wanted to give you a little view of what's happening in the State of South Dakota. It is much like North Dakota but a little bit different.

In May 2007, petroleum wholesalers and marketers started to see major outages at pipelines throughout the State of South Dakota. These outages where most apparent in Sioux Falls, South Dakota and that is where our population center is in our State. The first week of May, wholesalers and marketers had no gasoline to load from the pipelines because there simply was no product available. This outage continued for about 10 days. Since May 2007, our supply issue has only gotten worse.

Marketers and wholesalers have continued to struggle to find gasoline and diesel fuel at all the pipeline terminals in South Dakota and throughout the entire region. My members have experienced long waits at the terminals. In some cases, they wait up to 12 to 15 hours, sitting in lines to load the product.

In early of June 2007, I went to Governor Rounds and asked for an hours of service waiver for marketers who enduring these conditions. Our first waiver was issued on June 15 and we have one in effect yet today. We will have one in effect until December 7, which is 6 months, which is unprecedented. Unfortunately, the hours of service waivers do not aid our members in receiving the products. All they do is enable them to not get tickets for sitting in long longs and waiting and sleeping in their trucks.

My members or I have been in daily contact with pipelines and/or the refiners and have been asking the same questions. When will we get fuel in South Dakota? The answer is always the same. No one knows. Our marketers do understand that this spring, summer and fall, there have been many challenges for refiners—floods, fires, and maintenance issues have all contributed to the supply problem.

South Dakota is slightly different than North Dakota and other States in our region. We don't have a refinery in our State and we are at the end of the pipe with small volumes as compared to other States and marketers and we have fewer brands than most markets. I'm not sure if you're aware and this also has kind of happened in North Dakota but August 3, we lost Conoco Phillips and April 1, 2008, we will lose DP as a supplier in our State.

All these factors contribute, in my opinion, to the lack of fuel being prepared and shipped to South Dakota. The majority of the motoring public has no idea what wholesalers and marketers face every day in their quest to keep gas stations, truck stops, farmers, State and local governments and bulk facilities from running out of gas or diesel. I commend my marketers and wholesalers for waiting in those long lines and long hours to ensure that our State's citizens and visitors do not run out of product.

My marketers travel to Kansas, Colorado, Montana, Wyoming, Nebraska, Minnesota, Iowa and North Dakota in search of this fuel. These drivers worked very hard all through the summer and into the beginning of the fall. Most marketers and their drivers were optimistic that this situation was going to resolve itself. It did not. In early October, Governor Rounds wrote letters to all refiners who supply South Dakota and requested that they put more wet barrels into the pipelines in order to get more product and that's gasoline and diesel, into South Dakota. Unfortunately, that did not happen.

In the last 2 weeks, our situation and lack of fuel supply has hit an all time low. Marketers and wholesalers who have been in the business since the 1960s have told me that this was worse than the oil embargo of the 1970s. Many tell me they have never seen supply or lack of supply this bad. We have had gas stations, truck stops and bulk facilities running out of product almost every day.

Last week I once again asked for the assistance of Governor Rounds. I also made personal visits to our congressional delegation in Washington, DC. Governor Rounds and our congressional delegation did make personal phone calls, asking refiners to help in this crisis situation because we actually consider this a crisis in South Dakota. I am requesting that product be sent up the pipeline.

I continue to receive daily phone calls from marketers, State agencies within the State of South Dakota, and other fuel consumers, asking me when the situation is going to improve. I honestly tell them I do not know and that I don't any good news for them. It has been very frustrating for everybody involved.

I also have 100 stories just like Mike has told you. My most recent tragedy is a station in a saw town, White River, South Dakota, closed their doors on Friday. They simply could not afford the product anymore and they just couldn't get the product in their station. They're a mom-and-pop and who knows if they'll ever reopen those doors. Once they are closed, you know how hard it is restart. Their competitor actually told me that story because they were so sad and they were worried about that person's children, whether they'd be able to feed their children through winter.

PREPARED STATEMENT

So on behalf of the petroleum marketers, gas station owners, truck stops, bulk fuel haulers and fuel wholesalers in the State of South Dakota, we ask to help alleviate the continuing supply problem in our State. I just have to close with saying that every person on this panel kind of knows what's going on and we're all in the same situation and we're all struggling. Two things really keep me awake at night and every night I wake up and I say a prayer that

the whole day will go well; that is, that none of my drivers get in an accident because they are sleep deprived. They're waiting in those long lines and hope that it doesn't get cold. As I drove up here today, it was snowing and I had a pit in my stomach because we don't have the heating fuel. We had an ice storm 2 years ago in South Dakota this exact weekend. We didn't have any fuel. We were running out. We were commended for helping each other out. We were getting fuel from the National Guard, the State of South Dakota. So I've been through it. We've been through this tragedy in South Dakota and this is not a good situation and it's not getting better. So I will stand by for any questions and I thank you for your time.

[The statement follows:]

PREPARED STATEMENT OF DAWNA LEITZKE

Good Afternoon Chairman Dorgan and members of the committee. My name is Dawna (Dawn-a) Leitzke (Light-ski) and I am the executive director of the South Dakota Petroleum and Propane Marketers Association. I appreciate the opportunity to provide you with a picture of the fuel supply situation in South Dakota.

In May 2007, petroleum wholesalers and marketers started to see major outages at pipelines throughout the State of South Dakota. These outages where most apparent in Sioux Falls, South Dakota. The first week of May, marketers/wholesalers had no gasoline to load from the pipelines because there simply was no product available. This outage continued for about 10 days. Since May 2007 our supply issue has only gotten worse. Marketers/wholesalers have continued to struggle to find gasoline and diesel fuel at all the pipeline terminals in South Dakota and throughout the region. My members have experienced long waits at the terminals—in some cases they have had to wait up to 12–16 hours sitting in line just to load a transport.

In early June 2007, I went to Governor Rounds and asked for an hours of service waiver for marketers enduring these conditions. The first waiver was issued by Governor Rounds on June 15th. Since that day, South Dakota has had an almost continuous HOS waiver. Our present waiver is due to expire on December 7th. Unfortunately, the HOS waiver does not aid my members in receiving product.

My members or I have been in daily contact with pipelines and/or refiners asking the same question. When will we get fuel in South Dakota? The answer is always the same. No one knows. Our marketers do understand that this spring, summer and fall there have been many challenges for refiners—floods, fires, maintenance issues have all contributed to this supply problem.

I feel that South Dakota is in a slightly different situation than other States in our region. We have no refineries, we are at the end of the pipelines, we have small volumes as compared to other States and marketers, and we have fewer brands than most markets. All these factors contribute, in my opinion, to the continued lack of fuel being shipped to South Dakota.

The majority of the motoring public has no idea what wholesalers/marketers face every day in their quest to keep gasoline stations, truck stops, farmers, State and local governments, and bulk facilities from running out of either gasoline or diesel. I commend my marketers/wholesalers for working long hours, waiting in long lines at the pipelines to ensure that our State's citizens and visitors do not run out of product. My marketers/wholesalers travel to Kansas, Colorado, Montana, Wyoming, Nebraska, Minnesota, Iowa and North Dakota in search of fuel. These drivers worked very hard all through the summer and into the beginning of the fall. Most marketers and their drivers were optimistic that the situation would resolve itself.

It did not. In early October 2007, Governor Rounds wrote letters to all refiners who supply South Dakota and requested that they put more wet barrels into the pipelines in order to get more product (gasoline and diesel) into South Dakota. Unfortunately, that did not happen.

In the last 2 weeks, our situation and lack of fuel supply has hit an all time low. Marketers/wholesalers who have been in the business since the 1960s have told me that this is worse than the oil embargo of the 1970s. Many tell me they have never seen supply or lack of supply this bad. We have had gas stations, truckstops and bulk facilities running out of product almost every day.

Last week I once again asked for the assistance of Governor Rounds. I also made personal visits to our Congressional delegation in Washington, DC. Governor

Rounds and our Congressional delegation made personal phone calls asking refiners to help with this crisis situation—requesting product be sent to the pipelines in South Dakota.

I continue to receive daily calls from marketers, State agencies within the State of South Dakota, and other fuel consumers asking me when the situation is going to improve. I honestly tell them I don't know and that I do not have any good news for them. It has been very frustrating for everyone involved.

I also have many stories from my members that are similar to what Mike Rud has just told you.

On behalf of the petroleum marketers, gas station owners, truck stops, bulk fuel haulers, and fuel wholesalers in the State of South Dakota, we ask for your help in alleviating this continuing supply problem.

Thank you for your time and I will stand by for any questions.

HOME HEATING FUEL

Senator DORGAN. Ms. Leitzke, thank you very much for being here. Let us start with where you finished with respect to home heating fuel because Mr. Westbrock raised the question of home heating fuel supplies and price. Mr. Westbrock, what can you tell us would be your expectations this winter with respect to the supply of home heating fuel in North and South Dakota?

Mr. WESTBROCK. Senator, I'm making the assumption that the diesel fuel situation hasn't resolved itself, which then means that more likely, we aren't building supplies of two oil and we certainly aren't building supplies of one oil. Should we have an unplanned interruption basically anywhere in the PADD 2 or PADD 3 arena or if we have severe weather—I don't believe we're healthy enough yet to overcome that immediately and therefore, we'll be running the wheels off these trucks again to find product to bring into the States that are most affected.

Should the weather remain mild and should there not be any unplanned interruptions, I would guess that two oil probably will be adequate but as referenced over there, by the two marketing associations, one oil is critical. Fortunately, there aren't a lot of people that use one oil but there are certainly a lot of trucks that use one oil to blend with their two oil to get through the cold climate up here in North Dakota.

Senator DORGAN. Dr. Gruenspecht, what do you expect we will face with respect to the heating fuel in North Dakota?

Dr. GRUENSPECHT. I don't have much North Dakota specific information on heating fuel. It is a very closely related product to diesel fuel so many of the same issues are—I think people still use diesel fuel, at least in my part of the country on the east coast, essentially as heating fuel, which has sometimes the highest sulfur content.

The prices are a big concern, I think nationally and probably in this region as well, about heating fuel. We did our Winter Fuels Outlook and customers using oil as heating fuel will, we expect, see very significant increases in their heating costs this year. I happen to be such a person myself, which is unusual in the Washington, DC area, and I can tell you that it's pretty expensive. In the Midwest, in PADD 2, we track prices on a weekly basis and prices as of a week ago were up to $3.18 a gallon, I believe, for residential heating oil.

We've mostly been looking at the price issue, not the supply issues, but it is closely related to diesel fuel and to the extent you

have diesel fuel problems, I think it would be a concern for heating oil.

Senator DORGAN. Ms. Leitzke, let me ask you—you've already touched on this but it seems to me that you suggested that we may run into a significant problem with respect to home heating fuel. Is that your assessment?

Ms. LEITZKE. Senator Dorgan, I do believe that we are going to run into a problem. I have a report from NuStar Pipeline, which I get every day and now, just referring to my South Dakota terminals, which are basically at the end of the pipeline, there's no diesel. We had no diesel yesterday in our State, none.

As for the loads of y-grade, which is number 1 diesel, that came up the pipe a couple of weeks ago, you have marketers who are starting to blend that fuel but it's a little warm yet so they're kind of playing that waiting game. But they get in a situation where they don't have any place to store it. So it's kind of a use or lose situation right now.

I also use home heating fuel. I'm paying about $3.15 a gallon and I can afford that. But there are a lot of people in Pierre, South Dakota that cannot afford that and I do worry about that almost more than the supply of it.

Senator Dorgan, I just have to echo Dawna's comment. We're in the same boat here. I was just visiting with Hal Anderson from Tesoso. He says they've built supply up to 80,000 barrels at this point in time but we all know how quickly that can go. I mean, this summer, 650 loads of diesel fuel were going out of Alexandria in the span of 2 or 3 days. So it will certainly be a concern in North Dakota. It is right now and as I said before, we've got marketers already who are trying to take a look at using jet fuel or kerosene and blending that down with number one in terms of one, supplying people with a heating source and two, trying to find something that could be somewhat price competitive to take the financial pinch off the average consumer out there that is still using heating fuel in North Dakota.

SUPPLY SYSTEM

Senator DORGAN. Mr. Heine, let me ask, if I might, a question about this end of the pipeline issue, end of the pipeline distribution system and how States are treated when the supply system is constrained due to outages or lack of supply. It seems to me that a pipeline is a circular product and a pipeline contains the product that moves where it is commanded by a market price and I don't understand the notion of the extremes or the end of the pipeline in how a product is allocated in those circumstances. Let me ask this in one more saying. It's fascinating to me and kind of disappointing to me to hear about our problems. We rank sixth in the Nation in energy production in North Dakota. I was trying to think how many barrels we produced—Dr. Heine, do you know that number?

Mr. HEINE. About 2 percent of crude oil production.

Senator DORGAN. Yes and so we produce about 120,000 to 125,000 barrels a day of crude oil. We refine in our State, about 60,000 barrels a day and we have a need for about 25,000 barrels a day. So think through that again. We produce 125,000 barrels.

We refine 60,000 barrels and we have a need for 25,000 barrels and we're sitting here talking about how we don't have any fuel.

Now, you know, one might ask the question, what the hell is going on? I understand the issue of refining different products, different marketing systems and so on but I still don't understand the circumstances of how we find ourselves in this position. So Mr. Heine, explain to me, if you will, how product is transported by common carriers and to which markets and why does the so-called end of the pipe matter and how does that affect us?

Mr. HEINE. Thank you, Senator for the question. It always becomes relevant when you have limited supply and that's the circumstance in which we find ourselves today. When we have limited supply, we don't choose one State over another based on boundaries, on which terminals to supply. Those decisions are very methodically made and there are a number of factors that go into considering as we determine, with limited supply and where that limited supply should go, to service the maximum amount of trucks, we'd ultimately go to service stations or truck stops. When they make those decisions, we see back from our shippers on our pipeline, on their aspirations and their desires and that's how we developed what I referred to earlier, Senator, as a hub and a spoke system.

Let me give you an example of that. A hub terminal for us would be Minneapolis, and once we're able to keep Minneapolis supplied, then we supply a second tier hub terminal, which in this case would be either Sioux Falls or Alexandria, Minnesota, and once we satisfy demand there, then we supply Fargo and Grand Forks. That decision is not based on State boundaries. That decision is based on a number of factors that are ultimately designed to provide the maximum amount of product—and what group—if we tried to supply both Alexandria and Fargo with limited supply, we could end stranding some of that valuable product and locking it in a pipeline system.

The pipeline, an 8-inch diameter pipeline between Alexandria and Fargo, is approximately 1.5 million gallons or 36,000 barrels in size. That equates to approximately 190 trucks. So it is in everyone's best interests to make sure that if we've got to keep that product at one terminal, like Alexandria, because it has additional tankage, because it has closer proximity to an origin, because it has the additional line capacity to feed it quicker and because it has the ability to load more trucks at the same time. That's the reason that that terminal would be chosen versus one further up the line.

GRAND FORKS

Senator DORGAN. But let me ask you a question about this. If Grand Forks—I think you said Grand Forks doesn't have diesel? It doesn't have diesel or somebody said here——

Mr. HEINE. Yes, Senator. Grand Forks was out of gas for most of the summer and they've got a little gas in there right now but as far as diesel goes, I don't know anything about it.

Senator DORGAN. So why—in a circumstance like Grand Forks, which is at the end of the pipeline, why is it less deserving of a stream of product in a circumstance where it has none than any intermediate place along the pipeline distribution system?

Mr. HEINE. Senator, all of the answer to that question is it's the desire of all stakeholders to provide the maximum amount of product that is available for truck delivery. If we ended up trying to supply all of the terminals on our system, with limited supply, we would lose volume that would be available to take for everyone. So it's been our hub and spoke system, which has, in most cases produced very well over the last 3 years and this is a system that we're constantly re-evaluating to make sure that we've got the right terminals in the mix.

Senator DORGAN. You know, I guess I just, at this moment, finally understood. I mean, we've been on the hub and spoke system for airlines for years and if you're lucky enough to live in a hub, you can at least get reasonable prices for airline service. If you're unlucky enough to live on a spoke, you pay through the nose for airline service. I have never connected that but if you're saying that this is a hub and spoke system, then I understand why we are ill served because the whole notion of the spoke is that it is somehow a contributor to a hub but perhaps less deserving of the hub because there's less business in the spoke.

But with respect to a common carrier and the distribution of fuel that is needed in its system, I guess I don't quite understand how that allocation exists. Maybe one of you can help me when you talk about the shipper. We are advantaged by having Tesoro here. Tesoro is a first-rate business, great refinery. We're proud to have it in our State. It refines about 60,000 barrels a day. I don't know where Tesoro's contracts are, where their fuel moves but my guess is they have contracts and their fuel moves in a pipeline with trucks and so on, but I guess I don't quite understand the circumstance of how, with as much as we produce and refine, that we are considered the end of the road. It seems to me, a State that is producing every day, five times more than it needs every day, isn't at the end of the pipeline; it's at the beginning of the pipe. I'm just trying to understand all this.

Let me ask Mr. Westbrock, this issue of outages. I'll come back to this issue of the hub and spoke. Mr. Westbrock, do you provide information to other refiners and to the general public if you're going to have a planned outage or shut down information?

REFINERY OUTAGES

Mr. WESTBROCK. We do now. We do not communicate to other refiners about a planned shutdown or turn-around.

Senator DORGAN. Do you communicate to anyone that you're going to have——

Mr. WESTBROCK. Generally, the industry finds out pretty well because the supply of labor is pretty difficult. We all have to kind of schedule a year ahead of time when we're going to bring in these people and these people pretty much serve all of the other refiners. So it becomes fairly accurate knowledge but it is not a direct communication between one refiner and the other.

Senator DORGAN. But in your letter to me—I wrote letters to all of the refiners that serve North Dakota—in your letter to me, you said that unlike competitors—I don't know if you said unlike competitors but at least my observation of the letter said that you indi-

cated you share your outage schedules with your customers as a matter of business practice.

Mr. WESTBROCK. Yes, with our customers.

Senator DORGAN. With your customers?

Mr. WESTBROCK. I believe you asked other refiners.

Senator DORGAN. I did, in fact but it becomes public knowledge that you——

Mr. WESTBROCK. Yes.

Senator DORGAN [continuing]. You share your outage practices or planned practices with your customers so they know what you're about to do.

Mr. WESTBROCK. Yes. For example, because of this turn-around, we knew 2½ years ago. This spring, we started communicating with our customers, saying, we've got this major turn-around we thought we would be in June, which it was. We didn't realize it was also going to be in August. Get your tanks filled; get your customers' tanks filled. Let's get ready for this. We talked quite a bit about it. So it was well communicated and we can document that as well.

Senator DORGAN. But in fact, sharing this information with your customers is the same as sharing it with your competitors, is it not? Or do you have customers that say nothing?

Mr. WESTBROCK. I would guess that the competitors will find out about it, yes.

Senator DORGAN. I mean it becomes public knowledge.

Mr. WESTBROCK. Yes.

Senator DORGAN. Mr. Penner, your company does not; at least as I understood your letter to me, your company does not provide such information to customers or to competitors, is that right?

Mr. PENNER. Senator, we do provide information to our major customers when we are going into some type of plant turn-around. We're in the same boat as Mr. Westbrock that we don't go out and seek out competitors and tell them what our plans are. But we do talk to customers and we do talk to pipelines that we're supplying and let them know, in advance, if we're going to have less supply.

Senator DORGAN. Here's what's going to happen. I mean, that's the——

Mr. PENNER. Yes, we'll give them—we go through a planning process and we define how much product we believe we're going to be producing and then let those individuals know how much we would have available during that period.

Senator DORGAN. So if you already do that, both of you already do that, you both essentially say to your customers—you said major customers, but you say to your customers, here's what's going to happen, we think, in July. We're going down for some planned maintenance. And that is not proprietary information—it can't be proprietary once you tell your customers. I assume your competitors are going to know.

If that is not proprietary information that is going to hurt you, why do I hear from refineries—we can't really provide any information that would be sharing with respect to when someone might have a shutdown, when someone might not have a shutdown. I don't understand the argument. I understand the anti-trust issues but I don't understand the proposition that there is some sort of

propriety disadvantage to sharing information about when one might have planned outages.

Because if both of your customers know what you're doing—and yet I'm told you really can't know what each other is doing because it's a disadvantage from a business standpoint and proprietary information. That seems at odds with what I understand here.

Mr. PENNER. Well Senator, when we—we don't communicate with our competitors. I think when we talk about antitrust concerns, that's one. The other issue that I guess is implied is that if others knew and then the next question would be can you move the turn-around? That is extremely difficult and many times—there are lots of complex issues that come into play that make it difficult for us to move one. So that's another reason why. I'm not sure it does a lot of good to share that information.

NORTH DAKOTA REFINING CAPACITY

Senator DORGAN. North Dakota is disadvantaged apparently, not because we have a lack of refining capacity or a lack of production but because for whatever reason, that product doesn't come back into our State or doesn't stay in our State in sufficient quantity to meet our needs. Do we need increased refining capacity in North Dakota? Mr. Rud?

Mr. RUD. I think, Senator, everything we've studied anywhere from—it's an issue we've looked at and I'm no expert by any means but just a little bit of research I've done, it's anywhere from $11,000 to $15,000 per barrel for a new refinery. So rather than thinking that there is something that the State of North Dakota can do, I think we need to take a look at expansion of the existing refineries because that's going to solve the problem a lot quicker than trying to put a new refinery online and then deal with the environmentalists and deal with all those issues. There are folks at the API that I visited with that said it takes up to 10 years to build a new refinery. I think Frontier has put 60,000 barrels on line in a matter of, what? Two months? Somewhere in that area and I don't know exactly the whole process of what they go through and how long it took them to get to that point but if you can put 60,000 more barrels online in North Dakota and do it at an existing facility right now, that would be a huge plus, I think.

Senator DORGAN. Yes. My question wasn't should the State of North Dakota build a refinery. My question was, is there sufficient refining capacity in North Dakota, given our circumstances?

Mr. RUD. At this point, Senator, I would say it's definitely an issue, given the fact of what we've gone through this summer. I think it's something that needs to be looked at. We may need more refining capacity in order to keep up with the growing demand, not only in North Dakota but in the oil patch as well. We've seen a huge push out there and it's going to take more product out there. I have a marketer who is trying to secure further allocations out in the western part of the State, who is asking for 10 to 15 percent more in allocations at his site to deal with the oil patch and he's being told he's not, in all likelihood, unless something changes drastically, he's not going to see that next year. So he's faced with trying to deal with the oil patch and provide product for their energy needs out there with the same amount of product that he's

had for the last few years and given the fact of what we've seen in the oil patch, we may need more refining capacity in North Dakota to continue to grow this State.

REMEDIES

Senator DORGAN. What are the remedies at this point? As you see them as Ms. Leitzke sees them and then I will ask some others as well. Is this a circumstance where it's a big set of issues and what is, is and we're short of product and we're short of home heating fuel? We got hurt with diesel and we're still short of diesel. We got hurt with gas supplies but you know what? That's the way it is so, let's have a meeting and complain about it and we'll go home. Or are there solutions that you believe ought to be employed in public policy and if so, what are they?

Mr. RUD. Senator, I think first and foremost, in order to get price down, we need CFTC oversight. That's one of the issues I think we need to continue to address and I think it's getting a lot of attention in Washington at this point in time. I'm still on the board in Sarasota, North Dakota Petroleum Marketers Association with some type of refining coordinator for the planned outages and again, I can't speak to the refining industry and how difficult that will be but there has to be a liaison to do this job and do it without a whole lot of issues about collusion and antitrust. I think this could be done and done in a proper manner that would hopefully stop this from happening again, the way we've seen it this past summer.

Senator DORGAN. Are you familiar with the provision that I described that's in the energy bill we're now negotiating?

Mr. RUD. Section 280, yes.

Senator DORGAN. And your impression of that?

Mr. RUD. Again, I think it's something that could be done. I think it's something that probably needs to be done. We need something here in North Dakota that's going to help us so we don't see another situation like this. We're strapped for truckers. We're strapped for transport drivers. We're strapped for a lot of things and when we have to start stretching out and doing 15 and 16 hour days, just sitting in line, sooner or later, people are just going to say, there's a lot of jobs out there right now that I can go in a different direction and maybe only work 8 to 10 hours a day and still get a good paycheck. Those are concerns out there right now that we need to address.

So first and foremost, we can't keep taking the crumbs in North Dakota at the end of this pipeline. We've got to find some way for there to be a steady flow of product into the eastern terminals, even under a crisis situation.

Senator DORGAN. Ms. Leitzke?

Ms. LEITZKE. Senator, I would concur with what Mike had to say about some of those but in addition, for the State of South Dakota, like I said, our Governor and our representing Senators in Congress have asked for immediate product in a pipe to get through the harvest time.

Additionally, I think it would be great if Congress could get make it easier for oil companies to build refineries because our refining capacity in this country has diminished greatly in the last

25 years and when you get to the end of the day, our real problem is we do not have enough refining capacity.

Ironically, we're trying to build a refinery in South Dakota. We really hope that it gets done. It might take some time but any refinery that can get built in this country is going to help all of us at this table. Every single person and the consumer would benefit if we can get refining capacity up.

SUPPLY SOLUTION

Senator DORGAN. Dr. Gruenspecht, is that the solution? That we need additional refining capacity or do you see this as regional imbalances in supply?

Dr. GRUENSPECHT. I think there is a need for some additional refining capacity and I think there is some planned. One thing that's happened is that the cost of the capacity addition has gotten very high and I think of course, a lot of the large companies—energy system capital costs in general—have gotten high. The cost of building a coal-fired powerplant has gotten high. The cost of building an oil rig or an oil refinery has increased a lot. But despite the really significant constraints in the industry, I think that some of the gentlemen over here said there are a lot of opportunities to expand existing capacity and Flint Hills has done one and Cenex has done one.

In terms of the balance between the current supply and demand, I think you actually do consume a little more than you refine in North Dakota—some, although not a tremendous amount, but I think you are a net consumer of products, at least according to the information that I have.

Senator DORGAN. What information do you have?

Dr. GRUENSPECHT. That you consumed about 25 million barrels a year of petroleum products in 2005 and probably a little more than that. That's pretty old data and your demand has risen a lot. That translates into more than 70,000 barrels a day and I think your refining capacity is about 50,000 to 58,000 barrels a day.

Again, I don't know that each State has to be self-sufficient. You know, I think there really are advantages in—and again, more refining capacity would definitely help. I think that's right.

Senator DORGAN. That's not the number I have but if that's your number, that's one day's consumption in this country. We produce 85 million barrels of oil a day in the world and we use one-fourth of it in this country, every day.

Dr. GRUENSPECHT. We use about 20 million barrels a day in this country.

Senator DORGAN. Twenty-one million barrels.

Dr. GRUENSPECHT. In this country, that's correct, sir.

Senator DORGAN. So you're suggesting that our total yearly demand is 1 day's worth of consumption for the United States?

Dr. GRUENSPECHT. Personally, my mind is not working well but I will—let me check it out and get back with you on that.

[The information follows:]

PETROLEUM CONSUMPTION

The Energy Information Administration has 2006 data for North Dakota on prime supplier sales volumes, which include six categories of petroleum products. These

data show that North Dakota purchased 20.5 million barrels of these six categories of petroleum products in 2006. The prime supplier sales volumes constitute about 80 percent of total petroleum product consumption in the State, which would make the total consumption in 2006 about 25.6 million barrels. This can be compared with U.S. 2006 petroleum consumption of about 20.7 million barrels per day.

Dr. GRUENSPECHT. Another thing—and listening to some of the conversation, it is a problem. I think what Mr. Heine was trying to tell you is that to the extent that—there's a pipe fill aspect to this as well. What it takes to get product to a terminal is that you have to fill the pipe that leads to the terminal and that's in the pipe, it's not accessible. You can't empty the pipe, if you're going to fill the pipe between the refiner and let's say, Grand Forks. You fill that pipe and I think what he was trying to tell you was that nobody really benefits in a case of limited supply, if you have these supplies filling the pipe where they're not accessible to anybody.

So the common issue that I think these guys have is that if they have tight supply, they're reluctant to fill the pipe between the last section that they had filled and the ultimate terminal—maybe my language is indelicate but the one that's further up the line or at the extreme or whatever, because to fill that final section of pipe doesn't really serve anybody. It's only when they fill the pipe and then push another gallon through, which pushes another gallon out at the terminal, that somebody could actually drive up with a truck and take a gallon off at that terminal.

PIPELINE

Senator DORGAN. But that pipeline is pretty worthless then if it doesn't contain product that provides delivery to the end of the pipeline.

Mr. GRUENSPECHT. Right. And under normal circumstances, they would keep the pipeline full and push stuff in, which—you know, again, this is the difference between oil pipelines and electricity lines, I think. And that's what I was trying to say but it's hard for me to say it well. But there is this aspect of just filling that pipeline—if you only had enough to fill that pipeline but not enough to push another gallon that would actually put something in the terminal, you haven't done anybody any good by filling that pipeline and I think that's what my colleague was trying to say.

Again, I'm not speaking for the terminals but it's not like filling that pipeline is a thing that has no adverse consequences for consumers. I don't want to give that impression. It's just that discretionary decisions not to fill a pipeline are not being made because operators don't like people on the one end of it as much as they like people on the other end of it. I just want to make sure that that's clear.

BIODIESEL

Senator DORGAN. A couple of you have talked—I think Mr. Westbrock, you talked about—maybe it was Mr. Penner, you talked about moving ethanol blends and I want to talk about biofuels, biodiesel especially in the context of what we're now facing. We just dedicated a biodiesel plant. Tell me what you all see with respect to the production of biodiesel and is that going to be helpful to us and how soon will enough come online to be helpful?

Mr. PENNER. Well, unfortunately, the biodiesel production is having such a severe loss per gallon as it exits today, because of the cost of soybeans and its relationship to the cost of diesel fuel that I don't—unless there is certainly even more incentives or if you renew the incentives, I don't see how this industry can continue to expand at the rate it has been. It's just a severe loss. You're going to have some pretty deep pockets. I think longer term, that's going to have to play a role. Maybe a 2 percent, 5 percent in the United States, somehow a small role in the total supply but boy, today, there isn't much appetite that I can see, why someone would go build a biodiesel plant today, in my opinion.

ETHANOL

The other thing you referenced, I think that was Mr. Heine that made a comment about the need for tier ethanol in a pipeline.

Senator DORGAN. About what?

Mr. PENNER. The tier ethanol in a pipeline.

Senator DORGAN. My understanding is that's problematic. Right? Piping ethanol because of certain kinds of degradation of the pipeline? You might explain that to me.

Mr. PENNER. It's a challenge today, Senator. Back in the late 1970s when Congress enacted the ethanol tax credits, no one really envisioned that we'd be talking someday that the industry would expand as much as it has, to think that it would be economical to build a dedicated pipeline system to ship it. A dedicated pipe, say from the Midwest to the east coast could be as much as $2 billion or more to construct a system capable of handling 100,000 barrels a day of ethanol.

But before we get to the point of going through the commercial implications of where a line may go and where would it originate, those types of issues that could potentially benefit ethanol producers in North Dakota, is that the industry have to overcome a phenomenon that ethanol creates inside of steel pipelines and that is one referred to as stress corrosion cracking. In other words, Senator, what it means is, you have a liquid material, which is somewhat corrosive, such as ethanol and under stress, the pipeline has a tendency to develop cracks on the internal wall of the pipe much more so than gasoline or diesel fuel will create.

And in places we're familiar with stress corrosion cracking but it's only outside of the pipe. So our engineers in conjunction with the Department of Transportation has been undertaking studies to look at how we can manage stress corrosion cracking, both for ethanol blends and for a dedicated ethanol pipeline system.

The first answer regarding the ethanol blends will come to rest in 2008 and we see commercial opportunities to put a 90 percent gasoline, 10 percent ethanol blend in the pipe and that can be very beneficial. Today, for example, if we wanted to install ethanol at a new terminal in the southeastern United States, it would probably range between $2 to $3 million for us to install a tank and a blending system for ethanol. If we were able to transport a blended product into that terminal, we eliminate the need for that additional infrastructure and we eliminate the need for additional manpower to offload the product as well.

So there are a number of benefits that we see for the commercialization of transporting the blend and potentially move ethanol via pipeline. But we've got to get through the technical side of it first.

Senator DORGAN. And the blends, the higher blend, higher than 10 percent are really important if we're going to begin to market this in the quantity that we need to market it at. Let me make a comment about ethanol because the biofuels, I think, have to be a part of our solution. Not in the short term, not this winter perhaps and not in a significant way for just a bit but what's happening to us is the cost of feedstock is increasing but I think that's going to measure out over time because more people are planting that feedstock.

But we do not have the capability to market as we should. We use 145 billion gallons of fuel a year in this country. We only blend half of it at 10 percent. So we blend half of 145 billion gallons at 10 percent ethanol. We need to blend the other half as well so we have another market there for half of the fuel to blend at 10 percent.

So that's a conceivable total market of ethanol, of 14½ billion gallons, total market unless we're blending at higher than 10 percent. And we need to blend at, I think, 20, 30, 40 percent. There are new experiments going on out there, there are new studies just having been completed about the performance of those blends. And then we also need to be marketing the E85. It has to be priced right. We've got to move it. We've got to do all these things. But the fact is, if you're not running this fuel through carburetors and fuel injectors, then you're going to have a supply and that supply is going to move up and your demand isn't going to meet it and it's going to collapse and we're going to set this industry back 10 years or more.

So we've got a real challenge in front of us and Senator Lugar and I have just introduced some legislation to try to create the infrastructure so that we're marketing more of this. But I don't want this industry to fail. This industry has to expand. I mean, the President wants 35 billion gallons a year. Congress is going to embrace that. The question is how do we get there and how do you market? You can't produce what you don't market. So we've got big issues with respect to that.

OIL PRICES

But getting back to the moment, we've got a situation where I think the price of oil is maybe at $97 a barrel. A leading energy analyst for Oppenheimer last week said there isn't any reason that it ought to be a dime over $55 a barrel. Not one reason. And he's referring to some research that I know of that projects that we have people hip-deep now in the energy futures market, the oil futures market. We've got hedge funds in the oil futures market. We have investment banks buying in the oil futures market and in fact, they're buying tanks to store because they believe the future price will be greater than today's price. So they're taking oil off the market to store—investment banks, mind you.

I think there's rampant speculation in the futures market that has driven up the price of oil. I don't know whether it's $20 or $30

a barrel or $40 a barrel but I don't think it is healthy for this country. I don't think it ought to drop to $20 a barrel. I think there ought to be stability of pricing so that you have significant investment capability in the long term to find additional energy. But we've got a lot of these issues that combine and conspire to cause us lots of problems at this point.

At the moment, I'm interested in trying to figure out what we do to fix this problem and to make sure it doesn't happen in the future. So what I hear you say now is, yes, we had gasoline problems. We still have a little bit. We have diesel problems. They still exist in a significant way and we're likely to face problems with home heating fuel. Well, that's not much of a report. I appreciate your candor but the question is how do we address this? And Mr. Gruenspecht, I come back to you again. It seems to me that not long ago some people came to the Congress in the last decade, wanting to abolish the Department of Energy. I wasn't among them. I felt there was a good reason to have a Department of Energy of this country, given as important as energy is to our future but it seems to me the purpose of having a Department of Energy is to have it there, performing important functions with respect to the significant public policy issues and I understood when I invited you your role in the Department of Energy. Your role is to develop energy information and dispense that, distribute it so that all of us speak from the same base of knowledge.

ENERGY BILL

But I come back to this question as we're trying very hard between now and Christmas to get this energy bill passed, between the House and the Senate, get it to the President for signature and at least one portion of that would change your role and would provide a requirement that you provide to the Secretary an evaluation of what is happening so that the Secretary, in these circumstances, can see clearly the problem that we've got to try to find a way to resolve and deal with. I hope very much that we can pass that provision and do other things to try to make sure that we're not in this situation in the middle of the winter, next spring, next summer.

You know, again, I guess I'm trying to understand and learn about this end of the pipeline. I like pipelines but empty pipelines mean very little to me and I'm just trying to understand how a State that is a significant producer of energy can be in a situation where we don't have energy. You know? We need fuel. We produce more of it than we need. Why don't we have it? That's the question. Mr. Gruenspecht, tell me why, before you leave North Dakota.

Dr. GRUENSPECHT. I'll start out by saying, I don't speak for the Department of Energy but I'm sure that the Department feels——

Senator DORGAN. I'll ignore that. The fact is you're here because you're from the Department of Energy so when you say—I'll obviously ignore that.

Dr. GRUENSPECHT. I understand that and I'm sure that the Secretary would share your views on the role of the Department. We certainly look forward to working with you on this provision. I think the Department is not opposing the provision; the EIA is not opposing the provision. We want it to work. We've been in contact

with the folks on the Energy Committee to try to make it work. It seems like there are many other Washington problems to solve to enact an energy bill but we're not one of them and this provision is not one of them. We are prepared to take on that role.

We think the information role is a valuable role, although it is certainly not the only role of the Department of Energy. EIA makes up, I think, between three-tenths and four-tenths of 1 percent of the budget of the Department of Energy. I do think it's a good investment, what we provide, but again, there's another 99.7 percent of the Department of Energy and your concerns, I think, are legitimate.

Some of the points that you make about ethanol are very interesting. I think there will be a greater effort to at least move from the blending of about 50 percent of the gasoline stock with 10 percent ethanol to a much higher level. I think now the economics are pretty compelling for folks to put in the blending terminals to increase their use of ethanol. Right now, taking the tax credit into account and the price of ethanol relative to the price of gasoline, a gallon of ethanol, with tax credit taken into account, is about a dollar cheaper than the wholesale price of gasoline.

That's a tremendous incentive for someone who is supplying conventional gasoline in some of the areas that don't use a lot of ethanol to think really hard about how they're going to use more ethanol in their gasoline. So I think the market will help you on that over a period of time.

NORTH DAKOTA MARKET

I guess I had better answers on that score, perhaps, than on some of the questions that we're trying address here today, unfortunately. You know, North Dakota is booming. That's good news. It's good news that one of the things that's happened is that—as I understand it, North Dakota's demand is about 10 percent higher than last year. There was some discussion about the western part of the State where you have a lot of the oil development and it's correct, in terms of crude oil, that you're producing 2 percent of the Nation's crude oil. You're consuming, and you're right, 0.3 percent of the oil product consumption.

But certainly the crude oil producer—you're producing a lot more than you consume. Refining, you're a little bit under what you consume. But again, that's not a problem. The idea isn't to have each state self-sufficient in refining capacity. That would be crazy. You wouldn't want to pay the price associated with that.

Senator DORGAN. But there is something wrong with a system in which a State that produces six times more than it consumes doesn't have the product it needs for its economic opportunity and its economic needs. There's something wrong with that—you don't fix that overnight—but now that we know there's a significant potential for shortage at the end of the pipeline, we need to figure out how we resolve that, how we deal with it. I have written to all the refineries that serve our State. I received responses from all of them. We're going through those responses to try to understand what has happened here. Some have—they did not use the term, "perfect storm," as a description but I've heard the description, perfect storm. You know, the fact is, a big storm or perfect storm, it

doesn't matter very much. We can't continue to be in this situation. Our State is booming, at least in part—the economy is booming at least in part because of robust activity in the production of oil and it's a cruel irony that that which you describe as broke is that which is retarding our opportunity. That is, the lack of the very thing we produce.

When I get back, I'm going to meet with Secretary Bodman and review the materials I've received from the refineries and the discussion here and try to think through, what might we do to get out of this cycle somehow, in the Dakotas, if we, in fact, are at the end of the pipeline.

Your being here is helpful to me, just to think through and try to understand what we face and I know that you've come from some distance, Mr. Westbrock and I appreciate you being here and Mr. Heine and Leitzke and Mr. Rud, you didn't travel very far but we're still glad you're here. And Dr. Gruenspecht, thank you very much.

I hope all of you all understand my interest in this is not to denigrate any part of a system, it's to try to understand how this system can work for the benefit of everyone, because clearly it is not at the moment working if we are deciding, well, if we have product, we stop it here and then again down here and if we're at the end of that, we're not going to get product. So maybe this all gets resolved at some point but I'm not very happy just saying, well let's wait and see. I mean, I don't think we can wait and see. I think we have to find ways to stimulate and try to force solutions so that we're not continuing to be in this problem.

Is anyone not going to sleep if you don't have the last word? If there's something else that's on your mind and you wish to say today, I want to give you that opportunity.

Mr. HEINE. Senator, I won't miss it. The one thing I would like to tell you is it's the end of the pipeline for Magellan specifically. But we're not the only pipeline in the State and I've done my best to explain the regional approach that we take and that that's intended to maximize the amount of product that is available to go to consumers and the motorists that need it.

GOVERNMENT ROLE

In regards to what can be done and what role is there for the Government? In our view, there is a role. And some of it is wrapped up in your Senate energy bill and refiners that have the desire to expand need stable tax policy. Pipelines that have desires to continue to invest millions and millions of dollars in expanding their infrastructure need a stable tax policy to be able to make those decisions for the long term.

As I mentioned to you, putting an ethanol pipeline in could be a multi-billion dollar project but as a master limited partnership and I'll leave you with this note, Magellan is one of a growing number of companies that are structured as a master limited partnership. More and more pipeline companies that are independents like us today are structured not as a corporation but as a master limited partnership. There is a need in regards to breaking down another barrier that's necessary to transport ethanol blends in the pipe and transport ethanol in the pipeline. Our income needs to be

derived from transporting products such as gasoline, diesel and jet fuel. Ninety percent of the income from a master limited partnership needs to be derived from moving those types of products.

Back when Congress wrote the tax code in 1987 to allow the development of master limited partnerships, they didn't envision that ethanol would find its way in the pipeline system. So if we transport ethanol or ethanol blends in the pipeline system today, that's non-qualifying income for a master limited partnership. And we have a provision that hopefully make it into your bill that will resolve that problem. But until it is resolved, it's unlikely that a master limited partnership will be motivated to find technical solutions to move in vehicles and pipes can do it and the same provision calls for biodiesel as well. Thanks for letting me say that.

Senator DORGAN. Mr. Heine, thank you very much. We are going to follow closely in the weeks and months ahead, the supply of product and the urgency and the need for supply and I've requested a meeting with Secretary Bodman the week after next, when Congress reconvenes. I will use information I have learned here and the letters that I've received from all of the refineries serving our State to talk with Secretary Bodman and others about what we face and how we might try to address these shortages. So I appreciate very much the attention that you have all paid to this today and I look forward to further information from you as things develop in the fuel market.

ADDITIONAL SUBMITTED STATEMENT

In addition, I would like to include in the record the statement of Curt Anastasio, president and CEO of NuStar Energy L.P.

[The statement follows:]

PREPARED STATEMENT OF CURT ANASTASIO, PRESIDENT AND CEO, NUSTAR ENERGY L.P.

I appreciate the opportunity to submit written testimony related to recent fuel shortages in North Dakota. I first would like to take this opportunity to explain NuStar's role in the supply chain in the region. NuStar is in the petroleum product pipeline, terminal and storage business, so our company transports, stores and distributes petroleum products owned by our customers. Our North Dakota operations include pipelines that make intrastate deliveries from Tesoro's Mandan refinery, and bring fuel to your State from refineries in the lower Midwest region.

As you know, there have been supply constraints throughout the State since the summer due in large part to refinery issues in the Midwest, Rocky Mountain and Texas panhandle areas that supply North Dakota, and the fact that North Dakota is the endpoint of the product pipelines that deliver fuel from that region. And while some of those refinery issues were resolved, other refineries that supply your region are now undergoing planned maintenance, which has continued to constrain product supply for the Dakotas. As a result, we have supply inventories that are below our historical average because the supply available to us is below the historical average. And on top of that, the region is faced with consumer demand that is above the historical average. Obviously, all of this combines to intensify fuel shortages throughout the region.

NuStar has no refining operations in North Dakota or anywhere else, so I regret that I am unable to directly address your specific questions about refinery shutdowns and related issues. But I can tell you that in an effort to meet the strong demand, we have been moving every batch of product that we can obtain through our pipelines. In fact, we have had record volumes on our pipelines this year. This is an instance where our financial interests are completely aligned with consumer interests because it is positive for our bottom line to move as much product as possible.

And, recognizing the need to move more product into this area, we have invested nearly $15 million in our pipelines over the past 5 years. We have also improved

our operating procedures. For example, we have increased the horsepower on the pumps that move product through the pipeline, and introduced a drag reduction agent to eliminate friction and allow products to move more easily. We have also optimized the product mix to better meet demand. And at our terminals, we have completed rack automation upgrades that enable carriers to complete their transactions more quickly.

We have also invested in a very effective communication system for keeping our customers up-to-date regarding the supply picture throughout our system. Our Internet Stock Inventory System (ISIS) enables our customers to access a real-time inventory of supply at all of our terminals 24 hours a day, 7 days a week. What's more, each of our terminals has a hotline that carriers can call to get updated information on the product slate. If there are any product outages, they can quickly get an update on when those products are expected to be replenished. And, we have implemented an inventory management initiative at our Geneva, Nebraska fuels terminal in which we are allocating supply of gasoline and diesel to ensure there is product supply at downstream terminals in Iowa, South Dakota and North Dakota. As you can see, we have taken a lot of steps to try to assist our customers in supplying petroleum products to the Dakotas.

From our perspective, the most effective way to ease the supply constraints would be to have one consistent specification for gasoline across the Dakotas. As you likely know, there is a different specification for gasoline supplied to the western region. Having varied product grades slows down both production and transportation, so having one specification would allow for increased production and more movement of product into the area.

I hope this information helps explain the challenges that we face and the measures we've taken to minimize supply disruptions in the region. Please let us know if we can provide further assistance as the committee continues to explore potential solutions to the tight supply-demand balance in North Dakota. Thank you for giving us the opportunity to tell you more about our operations.

CONCLUSION OF HEARING

Senator DORGAN. This hearing is recessed.

[Whereupon, at 4:30 p.m., Tuesday, November 20, the hearing was concluded, and the subcommittee was recessed, to reconvene subject to the call of the Chair.]

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