OZONE TRANSPORT AND REFORMULATED GASOLINE: HOW FEDERAL REGULATIONS ARE RAISING GAS PRICES

HEARING

BEFORE THE

SUBCOMMITTEE ON NATIONAL ECONOMIC GROWTH, NATURAL RESOURCES, AND REGULATORY AFFAIRS

OF THE

COMMITTEE ON GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

ONE HUNDRED SIXTH CONGRESS

SECOND SESSION

JULY 6, 2000

Serial No. 106–230

Printed for the use of the Committee on Government Reform

Available via the World Wide Web: http://www.gpo.gov/congress/house
http://www.house.gov/reform

U.S. GOVERNMENT PRINTING OFFICE

72–583 DTP WASHINGTON : 2001

For sale by the Superintendent of Documents, U.S. Government Printing Office
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OZONE TRANSPORT AND REFORMULATED GASOLINE: HOW FEDERAL REGULATIONS ARE RAISING GAS PRICES

THURSDAY, JULY 6, 2000

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON NATIONAL ECONOMIC GROWTH,
NATURAL RESOURCES, AND REGULATORY AFFAIRS,
COMMITTEE ON GOVERNMENT REFORM,
Racine, WI.

The subcommittee met, pursuant to notice, at 8:30 a.m., in the City Council Chambers, Racine, WI, Hon. Paul Ryan (vice-chairman of the subcommittee) presiding.

Present: Representatives Ryan and Kucinich.

Staff present: Jonathan Tolman, professional staff member; Gabriel Neil Rubin, clerk; and Elizabeth Mundinger, minority professional staff member.

Mr. RYAN. The hearing will come to order. This is a field hearing in Racine, WI of the Subcommittee on National Economic Growth, Natural Resources, and Regulatory Affairs. I am Paul Ryan. I represent the 1st Congressional District of Wisconsin, and I want to thank the witnesses right now for coming up and coming out of your way to be here. Many of you traveled long distances to make it here today, and we are really appreciative of this.

This is Dennis Kucinich, the ranking member of the subcommittee, who came up from Cleveland, OH this morning. So Dennis, I just want to thank you very, very much for coming up here today.

I will open with some brief opening statements and then we will move on to the subcommittee testimony.

On the way to the hearing this morning—I live in Janesville—I drove over, and the gas prices are going down. We come over on Highway A and ES and D and 20 and you watch the gas pumps on the way over here, and clearly southeastern Wisconsin is seeing some relief in gas prices. Out at the intersection of Highway 20 and Interstate 94, it is $1.72 for regular unleaded, but $1.72 is still pretty darn high gas prices, but that is down, however, from as high as $2.30 for premium unleaded, $2.08 for regular unleaded that we have experienced here in southeastern Wisconsin as little as just 2 weeks ago.

Although we have seen these reductions in the last few days, it has not lessened the impact that it has had on our families, on our seniors and our businesses since the first of June.

Every day our office has been confronted by letters, e-mails, faxes, and media reports from people who have been hurt by the

high gas prices. In fact, I think I got the biggest dose of it from the 4th of July parades, where every other comment was directed toward gas prices. When it takes about $40 or $50 to fill a gas tank, most people are really pinched. These high gas prices have taken a big bite out of the paychecks of working Americans and small businesses in southeastern Wisconsin.

Economic studies of the effect of the high gas prices indicate that without relief soon, they will create a drag on our local economy and cause a ripple effect throughout the upper Midwest. I hope that today's hearing leads to a better understanding of the consequences of these exorbitant prices for consumers and what we can do to get and keep gas prices down.

Although rising gas prices are affecting an increasing number of communities across the country, price spikes have been plaguing southeastern Wisconsin since mid-May. The cost of gas rose on the average of $1.48 a gallon in early May to $1.69 a gallon by May 12, and as I mentioned, to over $2 by the middle of June.

The Environmental Protection Agency's Reformulated Gasoline Program is of particular concern to this area. Half of the 1st Congressional District lies within the EPA-designated ozone non-attainment zone. Reformulated gasoline is the most important issue for people in southeastern Wisconsin at this time, from my opinion and just from the constituent response that we have been receiving, and it has been an issue like this for a good month and a half.

Small business owners and families in southeastern Wisconsin want to know why they pay more for gasoline than any other region in the country, and at the height of this crisis was the fact that Wisconsin consumers were paying an average of 40 cents a gallon more for the price of gasoline than the national average.

I, along with Congressman Jim Sensenbrenner, released a report from the CRS—which is the non-partisan research branch of Congress—which has been widely cited throughout the last month and a half. Nowhere in this report is collusion and price gouging listed as an underlying cause for high prices. That indeed is the goal of the ongoing Federal Trade Commission investigation.

But likewise, I have an internal report dated June 5, 2000 from the Department of Energy, a document written from a policy director to Deputy Secretary Glauthier. This memorandum summarized, as did the CRS report, that rapidly increasing gas prices in the Milwaukee area are a supply problem—"high consumer demand with low inventories."

And the Department of Energy memo goes on to be more specific: "The Milwaukee and Chicago supply situation are further affected by: (a) an RFG formulation specific to the area that is more difficult to produce; (b) higher regional demand; (c) high regional refinery utilization rates; (d) limited alternative supply sources; (e) limited transportation links; and (f) lower gasoline inventories relative to the rest of the country."

So a lot of research has been done on this topic since these gas prices have been high. There are several convergent factors that have contributed to this problem, and that is what we are here to investigate today.

As many news accounts for the high gas prices have pointed out, Wisconsin and Illinois use ethanol instead of MTBE which makes

the phase II RFG blend relatively more expensive than the rest of the country. It is very important to note that MTBE is no perfect solution; MTBE causes ground water pollution had has clearly been detrimental to the ground water systems around the country.

What seems odd to me is that given the unique regional constraints, the knowledge of short supply, and the knowledge that RFG II will require more gas than before, the EPA still stands by the estimates that gas prices were only to increase 5 to 8 cents per gallon in Wisconsin. Clearly, there is an inconsistency between what is reality and what the EPA has claimed.

Perhaps since 87 percent of the country's RFG is blended with MTBE instead of with ethanol, the EPA did not bother to calculate the true cost of the impact on the Milwaukee/Chicago area, given we have a different blend.

My second concern is that in southeastern Wisconsin that we may be paying the price for other cities' pollution. It is my understanding that because of regional wind patterns, much of the ozone is blown into Wisconsin from places as far away as Texas. It seems to me that in the case of ozone transport, Wisconsin receives a lot more than we give.

The Lake Michigan Air Directors Consortium roughly estimates that on bad days as much as two-thirds of the ozone in the Gary-Chicago-Milwaukee area may come from outside the region from areas such as southern Illinois, Kentucky, Tennessee, and Missouri.

If one looks at the EPA's own data on the sources of pollution, it is clear where the vast majority of the problem is coming from. These three charts that are over there—there are two over here to my left and one over to the right—these charts are showing the ozone emission patterns. These three charts show that the pollution program and the pollution picture is a very unique one.

If one looks at the EPA's own data, you will see where the vast majority of the problem is coming from. The majority of the pollution, as seen on these charts, is produced by counties in Chicago and in Gary, IN. You can see Cook County and Lake County. If you look at the orange portions of the charts in Indiana and Chicago, those are the highest pollution emitting counties in our region.

Counties, however, such as Kenosha and Racine counties, although in a non-attainment zone, are relatively insignificant contributors to the overall pollution problem. Kenosha County, for example, produces 1/100th of the amount of pollution that Cook County, IL does.

As part of the EPA's Clean Air Program, when a county is designated non-attainment for ozone, the EPA requires that all gasoline sold should be reformulated gasoline. Consequently, even counties such as Kenosha and Racine, which do not appreciably contribute to the ozone problem, are required to have reformulated gas.

Wisconsin is making strides at alleviating air pollution, a goal all of us should share. But at some point it cannot do anything more to clean its air unless other regions clean their air first. Making the residents of southeastern Wisconsin accountable for other people's pollution in other regions is unreasonable. I recognize that the physics of ozone transport is still very new and is very vaguely un-

derstood, but it is my hope that the EPA takes this into account when tightening the regulations around Milwaukee.

The cause for high gas prices seems very up front to me: it is a problem of supply and demand and environmental regulation. I do not understand why the administration's recent investigations do not turn up these same results that their earlier investigations did, even though these preliminary reports from the Department of Energy, from the Congressional Research Service, squarely outline this fact. I believe we have had enough delay.

The goal of this hearing is not necessarily to point fingers at people; the goal of this hearing is to find out what kind of devastation these high gas prices have reaped upon Wisconsin consumers and small businesses and local municipalities, find the source of this gas price spike, and try and come up with solutions.

It is my fear that as the gas prices inevitably go down—as they are doing now that Saudi Arabia is producing more barrels now; we will see gas prices going down—it is my precise fear that we do not learn from this problem, that we simply push the issue aside once gas prices go down. The goal of public policy, indeed, the goal of sound science and reasonable regulation, is to make sure that we clean up our air and we do it in the most scientifically based, most reasonable and common sense way possible, because all of us support the goal of clean air. We simply want to make sure that it is done fairly, that it is done scientifically, and that it is done reasonably.

So hopefully, what we can gain from this understanding is that we learn from the mistakes that may have been made, that we will find out from the Federal Trade Commission investigation whether or not price gouging has occurred, and that we hopefully learn a lesson from this so we can avoid this kind of crisis from occurring again, because when it comes down to it, this does hurt our local economy.

[The prepared statement of Hon. Paul Ryan follows:]

Statement of Rep. Paul Ryan
Ozone Transport and Reformulated Gasoline:
How EPA Regulations Are Raising Gas Prices
Field Hearing In Racine Wisconsin
July 6, 2000

On the way to the hearing this morning I noted that the price of gasoline here in Racine is $ 1.79. Although we have seen price reductions over the last few days, it has not lessened the impact that we've seen on families, seniors and businesses since the first of June.

Every day, my office has been confronted by letters, e-mails, faxes and media reports from people who have been hurt because of high gas prices. When it takes $40 or $50 to fill a gas tank, most people decide to conserve gas and stay home -- except for essential trips.

What's more, high gas prices threaten to increase the cost of basic consumer goods that average families and those on fixed incomes depend on. Economic studies of the affect on high gas prices indicate that without relief soon, they will create a drag on the local economy, and cause a ripple effect throughout the Midwest.

I hope today's hearing leads to a better understanding of the consequences of these exorbitant prices for consumers, and what we can do to get and keep prices down.

Although rising gas prices are affecting an increasing number of communities across the country, price spikes have been plaguing southeastern Wisconsin since the middle of May. The cost of gas rose from an average of $1.48 a gallon in early May to $1.69 a gallon by May 12, and to over $2 by the middle of June.

The Environmental Protection Agency's Reformulated Gasoline (RFG) program is of particular concern to the first congressional district. Half of the district lies in the EPA designated ozone non-attainment zone. Reformulated gasoline is the most important issue for my constituents, and has been for over a month and a half. The small business owners and families of Southeast Wisconsin want to know why they pay more for gasoline than any other region in the country. I commissioned a report from CRS – the non-partisan research branch of Congress – which has been widely cited today. Nowhere in this report is collusion and price-gouging listed as an underlying cause for high prices.

Likewise, I have an internal June 5, 2000, DOE document from a policy director to Deputy Secretary Glauthier. This memorandum summarized rapidly increasing gas prices in the Milwaukee area as a supply problem – "high consumer demand and low inventories." The DOE memo then gets more specific:

"The Milwaukee (and Chicago are) supply situation is further affected by:

- An RFG formulation specific to the area that is more difficult to produce;
- Higher regional demand;
- High regional refinery utilization rates;
- Limited alternative supply sources;
- Limited transportation links, and;

- Lower gasoline inventories relative to the rest of the country."

As many news accounts of the high gas prices have pointed out, Wisconsin and Illinois use ethanol instead of MTBE, which makes the Phase II RFG blend relatively more expensive to the rest of the country. This is because refiners must make the vapor pressure lower, as well as, according to the DOE document, "remove a greater quantity of the higher volatility gasoline blendstocks than was removed for Phase I RFG." The effect is that "RFG II gasoline production processes will yield less gasoline overall than RFG I processes. To compensate for lower yields and performance losses, refineries can either increase crude inputs or rely on more sophisticated processing units, both of which may increase cost and are not at all refineries."

What seems odd to me is that given the unique regional constraints, the knowledge of short supply and the knowledge that RFG II would require more gas than before, the EPA stands by their estimates that gas prices were to only increase by 5 to 8 cents in Wisconsin. Clearly, there is an inconsistency between what is reality and what the EPA claims. Perhaps since 87 percent of the country's RFG is blended with MTBE instead of ethanol, the EPA didn't bother to calculate the true costs of the impact on the Milwaukee/Chicago area.

My second concern is that Southeastern Wisconsin is paying the price for other cities' pollution problems. It is my understanding that because of regional wind patterns, much of the ozone is blown into Wisconsin from places as far away as Texas. It seems to me in the case of ozone transport, Wisconsin receives a lot more than it gives. The Lake Michigan Air Directors Consortium roughly estimates that on bad days, as much as two-thirds of the ozone in the Gary-Chicago-Milwaukee area may come from outside the region from areas such as southern Illinois, Kentucky, Tennessee and Missouri.

If one looks at the EPA's own data on the sources of pollution it is clear where the vast majority of the problem is coming from. These three charts show that the majority, the majority of pollution is produced in counties in Chicago and Indiana. Counties such as Kenosha, although in the non-attainment zone, are relatively insignificant contributors to the overall pollution problem. Kenosha for example, produces 1/100th the amount of pollution as Cook County, Illinois.

As part of the EPA's Clean Air program, when a county is designated non-attainment for ozone, EPA requires that all gasoline sold be reformulated gasoline. Consequently, even counties such as Kenosha, which do not appreciably contribute to the ozone problem, are required to have RFG.

Wisconsin is making strides at alleviating air pollution, but at some point, it cannot do anything more to clean its air unless other regions clean their air first. Making the residents of southeastern Wisconsin accountable for others' pollution is unreasonable. (I recognize that the physics of ozone transport is still new and vaguely understood.) My hope is that the EPA takes this into account when tightening the regulations around Milwaukee.

The cause of high gas prices seems up front to me – it's a problem of supply and demand and environmental regulation. I do not understand why the Adminstration's *recent*

investigations have not turned up these same results even though preliminary DOE explanations squarely outline this fact. Enough delay, it's time to find an honest solution to this mess.

Congressman
Paul Ryan
Serving Wisconsin's First District

1217 Longworth - Washington, DC 20002 - (202) 225-3031 - (202) 225-3393 FAX

FOR IMMEDIATE RELEASE
July 6, 2000

CONTACT: Kate Dwyer
(202) 225-3031

CONGRESSIONAL SUBCOMMITTEE EXAMINES FEDERAL REGULATIONS REGARDING REFORMULATED GASOLINE

Are Wisconsin Consumers Paying for Other States' Pollution?

RACINE - First District Congressman Paul Ryan today chaired a hearing of a congressional subcommittee of the House Committee on Government Reform that focused on how the federal government regulates reformulated soline (RFG). Among those who testified at the hearing were Environmental Protection Agency (EPA) Regional dministrator Francis X. Lyons; Michael Koerber, Technical Director of the Lake Michigan Air Directors Consortium; Darwin Greenwald, owner of North Star Shell in Mukwonago; Racine County Sheriff William McReynolds; and Jerry Taylor, Director of Natural Resources, CATO Institute.

"When gas prices spiked in southeastern Wisconsin over a month ago, people let me hear about it," said Ryan. "Aside from demanding relief from the outrageous prices, they raised many good questions about the possible causes of the sudden increase. Over the past month, we've come at this from all sides - looking at contributing factors such as very low gasoline inventories, pipeline problems, and the introduction of more stringent, Phase II RFG this spring. In doing this, it became clear to me and to other Members of Congress that Washington's RFG regulatory process needed closer examination. Today's hearing gives us the chance do just that," noted Ryan before the hearing.

RFG is gasoline that has been specially formulated to improve combustion and reduce emissions that contribute to ozone formation. Under the Clean Air Act, RFG is required in areas designated by the EPA as ozone "nonattainment" areas - areas where the air quality does not meet EPA's standard for ozone pollution. Six counties in southeastern Wisconsin are in the Chicago-Milwaukee nonattainment zone. They are Kenosha, Racine, Milwaukee, Waukesha, Ozaukee, and Washington counties.

"I'm especially concerned about how EPA regulations tend to penalize recipients of pollution rather than going to the source of the problem," said Ryan. "For example, Kenosha drivers have to use RFG not because they are generating particularly high quantities of ozone-producing emissions, but because counties in Illinois and Indiana e generating these kinds of pollutants, and this affects ozone levels in the Kenosha area."

"While we can go back and forth with the EPA about how much the RFG mandate actually adds to the price of gas, we need to keep an eye on the big picture: certain places bear the brunt of federal regulations that were enacted to address pollution created elsewhere," Ryan added. "If Wisconsinites are paying extra for a special blend

of gasoline because of the effects of Chicago-area emissions, that isn't fair and it doesn't treat the problem at its source."

"There seems to be a carelessness in the way the federal government slaps certain communities with RFG mandates, regardless of whether they contribute much at all to the pollution problem," remarked Ryan.

"Then there's the arbitrary way that the EPA has addressed requests for relief from RFG requirements," he added. "On several occasions in recent weeks, other members of the Wisconsin congressional delegation and I have urged EPA Administrator Browner to grant a temporary waiver of RFG requirements. Our requests have been denied. Meanwhile, the EPA gave regulatory relief to St. Louis - not through a waiver, but by saying that it would 'exercise enforcement discretion.' Why such different approaches?"

A June 28 Congressional Research Service (CRS) memo detailed how the EPA's initial use of prosecutorial discretion - bypassing the waiver process via its decision not to impose and enforce penalties during a specified period when conventional gasoline would be brought into the St. Louis area - "may have been legally problematic."

In addition, a separate June 28 CRS report requested by Congressmen Ryan and Sensenbrenner notes: "About 48 cents of the current gasoline price is likely due to higher crude oil costs....It can also be roughly estimated that about 25 cents of the regional price increase is due to transportation difficulties. As much as another 25 to 34 cents, roughly estimated, could be due to the unique RFG situation in Chicago/Milwaukee. The term 'unique situation' refers to the combination of limited supply, the choice of ethanol for use in the area's reformulated gasoline, and RFG transportation problems."

Order Code RL30592

CRS Report for Congress

Midwest Gasoline Prices: A Review of Recent Market Developments

June 28, 2000

Lawrence Kumins
Specialist in Energy Policy
Resources, Science, and Industry Division

Congressional Research Service • The Library of Congress

ABSTRACT

This report provides background information regarding the especially high gasoline prices in the upper Midwest during the late spring and early summer of 2000. While the Federal Trade Commission is investigating the possibility of collusion, several identifiable factors have contributed to this localized situation. Contributors to the higher prices appear to be problems at two pipelines supplying the area with gasoline, the use of ethanol-only reformulated gasoline in Chicago and Milwaukee, and the high price and low supply of crude oil. The crude oil situation has uniform nationwide impact. Wholesale prices in the Chicago spot market began to decline during the week of June 19 and have fallen by 40 cents per gallon at this writing. This report will be updated as events warrant.

Midwest Gasoline Prices: A Review of Recent Market Developments

Summary

This report provides background information regarding the especially high gasoline prices in the upper Midwest during the late spring and early summer of 2000. While the Federal Trade Commission is investigating the possibility of collusion, several basic factors have contributed to this localized situation. Contributors to the higher prices appear to be the high price and low supply of crude oil, problems at two pipelines supplying the area with gasoline, the use of ethanol-only reformulated gasoline (RFG) in Chicago and Milwaukee, and apparent concern among refiners regarding use of a Unocal patent for making RFG. The crude oil situation has uniform nationwide impact. Wholesale prices in the Chicago spot market began to decline during the week of June 19 and have fallen by 40 cents per gallon at this writing.

About 48 cents of the current gasoline price is likely due to higher crude oil costs. That affects gasoline consumers everywhere. It can also be roughly estimated that about 25 cents of the regional price increase is due to transportation difficulties. As much as another 25 to 34 cents, roughly estimated, could be due to the unique RFG situation in Chicago/Milwaukee. The term "unique situation" refers to the combination of limited supply, the choice of ethanol for use in the area's reformulated gasoline, and RFG transportation problems. The RFG program by itself has caused only limited price increases in other markets – on the order of 2-8 cents per gallon – which is the range currently in effect as the prices in the Midwest decline.

While many have attributed the additional cost of RFG in the Midwest to the impact of EPA regulations, it is important to note that the use of ethanol in RFG, which is what distinguishes Chicago and Milwaukee from other markets, is not mandated by federal, state, or local regulations. Rather, refiners serving these areas use ethanol as the result of concerns about MTBE (an additive used elsewhere in the country in place of ethanol) and efforts to stimulate markets for corn, from which ethanol is generally derived.

The price-impact figures discussed in this report are very rough approximations based on spot market valuations, which do not comprise a complete series of price data. They are intended as rough estimates of what each factor's contribution to higher prices might be.

Recent spot price data point toward a sudden decline of about 40 cents per gallon in Chicago RFG wholesale prices, which appear to be converging with conventional fuel prices.

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Midwest Gasoline Prices: A Review of Recent Market Developments

Introduction[1]

Gasoline prices nationwide have risen about 60 cents per gallon since the beginning of 1999. Some localities – notably in Michigan, Illinois, and Wisconsin – have experienced even greater price hikes, often twice as much as the national average. However, Chicago-area wholesale prices began to drop in late June, and retail prices are expected to follow. An investigation of possible collusion or other wrongdoing by some in the industry has been initiated by the Federal Trade Commission (FTC) and is not discussed in this report. Rather, the report discusses five other factors that have contributed to the increase in prices. In summary, they are:

Higher Crude Oil Prices. Refiners' crude acquisition costs have risen by the equivalent of 48 cents per gallon during the past year and a half.

Pipeline Problems. Two oil pipelines serving the upper Midwest have been experiencing operational difficulties. The Wolverine Pipeline between Chicago area refineries and Michigan had a spill and was shut down for nine days. It restarted operation June 16 and is gradually returning to a high level of service, although it is uncertain when it might reach previous levels of throughput. Meanwhile, ExxonMobil has put its branded gasoline distributors on allocation. The Explorer pipeline serving St. Louis and Chicago is operating at 10% reduced throughput, meaning St. Louis deliveries are reduced by about 50,000 barrels per day (b/d) and Chicago by about 34,000 b/d. In a tight regional market, supply reductions of this magnitude can be extremely disruptive, and lead to significant price increases.

Use of Ethanol in Reformulated Gasoline. Reformulated gasoline (RFG) is required in numerous areas designated by the Environmental Protection Agency (EPA) as ozone nonattainment areas. About 30% of the gasoline sold in the United States is RFG. Refiners serving the Chicago and Milwaukee areas use ethanol instead of MTBE (the additive used in most other RFG areas) to meet the oxygen requirements of the RFG program. New requirements for Phase II of this program, which took effect June 1, 2000, have made it more difficult and costly to make RFG with ethanol. How much more costly is a matter of debate. EPA estimates the impact of Phase II requirements at 5-8 cents per gallon. As of June 19, RFG prices in Chicago and Milwaukee – which are determined not only by cost of production but more directly by the supply of and demand for gasoline locally – were 50 to 58 cents

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[1] This report supersedes a previous CRS General Distribution Memo on this subject, Midwest Gasoline Price Increases, June 22, 2000.

above RFG prices elsewhere. Not all of this difference can be attributed to the RFG requirements or the use of ethanol. In fact, non-reformulated gasoline sold in areas near Chicago and Milwaukee is priced well above comparable gas sold elsewhere. More recently, the RFG price differential in the area appears to be diminishing significantly.

Low Inventories. The Energy Information Administration (EIA) reports that crude oil and gasoline inventories are extremely low. There is the equivalent of about 2 days of consumption in working inventory. When stocks get this low, misallocations to the distribution system cannot easily be corrected. And refiners may be hesitant to put extra gasoline on the market when needed because they are unable to replace those barrels with gasoline or extra crude runs at their plants.

Patented RFG. Patents by Unocal on an important range of reformulated gasoline compositions may have some marginal impact on price and availability of RFG. However, with regional gasoline prices as high as they are, any license fee owed to Unocal, once such a fee is ultimately determined, would be too small to create a barrier to making RFG or the blending material for ethanol-based RFG.

In summary, some of the increased prices in Chicago/Milwaukee and Detroit can be attributed to these factors. About 48 cents of the price increase since the beginning of 1999 is likely due to higher crude costs. This affects gasoline consumers everywhere. It can also be roughly estimated that as much as 25 cents of the regional price increase may have been due to transportation difficulties and another 25 to 34 cents, roughly estimated, could have been due to the unique RFG situation in Chicago/Milwaukee. This "unique RFG situation" refers to the combination of limited supply, the choice of ethanol for use in the area's reformulated gasoline, and RFG transportation problems. The RFG program by itself has caused only limited price increases in other markets – on the order of 2-8 cents per gallon – which is the range currently prevailing as the prices in the Midwest decline.

These regional price-impact figures are very rough approximations based on spot market valuations, which do not comprise a complete series of price data. They are intended as rough estimates of each factor's contribution to higher prices. Additionally, the Federal Trade Commission is currently investigating the possibility of collusion.

Background on Oil Supply and Price

The price of any good is determined by the supply of and demand for that item. It is determined in the marketplace, and, certainly in the short run, bears little relationship to the cost of manufacturing that good. In the case of gasoline, it is the supply and demand for gasoline at the point of sale that determines its price; cost is not a factor in the market. Price is a matter of what consumers will pay at any point in time for the available supply.

Retail prices of petroleum products and motor fuels have risen sharply this year. Volatile oil prices have been driven up largely by production cutbacks by the

Organization of Petroleum Exporting Countries (OPEC). The reduced OPEC production quotas have combined with strong world demand to boost crude oil prices from $10 per barrel at the end of 1998 to about $30 per barrel by late 1999.[2]

OPEC output quotas also resulted in reduced petroleum stocks around the world. In the United States, crude oil and gasoline inventories are well below normal levels. Spot shortages of home heating oil and diesel fuel occurred in the eastern part of the nation during winter 2000. Now that gasoline is in seasonally high demand, short supplies and instances of volatile prices are cropping up around the country. The most notable price increases are in the upper Midwest, where pump prices have exceeded $2.00 per gallon.

Table 1 shows a one-week snapshot comparison between RFG prices in Chicago with conventional gasoline price postings for that trading area. It also compares prices with seven major trading areas[3] in PADDs[4] 1 and 3. These data were collected to form a comparable price series for the eastern part of the country. These prices do not include taxes or other charges such as transportation and dealer items. RFG, which is oxygenated to reduce carbon monoxide emissions and must meet requirements for emissions of toxic pollutants year-round, is required to reduce emissions of volatile organic compounds during the summer "high ozone" season, generally June 1 through September 15.

Table 1. Wholesale Gasoline Prices – Chicago RFG and Conventional Fuel Compared to PADD1 and 3 Benchmark (cents/per gal)

Date	RFG Benchmark	Chicago RFG	Chicago Conventional
6/12	106 to 111	156 to 171	127 to 130
6/13	108 to 113	162 to 171	130 to 135
6/14	110 to 115	164 to 173	135 to 138
6/15	111 to 116	161 to 175	142 to 145
6/16	111 to 116	153 to 170	139 to 140
Average	109 to 114	160 to 172	135 to 138

Source: Estimated from *Platt's Oilgram Price Report* data, page 5, various issues.

During this one-week snapshot of prices, Chicago RFG averaged between 51 and 58 cents higher than the benchmark average RFG price for PADDs 1 and 3. The

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[2] Unless otherwise noted, all prices cited in this report are from the U.S. Department of Energy's Energy Information Administration.

[3] Metro NY, Northern NJ, Baltimore, Norfolk, Philadelphia, Dallas and Houston.

[4] Petroleum Allocation for Defense District

Chicago RFG price was also between 25 and 34 cents per gallon above the spot price for conventional gas in Chicago.

With Chicago RFG prices (recorded by *Platt's* during the June 12 through 16 business week) running 51 to 58 cents above the eastern part of the nation – and regular gasoline more than 25 to 34 cents above – a generalized supply shortfall in the Chicago area was strongly suggested. And the fact that Chicago RFG prices were well above conventional gasoline suggests that some the difference was due to the supply of ethanol-based RFG, and the fact that Chicago conventional fuel has been priced above the rest of the nation suggests a shortage in the region, possibly resulting from pipeline transport problems.

When Chicago-Milwaukee RFG prices were this far above comparable prices elsewhere in the country, elementary economics would suggest that added supply would sooner or later be attracted by the area's elevated prices. By the end of the third week in June, RFG prices began to decline, quite steeply. On June 26, *Platt's* quotes wholesale Chicago RFG at $1.19 to $1.35 per gallon, down by almost 40 cents per gallon from the highest levels less than 2 weeks earlier.

It must be reiterated that this effort based on publicly available data to attribute price differentials to the availability of RFG and to pipeline supply difficulties is necessarily a simplistic exercise. It has been undertaken to separate the price effects of generalized regional shortage due to transport breakdowns from the effects of the tight supply of RFG blending material. The price effects of a tight supply situation, under discussion here, are quite distinct from whatever higher costs might be involved in making ethanol-based RFG. In the current Chicago market situation, prices appear to be mainly driven by supply and demand. The price increases – driven by supply-demand pull – are so large and out of proportion to any likely higher manufacturing costs associated with the RFG sold there that it is unlikely that manufacturing-related "cost push" would be a factor.

Contributory Factors

Aside from the allegations of collusion which are currently under investigation, a number of factors at work in the marketplace have contributed to Midwest gas prices being markedly higher than similar prices on the East and Gulf coasts. Prices appear especially high for RFG in Chicago and Milwaukee. Michigan has also experienced prices above other areas of the country, as has St. Louis. Five factors appear to be influencing market developments.

Higher Crude Costs

Gasoline and crude oil reached their lowest prices in recent history in December 1998 and January 1999. In December 1998, crude cost U.S. refiners $9.84 per barrel; in January 1999 crude was $10.47. Similarly, gasoline of all types sold at the pump (including all taxes, etc.) for an average of $1.05 and $1.03 per gallon during those months.

Since that time, petroleum prices have risen consistently; in mid-June of 2000, crude is in the $30 per barrel area, an increase of roughly $20 per barrel or 48 cents per gallon of gasoline. It is likely that all 48 cents has been included in pump prices.

OPEC has set production quotas that resulted in much higher crude prices than were anticipated. Crude oil on the N.Y. Mercantile Exchange (NYMEX) was trading at about $33 per barrel (bbl) as of mid-June. All petroleum products are affected more or less proportionally by high-priced crude oil, and consumers of all fuels look toward the effects of the June 21, 2000 OPEC meeting, at which a 3% production increase was agreed upon. This increase is to become effective July 1. Many analysts question the extent to which the increased output will alleviate what amounts to a global tight inventory situation. The world oil market's next-day reaction seems to support the tight inventory view, as NYMEX crude prices remain above $32.

Troubled Pipelines

Two pipelines that play important roles in supplying gasoline to the upper Midwest are currently suffering operational difficulties. Petroleum is most efficiently transported in large quantities by pipeline. When the pipeline system has capacity problems, it can be supplemented by truck, and/or waterway transport in some cases. But pipelines' ability to move large amounts of fuel is difficult to replicate by supplementary transport, as are the low costs inherent in pipelining.

The Explorer pipeline transports fuel from the Gulf Coast to Chicago, traveling south to north and passing through St. Louis. The Explorer had a fire near St. Louis in March 2000. The damage was repaired quickly, and transport resumed. But as a result of the investigation into that incident, the pipeline company and the Department of Transportation entered into a verbal agreement to reduce operating pressure by 20%. This translates into a volumetric reduction (measured in barrels per day, b/d) of 10%. The Department of Energy (DOE) estimates that this has reduced the pipeline's throughput to St. Louis from 550,000 b/d to 500,000 b/d, creating an extremely tight local gasoline market. After St. Louis, the pipeline's diameter becomes narrower to match reduced northbound requirements, although it is probable that the flow reduction in this segment of the pipeline is also 10%.

The other pipeline that is having problems is the Wolverine pipeline, which has a capacity of 186,000 barrels per day and runs eastward from Niles, Illinois, to Jackson, Michigan. A leak in early June caused a nine-day interruption of service, during which gasoline was trucked around the break. It restarted operation June 16 and is gradually returning to a high level of service, although it is uncertain when it might reach previous levels of throughput. While the repairs were being made, Michigan supplies were disrupted and prices spiked.

Chicago-Milwaukee RFG

RFG is a smaller percentage of regional gasoline supply in the mid-continent than on the East or West Coasts. Essentially, it is used only in Chicago, Milwaukee, and St. Louis; the rest of the region uses conventional fuel. Under the Clean Air Act, RFG is required to contain 2% oxygen, as a means of promoting cleaner combustion.

Most RFG markets use an additive called MTBE to provide the required oxygen. As a result of concerns about other effects of MTBE and a desire to stimulate markets for ethanol (generally made from corn), refiners serving the Chicago and Milwaukee markets have used ethanol rather than MTBE in reformulated gasoline. Blending with ethanol requires a separate gasoline base stock (called RBOB[5]) that has become a factor in the region's high prices.

The difficulty stems from the fact that RFG volatility (speed of evaporation) is limited by regulation. Ethanol is much more volatile than the major alternative oxygenate, MTBE. In order for the ethanol-blend RFG to fall under the overall volatility limit, the volatility of the RBOB to be used in ethanol blending must be low. This is a matter of blending volatile ethanol – a physical fact that cannot be changed – with special reduced-volatility RBOB. The difficulty arises because low-volatility RBOB is very hard to manufacture, and there is very little demand for this material outside the Chicago-Milwaukee gasoline market. Most of the required material is made in the six refineries in Illinois (whose capacity totals nearly 1 million barrels per day). When demand exceeds local refiners' ability to manufacture low-volatility RBOB, supplies are brought in from Gulf Coast refiners by pipeline.

Low volatility RBOB is a specialty product; not all refiners can or will manufacture gasoline to such specifications. And shipping presents difficulties stemming from the unique nature of the product, the need to segregate within the pipeline and the fact that it is usually shipped in relatively small quantities. Additionally, transportation bottlenecks can adversely affect the price and availability of this material in this consuming region.

U.S. Crude Oil Inventories

OPEC attempts to set prices by administering the level of supply sent to the world market. When OPEC members met last March, they set quotas that were not high enough for refiners around the world to rebuild crude stocks depleted by winter heating demand. Thus, low inventories are a problem around the world. In the United States, crude oil stocks are presently 20 million barrels under the normal range for this time of year, according to the Energy Information Administration (EIA). They stand at 31 million barrels above the lowest operational inventories ever observed in recent times – the equivalent of two days of refinery operations.

Gasoline stocks are in similarly tight condition. While U.S. inventories are just below the lower range of normal seasonal stocks, they are only 16 million barrels above the minimum operational level of 185 million barrels.[6] This means that the amount of readily marketable gasoline in the U.S. production and distribution system is the equivalent of slightly less than two days of current consumption.

When oil inventories get this close to minimum operating level, refiners' flexibility is diminished, and they are less able to deal with such factors as

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[5] Reformulated Gasoline Blendstock for Oxygenate Blending.

[6] Minimum operational levels are the lowest inventory levels that have been observed in the United States in recent times. Such levels have been associated with distributional problems.

unanticipated demand changes, distribution difficulties, or special requirements. The latter includes such factors as the demand for RBOB suitable for ethanol blending.

The Unocal Patent Issue

Unocal, a large oil company that divested its refining, marketing, and gasoline retailing operations in 1997, had substantial gasoline production in its California refineries. California has special air quality problems, and special gasoline is needed to meet California Air Resources Board (CARB) specifications, which are currently tighter than national Phase II RFG requirements. In 1990, Unocal researchers discovered a unique way of manufacturing gasoline with minimum volatility, as well as some other parameters helpful in meeting clean gasoline requirements. A patent was applied for and in 1994, the U.S. Patent and Trademark Office awarded Unocal its first patent for the process. Four other patents were subsequently awarded to the company.

In 1995, Unocal announced its intention to license the patent to other refiners. Shortly thereafter, six major refiners sued Unocal, challenging the validity of its patents. A U.S. District court found in favor of Unocal, upholding the patents' validity and awarding Unocal damages of 5.75 cents per gallon on the gallons manufactured that infringed on Unocal's patent. In March 2000 the initial verdict was upheld in the U.S. Court of Appeals for the Federal Circuit.

How much gasoline is involved in the Unocal patents? Most gasoline is made by processes other than those patented by Unocal. In California, where CARB gasoline is often made using the Unocal process, the company estimates that only 29% of the gallons produced would involve its patents; 71% fell outside the patents. Around the rest of the nation, an even smaller amount would fall under the patents. Unocal has asserted that the proportion of regular RFG subject to its patents is small, but increases as octane increases. Most gasoline sold nationwide is regular grade.

Refiners have substantial latitude in which to formulate gasoline, and can choose to blend around the patents by changing the mix of ingredients. Refiners contend that, while they can often avoid the patent issue, "blending around" can cost them as much as 5 cents per gallon in higher manufacturing costs. And some have contended that the patents stand in the way of increased RBOB production. But Unocal asserts that the patents – which apply only to finished gasoline – should not be a factor in the manufacture of RBOB suitable for ethanol blending.

At this point, negotiations about licenses and appropriate fees are beginning. There seems to be agreement on both sides that the 5.75 cent-per-gallon judgment handed down in court is too high for future license fees. It is likely that fees may be smaller when the negotiations are complete.

Meanwhile, refiners using the Unocal process without a license operate in an area of uncertainty, because the cost of licensing the Unocal process has not yet been determined. Some contend that this uncertainty created by the court decision has adversely impacted RFG production. However, given the high market prices for gasoline generally, and for RFG and RBOB specifically, prices may already be high

enough to cover whatever costs might be incurred when the license fee issue is resolved.

Developing Situation

How the current gasoline price situation in the Midwest plays out over the next several months will likely depend on several ongoing developments. Demand for gasoline is likely to remain strong during the summer driving season, keeping pressure on prices; resolution of the pipeline constraints will help with supply to Midwest markets; temporary suspension of state gasoline taxes may be considered by some states. Some change in the world price of crude oil could result from the recent OPEC decision to expand production. Overlaying these developments are any actions that might result from the current FTC investigation on possible collusion.

On or about June 21, wholesale prices for RFG in Chicago were beginning to fall significantly. A week later, they had dropped by 40 cents per gallon. Retail prices are expected to follow. Many observers believe the decline reflects increased supply of RBOB for ethanol blending, as refiners increased production in response to extremely high prices. Others believe it is in response to the announced FTC probe of possible anticompetitive activities within the industry.

Mr. RYAN. With that, I would like to yield to the ranking Democrat on the committee, Mr. Kucinich from Ohio.

Mr. KUCINICH. Thank you very much, Congressman Ryan. It is a pleasure to be in your district and work with you on this matter of great concern to the people in Wisconsin and also the people of the Cleveland area I represent.

Coming in here today, I noticed that the prices at the Speedway on Ohio and Washington Avenues were $1.65.9 for regular, $1.75.9, and then $1.85.9. When I left Cleveland today, they were $1.56.9, $1.58.9 and $1.68.9. So in some cases, there is a 9 to 17 cents difference between Cleveland and Wisconsin, and I can understand why you are concerned.

I also understand the frustration and the concern many of the citizens who are here today and people are feeling about this high price of gasoline. The effect of high gas prices ripples through the economy affecting consumers and commuters. And this area of the country has seen some of the worst price hikes anywhere in the Nation. That is one of the reasons why, when Mr. Ryan asked if I would come here, of course I wanted to be here. I wanted to hear from witnesses but also share with you some of the information that we gathered.

Unfortunately, there are no easy reasons as to why the price of gasoline—especially clean-burning fuel, otherwise known as reformulated gasoline—is so high. A few weeks ago, the price of—we will call it RFG—in the Chicago-Milwaukee area was about 50 cents higher than the price of conventional gasoline. Therefore, many believe that the culprit in the price rise was RFG. Mr. Chairman, you have joined the Governor and others in asking a Federal court to review the Clean Air Act rules covering RFG in southeastern Wisconsin.

It has become increasingly apparent to me that we may want to, while we are looking at this, look elsewhere for some of the problems with the high prices. Thirty percent of the Nation's gasoline consumption is clean-burning RFG. And outside of Chicago and Milwaukee, the average price of reformulated gasoline is 2 cents lower than conventional gasoline. Thus, the reformulated gasoline requirements, in and of themselves, are not necessarily a major contributing factor.

Since June 15, when the Department of Energy and the EPA asked the Federal Trade Commission to investigate possible price fixing, the wholesale price of RFG has dropped by over 38 cents per gallon in Chicago and Milwaukee. So I think there is a sense in which the pressure that Mr. Ryan, myself, Mr. LaTourette, and others in the Congress have started to put on the oil companies has, in fact, caused the prices to start to come back down.

The Oil Price Information System reported that the wholesale price differential between RFG and conventional gasoline in nearby cities has dropped to less than 1 cent a gallon in Chicago and 8 cents a gallon in Milwaukee. In other words, the price differential at the pump is consistent with the EPA's estimate that it would cost 4 to 8 cents more to produce ethanol-based RFG. Thus, the RFG requirements, as applied to this region, do not appear to be the culprit.

So the question remains why was the price for RFG in this region 50 cents higher than the price for conventional gasoline?

I mean, people in the Cleveland area—as you talked about during the 4th of July—I was doing all these parades and people are coming up to me shouting from the crowd: What about the gasoline prices? And they know that there is something going on here and this RFG just doesn't explain the whole thing.

I think we should look closely—and Congress obviously is looking closely—at the allegations of price fixing and price gouging by companies that profited from the price increase. Last month, Public Citizen released figures on the first quarter profits that showed major oil companies had profit increases as much as 473 percent over 1999 figures, and stock prices for the largest oil companies since the beginning of the year have risen 14 percent since January 2000, and interestingly, the price for RFG dropped precipitously since the Federal Trade Commission announced on June 15 that it would be investigating the industry's pricing practices.

Also of interest is the fact that while refiners were increasing their profit margins in the United States, they were falling in Europe. Non-U.S. refining and marketing profits were down by 57 percent in the first quarter of the year, but U.S. refining and marketing profits were up 68 percent in the same period.

Now, you take Exxon Mobil for example: its U.S. earnings on refining and marketing skyrocketed by 194 percent in the first quarter of 2000 as compared to the first quarter of 1999. But it was not selling more gasoline, it was selling 6 percent less gasoline by volume. Meanwhile, its non-U.S. earnings fell by 61 percent while its sales volume fell by 16 percent. I am interested in why there is pressure on a refiner's profits in Europe while the United States refiners are having a profit bonanza. I look forward to the FTC's preliminary report on the issue which is due out in a few weeks.

Now, Mr. Chairman, a lot of the statement that I have relates to concerns that I have expressed about how the oil companies have manipulated this condition where the consumer demand is the highest in the summer and they waited for the demand to be at its peak and just socked it to the consumers, and then they turn around and blame RFG. I have a lot of discussion about that; I am not going to take the time to go through it, but I would ask for it to be included in the record.

Mr. RYAN. Without objection.

Mr. KUCINICH. And also, in response to this concern, a number of Members of Congress—myself included—have in the wings a bill which is going to go after what we believe are windfall profits of the oil companies, because we have to protect the consumers. I know that is why you are here, and I applaud you for that, Mr. Ryan, and that is why I came here to work with you, and we have to make sure that the oil companies are not ripping off our constituents. I mean, I think that is what is going on, and while I am going to be interested in hearing from the witnesses about their concerns about RFG, there is one final point I want to make.

There are health concerns which arose when the EPA announced that they wanted to have reformulated gasoline. You know, I come from Cleveland, which has a number of days where they are not in attainment, and it is an industrial area which has suffered

greatly from air pollution. We are proud of our industries but we are not proud of our air pollution. And we have had serious health problems in Ohio as a result of ozone and pollution in particular.

As a matter of fact, if you look at the U.S. maps of epidemiological studies of increases in respiratory problems, you will see the Cleveland area is one of the highest places in the country right now. So you know, ozone is an invisible toxic gas and is a prime ingredient in smog. And the American Lung Association explains that

> At levels routinely encountered in most American cities, ozone burns through cell walls in lungs and airways. Tissues redden and swell. Cellular fluid seeps into the lungs, and over time their elasticity drops, susceptibility to bacterial infection increases, scars and lesions form in the airways. Breathing is rapid and painful. As ozone levels rise, hospital admissions and emergency department visits do the same. Children at summer camp lose the ability to breathe normally as ozone levels rise—even when the air is clean by reference to a Federal standard—and these losses continue for up to a week.

That is from the Lung Association.

Now, the people of Wisconsin, according to information that my staff came forward with, have paid a real health care cost for ozone pollution. In October 1999, a report prepared by ABT Associates for Clear the Air: the National Campaign Against Dirty Power estimated that in the 6-month period between April and October 1997, Wisconsin residents experienced 150,000 ozone-related asthma attacks, 4,200 ozone-related visits to the emergency room, 1,400 ozone-related respiratory hospital admissions.

The same study estimated that in Racine County, alone, there were 45 respiratory admissions, 135 visits to the emergency room, 5,319 asthma attacks, and 6,900 other symptoms attributable to ozone during the 6-month period.

Residents are paying 8 cents a gallon at the pump to purchase cleaner-burning fuel, that is true. But we also have to be aware that the reason for this is to make sure that residents avoid expensive hospital visits and to improve the quality of life by reducing the number of asthma attacks and other ozone-related symptoms. I do not think the people of Wisconsin or Ohio, or anywhere in this country, should have to choose between clean air and affordable, reasonably priced gasoline.

Unrestrained, the oil industry would be happy to sell us polluting gasoline at extremely high prices—I mean, that is what they would love to do so they could go along and attack RFG and turn around and when it comes to profits say, Oh, I don't know anything about it. Well, we understand. You know, driving over here with the deputy, he said, what do these oil companies think we are, stupid? We know what is going on. Deputy Ericson, I appreciate that, because that is what I am hearing in my district, too.

So I am pleased to know the FTC is going to be checking out the oil industry's pricing practices. Government can make sure that consumers are getting clean-burning fuel at a reasonable price. Otherwise, consumers may be forced to buy conventional gasoline but be paying twice: at the pump and at the hospital.

I want to thank Congressman Ryan, again, for holding this hearing. I applaud your dedication to the people of your district and I look forward to the testimony today, and again, it is an honor to work with you, Chairman Ryan.

[The prepared statement of Hon. Dennis J. Kucinich follows:]

Statement of Dennis Kucinich (D-OH)
Ranking Member
July 6, 2000 District Hearing

Mr. Chairman, I understand the frustration and concern many of the citizens that are here today are feeling about the high price of gasoline. The effect of high gas prices ripples though the economy affecting commuters and consumers. And this area of the country has seen some of the worst price hikes in the nation. So, I am pleased, Mr. Chairman, to join you here today to look into what we can do about this serious problem.

Unfortunately, there are no easy answers was to why the price of gasoline -- especially clean-burning fuel otherwise known as reformulated gasoline or RFG -- has been so high. A few weeks ago, the price of RFG in the Chicago-Milwaukee area was about 50 cents higher than the price of conventional gasoline. Therefore, many believed that the culprit was the increased costs posed by the RFG program. And, Mr. Chairman, you have joined the Governor and others in asking a federal court to review the Clean Air Act rules requiring RFG in Southeastern Wisconsin.

However, it is becoming increasingly apparent to me that we may want to look elsewhere for an explanation of the high prices.

Thirty percent of the nation's gasoline consumption is cleaner-burning RFG. And outside of Chicago and Milwaukee, the average price of RFG is two cents lower than conventional gasoline. Thus, the RFG requirements in and of themselves do not appear to be the major contributing factor.

Also, since June 15th, when the Department of Energy and the Environmental Protection Agency asked the Federal Trade Commission to investigate possible price-fixing, the wholesale price of RFG has dropped by over 38 cents per gallon in Chicago and Milwaukee. The Oil Price Information System reported that the wholesale price differential between RFG and conventional gasoline in nearby cities has dropped to less than 1 cent a gallon in Chicago and 8 cents a gallon in Milwaukee. In other words, the price differential at the pump is consistent with the EPA's estimate that it would cost four to eight cents more to produce ethanol-based RFG-2. Thus, the RFG requirements as applied to this region do not appear to be the culprit.

So the question remains, why is the price of RFG in this region 50 cents higher than the price of conventional gasoline?

I think we should look closely at the allegations of price

gouging by the companies that profited from the price increase. Last month, Public Citizen released figures on first quarter profits that showed that major oil companies had profit increases as high as 473%, 371%, and 257% over 1999 figures. Overall stock prices for the ten largest oil companies have risen 14% since January 1, 2000, and by 7% since May 1, 2000. And, interestingly, the price for RFG dropped precipitously once the FTC announced on June 15th that it would be investigating the industry's pricing practices.

Also of interest is the fact that while refiners were increasing their profit margins in the U.S., they were falling in Europe. Non-U.S. refining/marketing profits were down by 57% in the first quarter of this year, but U.S. refining/marketing profits were up by 68% in the same time period. Take ExxonMobil for example: its U.S. earnings on refining and marketing skyrocketed by 194% in the first quarter of 2000, as compared to the first quarter of 1999. But it wasn't selling more gasoline, it was selling 6% less gasoline by volume. Meanwhile, its non-U.S. earnings fell by 61% while its sales volume fell by 16%. I'm interested in why there is pressure on refiner's profits in Europe, while in the U.S., refiners are having a profit bonanza. I look forward to the FTC's preliminary report on this issue which is due out in a few weeks.

The oil industry itself points the finger to one company's use of patents on technology used in making RFG. Unocal holds the patents for technology used to manufacture ethanol-based RFG-2. The industry claims that the royalties they need to pay Unocal are deterring it from manufacturing ethanol-based RFG, which, in turn, is causing diminished supply. According to classical economics, when supply fails to meet the demand, the price increases just as the price has increased here in Wisconsin. This diminished supply may account for some of the increased cost for ethanol-based RFG-2.

According the American Petroleum Institute, "If the Unocal patents stand, they could impact supplies fo RFG ... [S]ome refiners, importers and blenders have said they will seek to avoid potentially infringing on the Unocal patents by choosing to supply less reformulated gasoline to the market that they would otherwise have done."

I have introduced a bill that would allow the Attorney General to order the licensing of RFG-related patents at a fair and competitive price to all manufacturers. Thus, the oil industry would be able to manufacture ethanol-based RFG, Unocal would be fairly compensated for its patent, the RFG supply would increase to

meet demand, and the price at the pump would be lower.

There are other things government could and should do to help consumers with the high price of gasoline. The government can stimulate the manufacture of high efficiency automobiles and SUVs with a tax credit to consumers. These vehicles would be made in America by American workers. I am drafting a bill right now that would create just such a tax credit. The tax credit would be paid for with the proceeds from a windfall profits tax on price gouging oil companies.

Unfortunately, we do not have any witnesses from the oil industry with us here today, so it will be difficult to fully investigate these issues. Instead, this hearing focuses on the impact of the RFG program on gas prices. I am happy to look at this issue. However, I hope that we look at both the costs and the benefits of the program.

On that note, I would like to point out that, according to the Wisconsin Department of Natural Resources, the RFG program in Southeastern Wisconsin has successfully reduced the number of volatile organic compounds that are being emitted in the region. Volatile organic compounds, or VOCs, are the precursors of ozone. On average, a car using RFG emits 27% fewer VOCs than when it

is using conventional gasoline. State monitors indicate:
*** during the first year of the RFG program (1995), Milwaukee experienced a 50% reduction in volatile organic chemicals, and**
*** since the introduction of RFG five years ago, Milwaukee experienced a 50% reduction of benzene, a known human carcinogen, and a 40% reduction in carbon monoxide.**

Although the RFG program has been a success, there is still a serious air pollution problem in this region. Last month, the Clean Air Network released a report, *Smog Watch 2000*, which found that, during the three years between 1997 and 1999, Milwaukee experienced 3 weeks-worth of days when the ozone standard was above acceptable levels. Similarly, Racine saw 2 weeks worth of dirty air days.

Ozone is an invisible, toxic gas and is the prime ingredient in smog. The American Lung Association explains that, quote, "[a]t levels routinely encountered in most American cities, ozone burns through cell walls in lungs and airways. Tissues redden and swell. Cellular fluid seeps into the lungs and over time their elasticity drops. ... Susceptibility to bacterial infections increases, ... {s]cars and lesions form in the airways. Breathing is rapid and painful. As ozone levels rise, hospital admissions and emergency department

visits do the same. In some laboratory animals, cancers appear. Children at summer camp lose the ability to breathe normally as ozone levels rise -- even when the air is clean by reference to the federal standard -- and these losses continue for up to a week."

Unfortunately, Wisconsinites have paid a real health care cost for ozone pollution. In October 1999, a report prepared by ABT Associates for Clear the Air: the National Campaign Against Dirty Power estimated that, in the six month period between April and October 1997, Wisconsin residents experienced:

*** 150,000 ozone-related asthma attacks,**

*** 4200 ozone-related visits to the emergency room, and**

*** 1400 ozone-related hospital admissions.**

The same study estimated that, in Racine County, alone, there were:

*** 45 respiratory admissions,**

*** 135 visits to the emergency room,**

*** 5319 asthma attacks, and**

*** 69,000 other symptoms attributable to ozone during that six month period.**

Although residents are paying about eight cents a gallon at the pump to purchase cleaner burning fuel, it may well be worth it if it

helps residents avoid these expensive hospital visits and improves their quality of life by reducing the number of asthma attacks and other ozone-related symptoms.

In conclusion, Wisconsinites do not have to choose between clean air and affordable, reasonably priced gasoline. Unrestrained, the oil industry would be happy to sell you polluting gasoline at extremely high prices. However, the government can step in and make sure that monopolies and oligopolies are not abusing their market power. I am pleased that the FTC will be investigating the oil industries pricing practices. And the government can make sure that consumers are getting clean burning fuel at a reasonable price. Otherwise, consumers may be forced to buy conventional gasoline and would be paying twice: at the gas pump and at the hospital. Therefore, I am pleased that the government is taking an interest in the recent high price of RFG in this area.

Mr. RYAN. Thank you. And I would like to submit to my friend and colleague from Ohio that I think these ozone health problems are even more of a reason for Gary and Chicago to clean up their emissions as well.

Mr. KUCINICH. I am with you.

Mr. RYAN. I would like to introduce our witnesses now, and then we will swear them in and start testimony.

First we have Francis Lyons, who is the regional administrator from Region V—which is this region—from the U.S. Environmental Protection Agency. Then we will hear from Michael Koerber, the technical director from the Lake Michigan Air Directors Consortium; Jerry Taylor, the director of Natural Resources at the Cato Institute; and Sheriff William McReynolds, who is the sheriff here in Racine County; and Darwin Greenwald, who is the owner of North Star Shell in Mukwonago. Thank you, all you gentlemen, for coming.

Would you please stand and take the oath?

[Witnesses sworn.]

Mr. RYAN. We will try and conform with the 5-minute rule, and I understand that everybody brought written testimony. Without objection, we will have all the written testimony from each of the witnesses included in the record. Please feel free to stray from your written testimony in providing your oral testimony, and we will have this light here which will show you the 5-minute rule. And we will start with you, Mr. Lyons.

STATEMENTS OF FRANCIS X. LYONS, REGIONAL ADMINISTRATOR, REGION V, U.S. ENVIRONMENTAL PROTECTION AGENCY; MICHAEL KOERBER, TECHNICAL DIRECTOR, LAKE MICHIGAN AIR DIRECTORS CONSORTIUM; JERRY TAYLOR, DIRECTOR, NATURAL RESOURCE STUDIES, CATO INSTITUTE; WILLIAM L. McREYNOLDS, SHERIFF, RACINE COUNTY SHERIFF'S DEPARTMENT; AND DARWIN GREENWALD, GAS STATION OWNER, MUKWONAGO, WI

Mr. LYONS. Thank you very much, Mr. Chairman, Congressman Kucinich, and members of the subcommittee for this invitation to appear here today. I appreciate having the opportunity to share what we know about the recent sharp increases in gasoline prices, particularly in the Midwestern part of the country. I will also explain the Environmental Protection Agency's efforts, in coordination with the Department of Energy and the Federal Trade Commission, to address this situation.

Mr. Chairman, first and foremost, we are very concerned that consumers receive the air quality benefits of the clean-burning gasoline, also known as reformulated gasoline, or RFG. They should receive these benefits of this program at a fair and reasonable price. In the following testimony, I will show that the cost of producing RFG does not account for the extremely high-priced differentials we have seen in the Chicago and Milwaukee areas.

As EPA reviewed the various requests for waivers from the RFG program, factors such as the pipeline, tank turnover, and patents were examined. We do not believe that these factors adequately explain the price differentials that we have seen in the Chicago and Milwaukee areas.

Let me begin briefly with a history of the RFG program. When Congress passed the Clean Air Act Amendments of 1990, it put into place a number of programs to achieve cleaner motor vehicles and cleaner fuels. These programs have been highly successful in protecting public health by reducing harmful exhaust from the tail pipes of motor vehicles.

In the 1990 amendments, Congress struck a balance between vehicle and fuel emission control programs after extensive deliberation. The RFG program was designed to serve multiple national goals, including air quality improvement, enhanced energy security by extending the gasoline supply through the use of oxygenates, and encouraging the use of domestically produced renewable energy sources.

Congress established the overall requirements of the RFG program by identifying the specific cities in which the fuel would be required, specific performance standards, and an oxygenate requirement. The oil industry, States, oxygenate producers, and other stakeholders were involved in the development of the RFG regulations in 1991 through a successful regulatory negotiation.

EPA published the final regulations establishing the detailed requirements of the two-phase program in early 1994. Thus, the oil companies and other fuel providers have had 6 years to prepare for the second phase of the program that began this year. In addition, the oil industry has been involved in an EPA RFG implementation advisory work group since 1997 and at no time during those discussions did the companies raise concerns about production, supply, or distribution problems that might occur.

The first phase of the Federal reformulated gas program introduced cleaner gasoline in January 1995, primarily to help reduce vehicle emissions that cause ozone and toxic pollution in our cities. Unhealthy smog levels are a significant concern in this country with over 100 million people living in 36 areas currently violating the 1-hour ozone standard.

The Federal RFG program is required by Congress in 10 metropolitan areas which have the most serious air pollution levels. Although not required to participate, some areas in the northeast, in Kentucky, Texas, and Missouri have elected to join in or opt into the RFG program as a cost-effective measure to help combat air pollution in their States. At this time approximately 30 percent of the country's gasoline consumption is cleaner-burning RFG.

The Clean Air Act Amendments of 1990 also required that RFG contain 2 percent minimum oxygen content by weight. Neither the Clean Air Act nor EPA requires the use of any specific oxygenate. Both ethanol and MTBE are used in the current RFG program, with fuel providers choosing to use either. Ethanol, however, is used exclusively in RFG in the upper Midwest, such as the Chicago and Milwaukee area.

Ambient monitoring data from the first year of the RFG program in 1995 confirm that RFG is working. RFG areas showed significant decreases in vehicle-related tail pipe emissions. One of the air toxics controlled by RFG is benzene, a known human carcinogen. The benzene level at air monitors in 1995 in RFG areas showed the most dramatic declines, with a median reduction of 38 percent from the previous year.

The emission reductions which can be attributed to the RFG program are the equivalent of taking 16 million cars off of the road. About 75 million people are breathing cleaner air because of the RFG program. Since this program began 5 years ago, it has resulted in annual reductions of smog-forming pollutants of at least 105,000 tons and toxic air pollutants by at least 24,000 tons.

As required by the Clean Air Act, the first phase of RFG program began in 1995 and the second phase in January of this year. As an example of the benefits, in Chicago, EPA estimates that the RFG phase II program will result in annual reductions of 8,000 tons of smog-forming pollutants and 2,000 tons of toxic vehicle emissions, benefiting almost 8 million citizens in the Chicago area facing some of the worst smog pollution in the Nation. This is the equivalent of eliminating emissions from 1.2 million cars in the State of Illinois.

In early June, as gas prices rose, particularly in the Midwest, EPA and the Department of Energy invited the Midwest Oil Refiners to a meeting in Washington, DC. Simultaneously, EPA, the Department of Energy, and the Energy Information Agency sent two teams of technical experts to the Midwest to investigate the situation and talk to the refiners, distributors, pipeliners, jobbers, terminal operators, and retail outlets.

Following those meetings—which occurred on June 12 and June 13—EPA Administrator Browner and Department of Energy Secretary Richardson sent a joint letter on June 15 to Chairman Pitofsky requesting that the Federal Trade Commission conduct a full and expedited formal investigation into the pricing of RFG in Chicago and Milwaukee.

Since June 15, the wholesale price of reformulated gas has dropped by over 38 cents per gallon in Chicago and Milwaukee. The Oil Price Information Systems has reported that the wholesale price differential between RFG and conventional gasoline in nearby cities has dropped to less than 1 cent a gallon in Chicago and 8 cents a gallon in Milwaukee.

In our discussions, representatives of oil companies listed a number of factors which they believed contributed to the price differential between RFG and conventional gasoline in the Midwest. These included: the additional cost of producing RFG phase II; temporary shutdown of the Explorer Pipeline; the difficulty with replacing winter gas with summer blends; and the Unocal patents. I would like to now just discuss briefly each of these factors and show why EPA believes that even taken together, they do not account for the high gasoline prices.

Mr. RYAN. Mr. Lyons, if I could, in the interest of letting the other witnesses testify, if you could just briefly summarize those other five factors.

Mr. LYONS. Yes, I will, Mr. Chairman.

On June 26—this relates to the production costs—on June 26 the average retail price of conventional gasoline across the country was $1.64 per gallon. EPA has calculated that based on the Energy Information Agency and OPIS surveys, that the average retail price of RFG II everywhere, except in Chicago and Milwaukee, was $1.65 a gallon, while the average retail price in Chicago and Milwaukee was $2.08 per gallon.

EPA strongly disagrees, Mr. Chairman, that RFG is responsible for increases in the gasoline prices in the Midwest. We have consistently said that the RFG program would account for perhaps 4 to 8 cents per gallon in the increased prices, but it is important to bear in mind, Mr. Chairman, that is based on the entire RFG program, phase I and phase II included. Phase II, which began at the retail outlets on June 1, 2000, we estimate that is only a couple of pennies a gallon due to the phase II.

An analysis by Bonner and Moore Management Science, a nationally recognized firm that specializes in refinery cost analysis, estimated that RFG I would add 3 to 5 cents more per gallon to the average cost, compared to conventional gasoline, and subsequent studies estimate that RFG II would add 1 to 2 cents to the average cost of RFG I, or 4 to 7 cents to the average cost of conventional gasoline.

Let me just briefly, Mr. Chairman, address the temporary shutdown of the Explorer Pipeline. EPA investigated the situation with the Explorer Pipeline to respond to the waiver request we had received and we would like to share our findings.

The Explorer Pipeline has historically provided 10 to 15 percent of the RFG supply for the Chicago-Milwaukee area. The outage of the pipeline in mid-March meant a loss of 108,000 barrels of RFG destined for the Chicago area. Chicago consumes about 200,000 barrels of gasoline a day; thus, the RFG loss due to the Explorer Pipeline outage was less than 1 day's RFG needs for the Chicago area.

So again, Mr. Chairman, we do not attribute the temporary shutdown of the Explorer Pipeline to account for the wholesale price increases as well.

I am trying to summarize my testimony as much as possible, Mr. Chairman.

If I could briefly address tank turnover. Tank turnover is referred to the need to replace winter gasoline in terminal storage with summer blends. Fuel providers have been doing this for over 10 years to comply with summertime gasoline volatility requirements. This normally begins in April and, as required by regulation, the tanks at the terminals must meet all summertime RFG requirements as of May 1. Nothing changed this year from any other year, so we would not attribute that to account for the spike in gasoline prices.

And finally, the Unocal patent. EPA has heard comments that the impact of the Unocal patent might bear some responsibility. While we understand that this matter may be in litigation, refiners have told us in meetings with them that they are able to produce RFG that is not subject to the patents. In our discussions with refiners and with Unocal, no one has identified any cost or supply issues related to the patent that could in any way explain the price increases for RFG that we have seen.

And finally, if I could briefly address the waiver issues. In recent weeks, there have been many calls for EPA to waive the RFG phase II requirements in Milwaukee and Chicago. The RFG regulations provide for an administrative waiver under very limited circumstances, extreme and unusual circumstances, such as acts of God or natural disasters, where the refiner or importer is unable

to comply with the RFG requirements, despite their exercise of due diligence and appropriate planning.

Various criteria for an administrative waiver under the regulations have not been met in the Milwaukee or Chicago area, so EPA has treated all of the requests for waivers as requests for enforcement discretion. Enforcement discretion is normally used in situations such as occurred recently in St. Louis earlier this spring when a short-term shutdown of the Explorer Pipeline led to actual and acute shortages in the St. Louis area where the pipeline supplies 70 percent of the fuel delivered to the St. Louis region.

For Chicago and Milwaukee, the supply of RFG continues to be adequate and prices are going down. Our refiners have strongly recommended that EPA not grant the RFG waivers. It is highly uncertain what effect a waiver would have on supply and prices, and refiners would need to make adjustments and switch gears, imposing short-term costs and the possibility of additional supply problems.

No RFG phase I currently exists right now and supplies of conventional gasoline are tight as well. So waiving the RFG phase II requirements, under these kinds of circumstances, could exacerbate the supply and price situation in the Midwest for both RFG and conventional.

In closing, Mr. Chairman, I would like to reiterate the following points.

Clean-burning RFG is providing public health benefits to almost 75 million citizens nationally and nearly 8 million in the Chicago area alone.

EPA believes that the cost of producing RFG II does not account for the extreme prices being paid in the Midwest. The pipeline disruption, the tankage issue, the Unocal patents and its implications, as well as ethanol use, have all been analyzed. EPA does not believe that these factors adequately explain the price increases we have seen in recent weeks.

We are concerned that consumers are paying these high prices for RFG.

This concludes my prepared statement, Mr. Chairman.

[The prepared statement of Mr. Lyons follows:]

FRANCIS X. LYONS
REGIONAL ADMINISTRATOR
REGION V
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
COMMITTEE ON GOVERNMENT REFORM
SUBCOMMITTEE ON NATIONAL ECONOMIC GROWTH, NATURAL RESOURCES, AND REGULATORY AFFAIRS
U.S. HOUSE OF REPRESENTATIVES
July 6, 2000

Thank you, Mr. Chairman and Members of the Subcommittee, for the invitation to appear here today. I appreciate having the opportunity to share what we know about the recent sharp increases in gasoline prices, particularly in the Midwestern part of the country. I also will explain the Environmental Protection Agency's efforts, in coordination with the Department of Energy and the Federal Trade Commission, to address the situation.

Mr. Chairman, first and foremost we are very concerned that consumers receive the air quality benefits of the clean burning gasoline (also called reformulated gasoline, or RFG) program at a fair and reasonable price. In the following testimony I will show that the cost of producing RFG does not account for the extremely high price differentials we have seen in the Chicago and Milwaukee areas. As EPA reviewed the various requests for waivers from the RFG program, factors such as the pipeline, tank turnover and patents were examined. We do not believe that these factors adequately explain the price differentials that we have seen in the Chicago and Milwaukee areas.

Let me begin with a history of the RFG program.

History of RFG

When Congress passed the Clean Air Act Amendments of 1990 it put in place a number of programs to achieve cleaner motor vehicles and cleaner fuels. These programs have been highly successful in protecting public health by reducing harmful exhaust from the tailpipes of motor vehicles. In the 1990 Amendments, Congress struck a balance between vehicle and fuel emission control programs after extensive deliberation. The RFG program was designed to serve multiple national goals, including air quality improvement, enhanced energy security by extending the gasoline supply through the use of oxygenates, and encouraging the use of domestically-produced, renewable energy sources.

Congress established the overall requirements of the RFG program by identifying the specific cities in which the fuel would be required, specific performance standards, and an oxygenate requirement. The oil industry, states, oxygenate producers and other stakeholders were involved in the development of the RFG regulations in 1991 through a successful regulatory negotiation. EPA published the final regulations establishing the detailed requirements of the two-phase program in early 1994. Thus, the oil companies and other fuel providers have had six years to prepare for the second phase of the program that began this year. In addition, the oil industry has been involved in an EPA RFG implementation advisory workgroup since 1997 and at no time during those discussions did the companies raise concerns about

production, supply or distribution problems that might occur.

The first phase of the federal reformulated gasoline program introduced cleaner gasoline in January 1995 primarily to help reduce vehicle emissions that cause ozone (smog) and toxic pollution in our cities. Unhealthy smog levels are a significant concern in this country, with over 100 million people living in 36 areas currently violating the 1-hour ozone standard.

The federal RFG program is required by Congress in ten metropolitan areas which have the most serious air pollution levels. Although not required to participate, some areas in the Northeast, in Kentucky, Texas and Missouri have elected to join, or "opt-in" to the RFG program as a cost-effective measure to help combat their air pollution problems. At this time, approximately 30 percent of this country's gasoline consumption is cleaner-burning reformulated gasoline. (RFG)

The Clean Air Act Amendments of 1990 also required that RFG contain 2.0 percent minimum oxygen content by weight. Neither the Clean Air Act nor EPA requires the use of any specific oxygenate. Both ethanol and MTBE are used in the current RFG program, with fuel providers choosing to use MTBE in about 87 percent of the RFG. Ethanol, however, is used exclusively in RFG in the upper Midwest (Chicago and Milwaukee).

Ambient monitoring data from the first year of the RFG program (1995) confirm that RFG is working. RFG areas showed significant decreases in vehicle-related tailpipe emissions. One of the air toxics controlled by RFG is benzene, a known human carcinogen. The benzene level at air monitors in 1995, in RFG areas, showed the most

dramatic declines, with a median reduction of 38 percent from the previous year. The emission reductions which can be attributed to the RFG program are the equivalent of taking 16 million cars off the road. About 75 million people are breathing cleaner air because of cleaner burning gasoline. Since the RFG program began five years ago, it has resulted in annual reductions of smog-forming pollutants of at least 105 thousand tons, and toxic air pollutants by at least 24,000 tons.

As required by the Clean Air Act, the first phase of the RFG program began in 1995 and the second phase began in January of this year. As an example of the benefits, in Chicago, EPA estimates that the Phase II RFG program will result in annual reductions of 8,000 tons of smog-forming pollutants and 2,000 tons of toxic vehicle emissions, benefitting almost 8 million citizens in the Chicago area facing some of the worst smog pollution in the nation. This is equivalent to eliminating the emissions from 1.2 million cars in Illinois.

Administration Response to Increasing Prices

In early June, as gasoline prices rose, particularly in the Midwest, EPA and DOE invited Midwest oil refiners to a meeting in Washington, DC. Simultaneously, EPA, DOE and the Energy Information Agency (EIA) sent two teams of technical experts to the Midwest to investigate the situation and to talk to refiners, distributors, pipelines, jobbers, terminal operators and retail outlets. Following those meetings, which occurred on June 12 and 13, EPA Administrator Browner and DOE Secretary Richardson sent a joint letter on June 15 to Chairman Pitofsky requesting that the Federal Trade Commission conduct a full and expedited formal investigation into the

pricing of RFG in Chicago and Milwaukee.

Since June 15, the wholesale price of reformulated gasoline has dropped by over 38 cents per gallon in Chicago and Milwaukee. The Oil Price Information Systems (OPIS) has reported that the wholesale price differential between RFG and conventional gasoline in nearby cities has dropped to less than 1 cent a gallon in Chicago and 8 cents a gallon at Milwaukee terminals.

In our discussions, representatives of oil companies listed a number of factors which they believed contributed to the price differential between RFG and conventional gasoline in the Midwest. These included: the additional cost of producing RFG phase II, temporary shutdown of the Explorer Pipeline, the difficulty with replacing winter gas with summer blends (draining tanks), and the Unocal patent. I would now like to discuss each of these factors and show why EPA believes even taken together they do not account for the high gasoline prices.

Production Costs for RFG Do Not Explain Price Increases

As I stated earlier, we are very concerned that consumers receive the benefits of the RFG program at a fair price. Across the country hundreds of communities are benefitting from RFG II for pennies per gallon. In fact, this Monday (June 26), the average retail price of conventional gasoline across the country was $1.65 per gallon. EPA has calculated, based on EIA and OPIS surveys, that the average retail price for RFG II everywhere except in Chicago and Milwaukee was $1.64 per gallon, while the average retail price in Chicago and Milwaukee was $2.08 per gallon.

EPA strongly disagrees that the RFG program is responsible for increases in gasoline prices in the Midwest. In fact, EPA's estimates of the average cost for the production of Phase II RFG range from 4 to 8 cents more per gallon than conventional gasoline (with the use of either ethanol or other oxygenates). Several studies agree with EPA's estimates of the average costs:

> Analysis by Bonner and Moore Management Science, a nationally recognized firm that specializes in refinery cost analysis, estimated that RFG I would add 3-5 cents more per gallon to the average cost compared to conventional gasoline. Subsequent studies by Bonner and Moore and Oak Ridge National Laboratory estimated that RFG II would add 1-2 cents to the average cost of RFG I or 4-7 cents to the average cost of conventional gasoline. Oak Ridge National Laboratory estimated that the average added cost of blending ethanol into RFG II as compared to RFG I was about 1 cent more per gallon.

As I have already stated, over the past week, the wholesale price differential between RFG and CG has dropped dramatically in the Chicago/Milwaukee area. We do know that this differential is now in line with differentials observed in other parts of the country. EPA does not believe that the cost of complying with RFG regulations accounts for the extremely high price differentials we have seen in the Chicago-Milwaukee areas.

Temporary Shutdown of Explorer Pipeline

EPA investigated the situation with the Explorer pipeline to respond to the waiver requests we received and would like to share our findings. The Explorer pipeline has historically provided 10 to 15 percent of the RFG supply for the Chicago/Milwaukee area. The outage of the pipeline in mid-March meant a loss of 108,000 barrels of RFG destined for the Chicago area. Chicago consumes about 200,000 barrels of gasoline a day. Thus, the RFG lost due to the Explorer pipeline outage was less than one day's RFG needs for Chicago. Since mid-March, the Explorer pipeline from Houston to Tulsa has been running at 90 percent capacity, while the pipeline north of Tulsa to the Midwest has been capable of operating at 100 percent capacity. The supply of RFG to the Midwest has increased this year over last year and, in fact, for the month of June refiners expected to supply 650,000 more barrels of RFG this year than last year. The Explorer pipeline has informed us that more RFG could be sent if the companies elected to do so. For example, the pipeline company has informed us that, beginning earlier this month deliveries of RFG to Chicago have increased by approximately 100,000 barrels per ten day cycle.

Tank Turnover

Tank turnover refers to the need to replace winter gasoline in terminal storage tanks with summer blends. Fuel providers have been doing this for over ten years to comply with summertime gasoline volatility requirements. This normally begins in April and, as required by regulation, the tanks at terminals must all meet summertime RFG requirements as of May 1st.

Unocal Patent

EPA has heard comments as to the impact of the Unocal patent. While we understand that this matter may be in litigation, the refiners have told us in meetings with them that they are able to produce RFG that is not subject to the patent. In our discussions with refiners and with Unocal, no one has identified any cost or supply issues related to the patent that could in any way explain the price increases for RFG that we have seen in the Midwest over the last two months.

Waiver Issues

In recent weeks there have been many calls for EPA to waive the RFG Phase II requirements in Milwaukee and Chicago. The RFG regulations provide for an administrative waiver under very limited circumstances - extreme and unusual circumstances, such as Acts of God or natural disaster, where the refiner or importer is unable to comply with the RFG requirements despite their exercise of due diligence and planning. The various criteria for an administrative waiver under the regulations have not been met in the Milwaukee or Chicago area, so EPA has treated all of the requests for a waiver as requests for enforcement discretion. Enforcement discretion is normally used in situations such as occurred in St. Louis early this spring, where the short term shut down of the Explorer pipeline led to actual and acute shortages. The pipeline supplies on average 70 percent of fuel delivered to St. Louis.

For Chicago and Milwaukee the supply of RFG continues to be adequate and prices are going down. All refiners have strongly recommended that EPA not grant RFG waivers. It is highly uncertain what effect a waiver would have on supply and

prices. Refiners would need to make adjustments and switch gears, imposing short term costs and the possibility of supply problems. No RFG Phase I is currently available, and supplies of conventional gasoline are tight as well. Waiving the RFG Phase II requirements under these kinds of circumstances could exacerbate the supply and price situation in the Midwest, for both RFG and conventional gasoline.

Conclusion

In closing, I would like to reiterate the following points:

- Clean burning RFG II is providing public health benefits to almost 75 million citizens nationally and nearly 8 million in the Chicago area alone.
- EPA believes the cost of producing RFG II does not account for the extreme prices being paid by Midwest consumers. The pipeline disruption, the tankage issue, the Unocal patent and its implications, as well as ethanol use, have all been analyzed. EPA does not believe that these factors adequately explain the price increases we have seen in recent weeks.
- We are concerned that consumers are paying these high prices for RFG II.

This concludes my prepared statement. I would be pleased to answer any questions that you may have.

Mr. RYAN. Thank you, Mr. Lyons.

Mr. Koerber.

Mr. KOERBER. Thank you, Mr. Chairman, Congressman Kucinich. My name is Michael Koerber. I am the technical director for the Lake Michigan Air Directors Consortium.

The consortium is a non-profit organization formed by the States of Illinois, Indiana, Wisconsin, and Michigan in 1989. The main purpose of the consortium is to provide technical assessments for and assistance to its member States on air quality issues and to provide a forum for its member States to discuss air quality issues. The consortium's major pollutants of concern are ozone and its precursors, and the primary geographic focus is the area encompassed by its member States, in particular the Lake Michigan region.

Since 1989 the consortium has supported the collection of air quality and meteorological measurements in the Lake Michigan region, the development of a regional inventory of ozone precursor emissions, and the application of mathematical computer models. Our study of ozone in the Lake Michigan region led to three major findings.

No. 1, ozone transport is a major problem in the eastern half of the United States and in the Lake Michigan region. On many hot summer days, southerly and southwesterly winds bring not only heat and humidity into the Lake Michigan region, but also polluted air. The air entering the Lake Michigan region on these days can be as much as 0.08 to 0.10 parts per million which is about three-quarters of the current Federal 1-hour air quality standard for ozone of 0.12 parts per million.

The figure in my testimony shows the ozone concentrations entering the Lake Michigan region on a hot summer day. As can be seen by the color scale, these ozone concentrations coming in from the west and the south are on the order of 80 to 100 parts per billion, or 0.08 to 0.10 parts per million.

Transport within the Lake Michigan region also determines which areas locally receive the highest ozone levels. On days with southerly winds, the highest ozone occurs in eastern Wisconsin, as is seen in the figure in the lower left-hand corner. On days with southwesterly winds, the highest ozone occurs in western Michigan, as seen in the figure in the middle. On days with light winds, the highest ozone occurs close to the major urban areas of Chicago and Milwaukee, as seen in the figure in the lower right-hand corner.

Our second major finding is that 1-hour ozone air quality levels in the Lake Michigan region have improved in the past 10 years. The number of monitoring stations recording a violation of the 1-hour standard has decreased from 25 to 6 over the last 10 years. The magnitude of the peak 1-hour violation has decreased from about 0.19 parts per million to 0.13 parts per million.

The figure on the left shows the monitoring stations which currently violate the 1-hour ozone air quality standard, and the figure on the right shows the monitoring stations which violated the 1-hour standard 10 years ago. As you can see, there has been a dramatic decrease in both the number as well as the magnitude of 1-hour violations in the Lake Michigan region.

Our third major finding is that additional efforts are needed to provide for attainment of the 1-hour and 8-hour ozone standards. Despite the improvement in 1-hour ozone air quality levels, several sites in eastern Wisconsin remain above the 1-hour standard. The figure on the left, again, shows the monitoring stations in the Lake Michigan region which currently violate the 1-hour standard.

Furthermore, current 8-hour ozone levels are above EPA's new 8-hour ozone standard at many sites throughout the Lake Michigan region, and this is shown in the figure on the right-hand side.

In conclusion, ozone is a public health issue in the Lake Michigan region, and the Lake Michigan States are committed to working together to achieve clean air. Thank you.

[The prepared statement of Mr. Koerber follows:]

Testimony
Michael Koerber, Technical Director
Lake Michigan Air Directors Consortium

Subcommittee on National Economic Growth, Natural Resources, and Regulatory Affairs

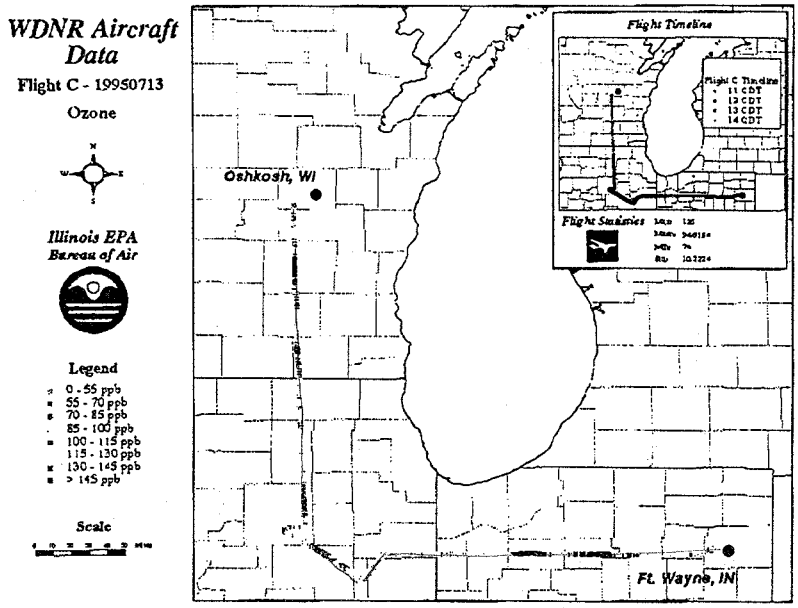
"Ozone Transport and Reformulated Gasoline: How Federal Regulations Are Raising Gas Prices"

Racine, Wisconsin
July 6, 2000

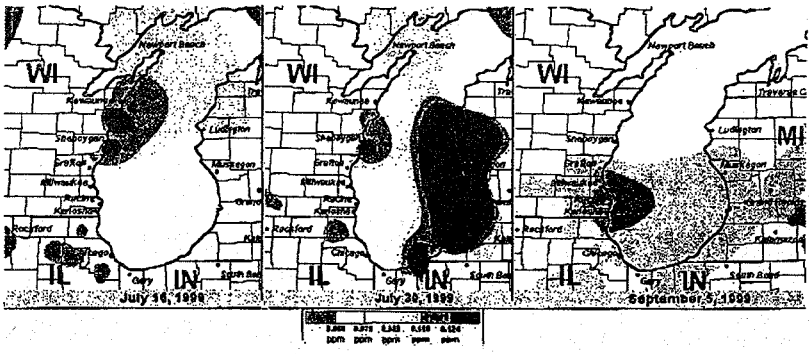
My name is Michael Koerber. I am the Technical Director for the Lake Michigan Air Directors Consortium. The Consortium is a non-profit organization formed by the States of Illinois, Indiana, Michigan, and Wisconsin in 1989. The main purpose of the Consortium is to provide technical assessments for and assistance to its member States on air quality issues and to provide a forum for its member States to discuss air quality issues. The Consortium's major pollutants of concern are ozone and its precursors, and its primary geographic focus is the area encompassed by its member States; in particular, the Lake Michigan region.

Since 1989, the Consortium has supported the collection of air quality and meteorological measurements in the Lake Michigan region; the development of a regional inventory of ozone precursor emissions; and the application of mathematical computer models. Our study of ozone in the Lake Michigan region has led to three major findings:

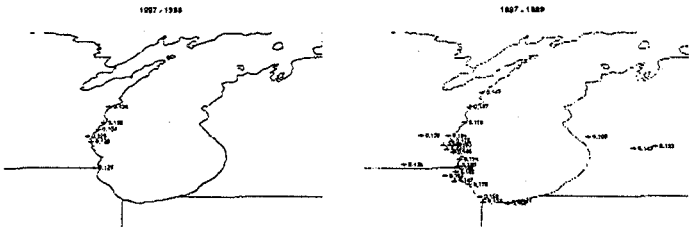
(1) Ozone transport is a major problem in the eastern half of the U.S. and in the Lake Michigan region. On many hot summer days, southerly and southwesterly winds bring not only heat and humidity into the Lake Michigan region, but also polluted air. The air entering the Lake Michigan region on these days can be as much as 0.08 – 0.10 ppm, which is about ¾ of the current federal 1-hour air quality standard for ozone.



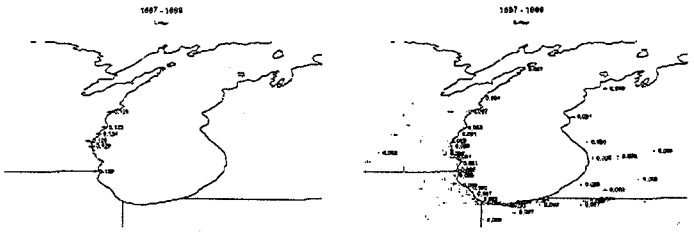
Transport within the Lake Michigan region also determines which areas locally receive the highest ozone levels. On days with southerly winds, the highest ozone occurs in eastern Wisconsin. On days with southwesterly winds, the highest ozone occurs in western Michigan. On days with light winds, the highest ozone occurs closer to the major urban areas of Chicago and Milwaukee.



(2) 1-hour ozone air quality levels in the Lake Michigan region have improved in the past 10 years. The number of sites measuring a violation of the 1-hour standard has decreased from 25 to 6, and the magnitude of the peak violation has decreased from about 0.19 ppm to 0.13 ppm.



(3) Additional efforts are needed to provide for attainment of the 1-hour and 8-hour ozone standards. Despite the improvement in 1-hour ozone air quality levels, several sites in eastern Wisconsin remain above the 1-hour standard. Furthermore, current 8-hour ozone levels are above USEPA's new 8-hour ozone standard at many sites throughout the Lake Michigan region.



In conclusion, ozone is a public health issue in the Lake Michigan region and the Lake Michigan States are committed to working together to achieve clean air.

Mr. RYAN. I think those are fascinating maps. I would like to add that you asked that these maps also be included in the record separately.

Dr. Taylor.

Mr. TAYLOR. Good morning. I would like to thank Congressman Kucinich and Congressman Ryan for the opportunity to testify today on the effect that Federal regulations have had on gasoline prices in the Milwaukee-Chicago area.

My testimony argues that there is absolutely, positively, without a doubt, not one bit of mystery about why gasoline prices have gone up about $1 a gallon over the past year in this area. The Milwaukee-Chicago market is suffering from a shortage of gasoline, and this shortage is entirely responsible for the surge in prices, and a little bit of economics 101 could explain exactly this matter.

As the EPA and the Department of Energy are fond of pointing out, supplies of gasoline as of early June in this area were about what they were in 1998, and that is absolutely correct, but that is only part of the story. Demand for gasoline in the Milwaukee-Chicago area has grown by about 4 percent over the past year.

Now, this might seem minor and inconsequential to anyone who does not understand the economics of this industry, but it is actually quite important, because demand for gasoline is inelastic in the short run. That is, it takes a large increase in the price of gasoline to reduce consumer demand even a little bit. People do not drive less because the price of gasoline per gallon goes up a nickel, a dime, or a quarter; it has to go up a lot just to get us to drive a little less.

Economists, for instance, calculate that if prices go up by about 1 percent, consumer demand will decrease in the short run by only about 1/20th of 1 percent. Thus, if local gasoline supplies are 4 percent below where they need to be to meet unmoderated consumer demand—the figure most market analysts believe to be correct for the Milwaukee-Chicago area—prices would have to jump by about 100 percent in order to prevent 1970's-style gas lines and spot shortages.

Now, there is absolutely no dispute about these two facts: one, that supplies are no higher than they were last year, and two, that demand has increased. And the 4 percent demand figure comes from AAA. That should pretty much set to rest the question of whether economics can explain this, but there are other mysteries.

What is responsible for the shortfall in supply? Three things: OPEC, pipeline breakdowns, and environmental mandates. First, because of OPEC production decisions, the cost that refiners are paying for crude oil has risen by about 48 cents per gallon of gasoline over the past year and a half, so that neatly explains about half of the price increase.

Second, two of the main gasoline pipelines serving the area have broken down, as has already been pointed out. The alternative ways of getting gasoline into the region, trucks and barges, are very costly and insufficient to fully make up for the shortfall. Accordingly, economists at the Congressional Research Service calculate that the pipeline problems are responsible for about 25 cents of the dollar's worth of price increase.

Third, the Milwaukee-Chicago area, beginning June 1—as has been discussed—was forced to sell nothing but ethanol blended reformulated gasoline, a fuel sold nowhere else in the Nation. This has spawned several problems.

Problem one, whenever new gasoline mandates are imposed on a market, an adjustment period almost always takes place. Refiners and merchant facilities need time to figure out their place in the marketplace, their role in it, profit opportunities, and to learn the most efficient ways to deliver the new products to consumers. This shakeout almost always results in initial price shocks, as it did in California in 1996.

To argue that the industry has had 6 years of warning and should have operated perfectly at the whim of Congress is silly. Whenever new mandates, especially as breathtaking as these have been, are imposed on an area, there will be an initial shakeout. It will be temporary, but it will have price implications and it always has in the past.

Problem two, thanks to pressure from the farm lobby, the reformulated gasoline sold in this area is blended with ethanol rather than MTBE. Because ethanol evaporates easily, unburned evaporated fuel is a major contributor to smog. The gasoline intended for blending must be specially prepared so as to minimize ethanol evaporation rates.

This has sparked a host of complications. Because of its unique characteristics, this fuel must be segregated from other gasoline all the way up the transportation system, which drives up costs and restricts the ability of refiners to deliver it to market. And because manufacturing gasoline for ethanol blending is so different from manufacturing conventional gasoline, refiners find it costly and time-consuming to switch from producing one type of fuel or another. Thus, the industry cannot quickly move to address spot shortages due to a shortage of ethanol-blended reformulated gasoline.

Now, I take a moment here to note that this has nothing to do with the cost of production. To dwell excessively about how much it costs, a few cents more, to produce ethanol, as if that alone should dictate what ethanol-blended gasoline prices should be, is economic silliness. There are a lot more things that go into the cost of gasoline at the pump than the cost of production.

Economists at the Congressional Research Service, like economists everywhere who have spent any time looking at this market, understand this and calculate that the problems of ethanol-blended reformulated gasoline are responsible for about 25 cents out of that dollar price increase. Thus, we can explain everything here of the dollar price hike per gallon of gasoline in mid-June: 50 cents is due to OPEC, 25 cents due to pipeline ruptures, and 25 cents due to environmental mandates.

That prices began dropping at June 15 is no mystery, either. While we could argue that an investigation was launched at that time and that obviously explains it, I could also argue that the Baltimore Orioles began losing on June 15 and attribute that to the reason why gasoline prices went down.

The main reason prices go down is when prices for something go up as much as they have for this gasoline in this market, profit op-

portunities are available to anybody who can get this blended gasoline in here. Every barge and truck that was not busy was corralled into bringing gasoline to market. Every refiner that can switch production, switched from conventional gasoline to this ethanol-blended reformulated gasoline. That is what high prices do in an economy: it signals the producers that profit opportunities can be made by meeting demand that is being unmet.

So it is the natural course of economics, of supply and demand, that explains why prices began to go down after they peaked at about $2.30 a gallon. It would have been shocking had they not gone down, because it would have meant that there was absolutely no opportunity in the refinery business to shift production. There was, and it is costly and it took time, but it has occurred.

So while government cannot take the blame for or do much about three-quarters of the price spike, it can take steps to address the 25 cent price increase that has occurred temporarily due to these environmental mandates. First, Congress should repeal the reformulated gasoline mandate in its entirety. It accomplishes absolutely nothing in the way of air quality.

The fuel injection systems that replaced conventional carburetors in cars built since 1983 included computerized oxygen sensors to determine when the fuel-air mix is optimized from an emissions perspective. This is all by way of saying that by automatically mixing gasoline in such a way as to minimize carbon monoxide emissions, fuel injectors accomplish through technology what the mandated reformulated gasoline attempts to accomplish via fuel design. They are redundant approaches.

Eric Stork, the head of EPA's Mobile Source Air Pollution Control Program from 1970 to 1978, told the New York Times recently that reformulated gasoline was a good idea 30 years ago but in cars built since 1983, the fuel is "obsolete and pointless."

Second, refinery margins are tight because refining capacity continues to shrink. Because of onerous environmental regulatory burdens, the refining business is simply not profitable. No new refineries have been built in 30 years and plants continue to shut down even while demand increases.

Congress should relieve the regulatory burdens facing the refining industry in two ways: First, it should heed the advice of the National Petroleum Council, an official advisory body to the Secretary of Energy, and shelve the new fuel mandates in the works that could cause a national repeat of the Milwaukee-Chicago experience.

Second, Congress should direct EPA to cease and desist from spelling out in painful bureaucratic detail exactly how companies go about meeting environmental standards. Instead it should just simply set standards and allow companies to meet them in any manner it chooses. Economists believe that this simple change could reduce regulatory costs on refiners by about 80 percent. This would go a long way toward attracting important needed investments in this industry, investments that are crucial to the supply of plentiful, affordable gasoline.

On a final note, the idea that the price fixing or price gouging charge has residence because oil profits have gone up recently is another example, I think, of not understanding markets. Prices are

means by which we allocate scarce goods. If you are an infra-marginal supplier of gasoline in the Milwaukee-Chicago area, you certainly made a lot of money. You lost about that much money in 1998 when prices collapsed through the floor, and nobody held press conferences about that.

This is an industry that has historically been less profitable than the average industrial sector in the United States over the past 20 years, but the high prices were absolutely necessary to allocate a scarce good. Even if gasoline is only a few percent below where it needs to be to meet unmoderated consumer demand is enough, given the inelasticities of demand, to cause shortages if prices do not go up.

There are only two ways of allocating scarce goods: we can let prices do it, or we can let politicians do it. If we let politicians do it by controlling prices and allocating and rationing the stuff, we get price lines and we get pumps that run dry. I believe despite the dislocations that occurred here were painful to everybody, that they were preferable to those that occurred in the 1970's which would be the national course of results if we impose windfall profits taxes or try to second guess market prices.

Thank you for the opportunity to testify, and I will certainly look forward to answering any questions you have.

[The prepared statement of Mr. Taylor follows:]

TESTIMONY OF
JERRY TAYLOR
DIRECTOR, NATURAL RESOURCE STUDIES
CATO INSTITUTE

BEFORE THE
COMMITTEE ON GOVERNMENT REFORM
SUBCOMMITTEE ON NATIONAL ECONOMIC GROWTH,
NATURAL RESOURCES, AND REGULATORY AFFAIRS
UNITED STATES HOUSE OF REPRESENTATIVES
July 6, 2000

I'd like to thank the members of the Subcommittee on National Economic Growth, Natural Resources, and Regulatory Affairs for the opportunity to testify today on the effect that federal regulations have had on gasoline prices in the Milwaukee/Chicago area.

There is no mystery as to why gasoline prices have spiked here but nowhere else: the Milwaukee/Chicago market is suffering from a shortage of gasoline and this shortage is entirely responsible for the surge in prices. My testimony today will examine the factors that have contributed to this shortfall as well as the economic laws that govern gasoline markets. In short, the June spike in Milwaukee/Chicago gasoline prices was largely caused by federal and state regulations mandating the use of ethanol blended reformulated gasoline in this market.

The only other explanation for the price spike that's been offered - the contention that oil companies are colluding to gouge consumers - is also examined and dismissed as extremely unlikely. No single oil company has enough market power to significantly affect retail prices and there is absolutely no evidence of collusion. A basic understanding of the gasoline markets strongly suggests that, if prices had not gone up dramatically in May/June, 1970-style gasoline lines at the pump would have been the inevitable result.

I conclude by suggesting some policy steps that would reduce the likelihood of such disruptions in the future. Less - not more - regulation is in order.

The National Gasoline Market

A gallon of gasoline in the United States today is - on average - 60 cents more expensive than it was a year ago. This represents about a 50 percent increase in price. Gasoline prices in the Milwaukee/Chicago area, however, peaked at about double the price of a year ago.

So about half the price increase experienced in the Milwaukee/Chicago area was due to the general increase in world oil prices. The Congressional Research Service, for instance, reports that refiners' crude acquisition costs have risen by the equivalent of 48 cents per gallon of gasoline over the past year and a half. That price increase is explained by three factors; OPEC production restraint, low domestic inventories of oil, and surging demand for oil products. About this there is little dispute, so I will not dwell upon it this morning.

As an aside, the price increase appears more dramatic than it actually is. First, it was preceded by the lowest inflation-adjusted oil prices in recent history: less than $10 a barrel in December 1998, a price that allowed gasoline to sell at $1.05 a gallon. Price increases were virtually inevitable, and given the historic lows of December 1998, they were bound to appear dramatic by comparison. Second, real prices even in the Milwaukee/Chicago area still don't approach the historic peak price of $2.67 a gallon, which was set nationally in March 1981 after adjusting for inflation.

Nevertheless, why are prices higher in the Milwaukee/Chicago area than elsewhere? Simply put, the imbalance between gasoline supply and demand is greater here than elsewhere in the country.

Imbalances in Supply & Demand

Disruptions in the transportation network are primarily responsible for limiting the supply of gasoline in the Milwaukee/Chicago area. An inability on the part of refiners to produce enough gasoline to keep up with surging demand has also contributed to the problem. Given the inelasticities of the gasoline market, those two factors alone explain the disparity between regional and national prices.

Gasoline demand has increased by 4 percent since last year according to the American Automobile Association but supply has remained unchanged. This imbalance is complicated by a shrinkage in inventory stocks: mid-June national inventories of reformulated gasoline were 6 percent below the June 1999 level and 16 percent below those of June 1998.

While this disparity between the supply and demand of reformulated gasoline has affected all markets that rely on the reformulated gasoline equally, the Milwaukee/Chicago market has been additionally hit by a production shortfall of the specific blend of reformulated gasoline that is required there and nowhere else. Going into the spring, only six refineries (all located in Illinois) were producing RBOB that could be sold in the Milwaukee/Chicago market. But production at those and the other facilities making gasoline dedicated to the Milwaukee/Chicago market is running about 7 percent below production a year ago and stockpiles are unusually low.

The cheapest and easiest way to supplement the production at those Illinois facilities is to ship gasoline via pipelines from Gulf Coast refineries. Unfortunately, the main pipeline that services the Milwaukee/Chicago area - the Explorer pipeline, which ships gasoline from refineries on the Gulf Coast to Chicago - experienced a major fire near St. Louis in March. Although the damage was repaired quickly and the pipeline opened for business ten days later, the owners of the pipeline and the U.S. Department of Transportation entered into a joint agreement to reduce the operating pressure of the pipeline by 20 percent, which reduced the volume of gasoline moving through the pipeline by 10 percent. A rupture in the Wolverine Pipeline on June 8 - the one dedicated reformulated gasoline pipeline from Chicago to Detroit that serves the Milwaukee region - has further reduced pipeline traffic by 20 percent although it returned to full operation by the end of the month.

While trucks and barges are an alternative means of delivering gasoline to the Chicago/Milwaukee market, it's a far more expensive method of delivery and a limited delivery alternative given the paucity of unused truck and barge capacity. The upshot is that trucks and barges have not been able to make up the shortfall in deliveries caused

by the pipeline problems and the use of trucks and barges has added expense.

An imbalance of only a few percent between supply and demand seems at first blush to be a minor problem, but given the nature of gasoline markets, it is quite serious.

Gasoline Economics 101

The demand for gasoline is inelastic in the short run. That is, it takes a large increase in price to reduce consumer demand even a little in the near term. Economists calculate that short-term price elasticity for gasoline is about -0.05. That is, if prices go up 1 percent, consumer demand will decrease in the short term by only one-twentieth of 1 percent.

Accordingly, when the demand for gasoline outstrips the available supply (even by just a little), prices have to go up a lot in order to keep the gasoline pumps from literally running dry. Thus, if local gasoline supplies are 2-3 percent below where they need to be to meet unmoderated consumer demand - the figure most market analysts believe to be correct for the Milwaukee/Chicago area - price would have to jump by more than 50 percent in order to prevent spot shortages.

Prices, remember, are used to allocate scarce goods. Although demand for gasoline is far more elastic in the long run, in the short run, small disparities in supply and demand (in either direction) will always by necessity have a large impact on prices.

Thus, we know all we need to know to explain the supposed mystery of retail gasoline prices in the Milwaukee/Chicago area. OPEC production cutbacks and surging world oil demand have driven the price of oil from around $10 a barrel in the winter of 1998/99 to around $30 a barrel today, adding 50-60 cents to the price of gasoline per gallon. Pipeline ruptures and production shortfalls have further reduced Milwaukee/Chicago supplies by 2-3 percent, which - given the inelasticities of demand - explains the 50 cent difference between peak regional gasoline prices and national average gasoline prices.

Why the Production Shortfall?

What role have politicians played in all of this? Approximately three-quarters of the price hike in the Milwaukee/Chicago area can be explained by circumstances largely outside of government's control; the OPEC production restraint and the pipeline ruptures. This is also the conclusion of economist Lawrence Kumins in his June 16 report on midwestern gasoline prices for the Congressional Research Service.

One-quarter of the price spike, however, can be laid directly at the doorstep of government. Refineries have had a hard time keeping up with the demand for reformulated gasoline in the Milwaukee/Chicago market, and that production shortfall is a logical consequence of poorly designed federal and state policies. Refinery production has been limited by the reformulated gasoline mandate passed as part of the 1990 Clean Air Act, unnecessarily burdensome environmental regulations promulgated by the EPA, and the continued demagogic nature of Congress, which deters investment in the refining industry.

Reformulated Gasoline Mandate

As a consequence of the Clean Air Act Amendments of 1990, areas that violated federal air quality standards were required to sell only specially reformulated gasoline beginning June 1, 2000. This new gasoline is blended with various oxygenates (primarily methyl tertiary butyl ether - MTBE, or ethanol) in order to reduce the emission of carbon monoxide, a significant contributor to wintertime smog, and to reduce the amount of toxic chemicals, such as benzene, in the fuel. This reformulated gasoline now serves 30 percent of the country.

While today's reformulated gasoline (known in the regulated community as "Phase II" reformulated gasoline, or RFG-2) is 1-2 cents more expensive per gallon than last year's "Phase I" reformulated gasoline and 5-8 cents more expensive than conventional gasoline, the real consumer impact of reformulated gasoline is related to the rigidity it imposes on national gasoline markets.

The accompanying map of the United States shows the different federal requirements for retail gasoline. As of October 1999, there were essentially seven separate gasoline markets. As of today, there are eight; gasoline

is reformulated with ethanol in Milwaukee and Chicago but with MTBE elsewhere.

This is a crucial point. As noted earlier, gasoline intended for ethanol reformulation requires a unique blendstock known in the trade as "RBOB." That's because ethanol evaporates easily and unburned evaporated fuel is a major contributor to smog. Gasoline intended for ethanol blending must, accordingly, be specially made in order to minimize ethanol evaporation rates.

Because of RBOB's unique characteristics, it must be segregated from other gasoline all the way up the transportation system until the point just before it is mingled with ethanol and delivered to the service station. Accordingly, it cannot move through normal distribution channels and requires an entirely separate, dedicated transportation network.

This congressionally mandated balkanization of the gasoline market has seriously hampered the flexibility that refiners would otherwise have to react to spot shortages (and the related opportunity for profit making). Because it is inefficient to segment refining operations to produce multiple fuel blends, refiners generally dedicate their facilities to the production of one particular gasoline blend. Going into the spring, most of the RBOB for the Milwaukee/Chicago market was produced by six refineries in Illinois. Unfortunately, shifting production from one blend to another is costly and time consuming. Accordingly, refiners cannot react quickly to profit-making opportunities.

Why did the refining industry initially underproduce RBOB? Two reasons. First, whenever new gasoline blends are introduced to the market, an adjustment period almost always takes place that is frequently characterized by temporary supply and transportation dislocations. Refiners and merchant facilities need time to figure out the marketplace, their place in it, and to learn the most efficient way to deliver the new product to consumers. This shakeout is temporary but inevitable. As even the EPA acknowledged in its November 1999 "Fact Sheet on Reformulated Gasoline":

> It is not possible to accurately predict the retail price of Phase II RFG [reformulated

gasoline] in the year 2000 because it will be influenced by many factors including production costs, weather, crude oil prices, taxes, and local and regional market conditions. *It is important to note that, at the start of the Phase II RFG program, retail prices may be higher or fluctuate more.*

Accordingly, there should be no surprise that the introduction of this fuel in the Milwaukee/Chicago area on June 1 led to problems as the industry adjusted to new market conditions. Government mandates will always produce such periods of temporary dislocation.

Second, a federal appeals court ruled in March that Unocal legitimately held a patent on the most efficient method of producing RBOB. Refiners were forced to either pay Unocal royalties on RBOB production (imposing a 1-5 cent per gallon tariff on the cost of RBOB) or use a less efficient means of producing the blend. While the direct cost of the Unocal patent is thus minor, the indirect cost has been a reduction in RBOB production. Given the low profit margin that refiners typically operate under, many refiners simply chose to dedicate their facilities to the production of other blends.

Environmental Regulatory Burdens

As noted a moment ago, the refining business is not a particularly profitable one. Its profit margins, in fact, are smaller than the industrial average and no new refinery has been built in over thirty years. Refining capacity is shrinking annually due to plant shutdowns despite continually increasing demand.

The lack of profitability within this industry can be easily traced to several causes.

First, air pollution and hazardous waste regulations hit this particular industry harder than almost most any other. While such regulatory burdens might be justified as the price society must pay for a cleaner environment, that is unfortunately not the case. A 1990 joint study by the U.S. EPA and Amoco found that a typical refinery could meet all of EPA's emission mandates at only 20 percent of the cost if only the federal government would allow the plant managers flexibility in how they go about controlling emissions.

Second, delays in permit review and issuance seriously constrain a refiner's ability to react to profitable market opportunities such as the one presented today by high prices in the Milwaukee/Chicago area. Retooling a plant to produce a different gasoline blend requires federal permits to ensure that no additional air pollutants would result from the change. Often, these permit reviews take so long that windows of market opportunity close before refiners are capable of taking advantage of them.

Third, the federal government is constantly issuing new orders regarding how gasoline can be made. Those orders, which require constant retooling and reinvestment in facilities, not only impose steep up-front costs but curtail a plant's ability to capture profits from previous mandated retoolings and reinvestments. The refining industry is today facing 12 major regulatory actions over the next 10 years, all of which will require major capital investments. Many of those regulatory actions concern additional mandated changes in gasoline blends such as the reduction of sulfur in gasoline and diesel fuel, total elimination of MTBE from reformulated gasoline, and the reduction of various toxic substances. These changes alone will cost between $1.8 billion and $5 billion depending upon how the regulations are promulgated by EPA.

As long as government is insensitive to the regulatory costs it's imposing on this industry, it cannot legitimately complain when the industry occasionally stumbles under the weight of its regulatory burdens. In short, the government has made certain that there is little profit to be made in the business of refining gasoline, capacity is naturally dwindling, and the industry's ability to quickly and efficiently adjust to dislocations caused by new mandates is disappearing.

Regulatory Uncertainty

The final contributing factor to the shortfall of gasoline this summer is the constant threat of regulatory and policy change that deters companies from entering the market, investing in efficient practices and technologies, or stockpiling supplies. If businessmen are uncertain about whether new regulations will be imposed that might prevent them from recouping the cost of plant investments, less plant investment will be made. Similarly, if politicians threaten to impose windfall profit taxes or

other forms of regulatory intervention to ensure that occasional shortages never present the opportunity for significant profit, then companies will refrain from investing in stockpiling and other activities that only prove profitable under such conditions.

It is a cardinal rule of economics that stable rules are good rules. Even poorly drafted, inefficient regulations can be mitigated and overcome in time by market actors. Constant change, however, spawns uncertainty, and uncertainty in the marketplace restricts corporate time horizons in ways that often prove disastrous for consumers.

The "Price Gouging" Charade

The foregoing analysis should put to rest the charge that oil companies are "gouging" the public. Price increases in the Milwaukee/Chicago region were necessitated by a shortfall in supply, a shortfall that was caused by a number of factors. Moreover, there is no dispute about the fact that there *has been* a shortfall. The fault line is between those who understand that, given the inelasticities of demand, such a shortfall will have major pricing implications and those who simply do not understand the basic economics of this industry.

Even so, the logic of the "price gouging" charge is threadbare. Federal regulatory officials deny the possibility of shortages by pointing out that reformulated fuel stocks are just as plentiful today as they were last year when no such price shock occurred. But demand is about 4 percent higher today than last year, a disparity that is great enough to trigger the spike. Moreover, such assertions about overall reformulated fuel stocks ignore the fact that the particular reformulated fuel stock relied upon by the Milwaukee/Chicago market - RBOB - is undeniably in shorter supply.

Spectacularly high industry profits are not evidence of gouging. Given the inelasticities of consumer demand for gasoline, prices had to go up substantially to bring demand in balance with supply. If they had not, then the Milwaukee/Chicago area would have undergone a replay of the 1970s when long gasoline lines and dry service station pumps traumatized the nation. Suppliers who had gasoline for the Milwaukee/Chicago market on hand and who were able

to deliver it cheaply to market (inframarginal suppliers) are indeed making a substantial profit. Those who had to retool their refineries this spring to make RBOB for the Milwaukee/Chicago market and those who had to secure special truck or barge service to get that gasoline to market (extramarginal suppliers) are making significantly less.

Regardless, those high prices were necessary not only to ration a scarce good; they were also necessary to signal to other refiners that a valuable commodity was in short supply. If prices had somehow been kept down by government action, refiners would have been even less likely to help mitigate the shortage and the supply crisis would have been even worse.

Finally, the charge of price gouging has little internal consistency. If oil companies have enough market power to gouge consumers at will, why have they waited until this year to exercise that power? Why did they not "gouge" in 1999, or in 1998 (when industry profits were at their lowest point in years), on anytime over the last several decades? Moreover, why would oil companies gouge the Milwaukee/Chicago area but nowhere else?

The answer some give is that the industry needed an "excuse" to gouge, and the introduction of Phase II ethanol-blended reformulated gasoline this June was the excuse they needed and an excuse that was not available in any other market. But what critics miss is that businesses do not need an "excuse" to raise prices if that's what they want to do. This is, after all, a relatively free market and companies are free to charge whatever they think the market will bear anytime they chose.

Oil companies should not have to apologize for their profits this year. Given the short-term inelasticies of both supply and demand in this industry, minor imbalances in *either* direction will dramatically move prices either up or down. Massive but temporary transfers of wealth are just as likely to benefit consumers as they are to benefit producers in the oil business because temporary periods of excess supply are as likely as are temporary shortfalls of supply. Nobody shed a tear when consumers were "gouging" oil companies in 1998 when the short-term inelasticities of the gasoline markets crashed prices through the floor.

Nobody should shed a tear now when those same market inelasticities produce windfall profits for producers.

Finally, for a charge of price gouging to have credence, federal investigators will have to find evidence of collusion between oil companies. That's because no one company has enough market power to unilaterally drive up prices. But absolutely no evidence of collusion has been unearthed so far, and 30 years of on-again, off-again public witch-hunts have yet to produce even a shred of evidence that oil companies have *ever* colluded to fix prices.

The belief that oil companies get together to profit at the expense of consumers appears to be genetically hard-wired into our heads. But much like the belief in extraterrestials, it has yet to be substantiated. Given the perfectly understandable nature of the current price spike in the Milwaukee/Chicago area, it's a pretty safe bet that this particular investigation by the Federal Trade Commission - like all investigations that have come before it - will turn up empty. It is my hope, however, that those who are so demagogically accusing the industry of unjustified profiteering without any evidence will just as loudly and energetically apologize to it once the FTC investigation concludes with its inevitable findings.

Conclusion

Of the approximately $1 per gallon increase in gasoline prices that Milwaukee/Chicago area drivers have experienced over the past year, about 50 cents can be attributed to OPEC production decisions, 25 cents can be attributed to unfortunate pipeline breaks during particularly inopportune times, and 25 cents can be attributed to the market complications imposed by the reformulated gasoline mandate originally imposed in the 1990 Clean Air Act and put into place this June.

Congress would be best advised to eliminate the reformulated gasoline mandate in its entirety. Not only has it been responsible for an (albeit largely temporary) 25 cent per gallon increase in gasoline prices, it accomplishes absolutely nothing in the way of air quality. The fuel injection systems that replaced conventional carburetors in cars built since 1983 include computerized oxygen sensors to determine when the fuel-air mix is

optimized from an emissions perspective. By automatically mixing gasoline in such a way as to minimize carbon monoxide emissions, fuel injectors accomplishing through technology what the mandated reformulated gasoline attempts to accomplish via fuel design. Eric Stork, the head of EPA's Mobile Source Air Pollution Control Program from 197(till 1978, told the *New York Times* recently that reformulated gasoline was a good idea 30 years ago, but in cars built in 1983 or later, the fuel is "obsolete and pointless."

Congress should also demand that environmental regulations shift from a command-and-control basis to a "performance" based regime. Federal agencies might still require that no more than *x* amount of this or that pollutant come from a facility or gasoline blend but should allow plant managers to undertake whatever actions they wish to meet the standard. As long as companies are required to verify their emissions (and allow public verification of their findings), such a regulatory reform would dramatically reduce regulatory burdens on refiners while maintaining current strict air quality standards.

Finally, congress should force regulatory changes to expedite the issuance of federal air emission permits and reconsider the onslaught of new fuel recipe mandates that are in the hopper. As a recent report by the National Petroleum Council (an official advisory body to the secretary of the Department of Energy) warned, those mandates threaten to replay the dislocations that have hit the Milwaukee/Chicago market in other markets on and off for years to come.

Thank you for your patience, and I look forward to answering any questions you may have.

Mr. RYAN. Thank you, Mr. Taylor. I appreciate it.

[Applause.]

Mr. RYAN. I see some agree with you. For the audience, we try to get all sides of the view here in our hearings, and I think it is very important to hear from each side. Clearly, there is disagreement as to the source of the price, and as to the science of the regulation. That is the purpose of having a hearing, to hear from all sides involved to try and get to the heart of the matter, and I think it is very good that we have such a rich composition of different viewpoints here on the panel.

Now I would like to turn to you, Sheriff McReynolds. I know you guys are all sharing one microphone there; if you could just bring that in front of you, please indulge us, Sheriff McReynolds.

Sheriff MCREYNOLDS. Good morning, members of the subcommittee. Thank you for inviting me here today and giving me the opportunity to explain how high gas prices affect our community here in Racine County.

The Racine County Sheriff's Department has been serving the county since 1836. Perhaps 164 years ago, Congress convened field hearings like this one when the price of steel to make horseshoes went up, but times have changed dramatically from the days of horses and buggies. Today the sheriff's department has a sophisticated fleet of motor vehicles, several patrol boats, and even snowmobiles which, when in season, run consistently 7 days a week, some 24 hours, and rely on gasoline to keep moving.

As the modes of transportation that the sheriff's department uses have changed in the past century, so has the nature of crime here in Racine County. Today Racine County, like many other counties in the United States, faces the threats of gang violence and the crimes related to drug abuse and drug usage, for example. The department has initiated a successful and broad range of programs, not only to fight crime but to prevent it as well. These include the Metro Drug Enforcement programs, a Gang Awareness program, the community oriented policing services, Deputy Friendly, and DARE, among other types of programs to address this need.

Funding is critical to assure that the department can successfully run these programs, investigate crimes, enforce traffic laws, operate the county jail, and to maintain a law enforcement presence and availability throughout Racine County on a 24-hour basis. This is my first priority.

Funding for the sheriff's department comes from local residents' tax revenue. The recent high gas prices are straining and do have an effect on the Racine County Sheriff's Department budget. We have calculated that the increase in fuel prices for the department's motor vehicles will cost somewhere over $25,000 in excess of budgeted amounts for 2000. And if I may add that if the price holds at what it is today for what we pay, this budgeted amount will be overrun by over $46,000. In the $25,000 estimate we did try to conclude that maybe prices will continue to go down. This is money that should be spent on policing and preventing criminal acts.

Fire departments, city police departments, public works departments all depend on cars and trucks and gasoline to get their jobs done. For both the quality of life and the safety of Racine County, I hope that none of these services is forced to cut back because of

the impact high gas prices have on their budgets. The extra money needed for gas this year has to come from somewhere. One way to make up for the increase is to cut back on vital programs or to direct our patrol cars to drive less; the other way, naturally, is raise taxes. Neither of these are good options.

Businesses pass cost increase to consumers. My business, the consumers are the residents of Racine County, and increased costs are passed down through tax increases.

From a personal perspective, I think it is unfair that local taxes should have to increase to pay for more expensive gas because of new Federal regulations, such as the EPA's reformulated gas mandate. In my view, it is double taxation. As an individual, I not only am paying more for gas because of EPA regulations, but I am paying more in local taxes to support these essential community services that must also pay higher gas prices.

On a separate note, I think it is important to note that the State of Wisconsin excise tax on motor vehicle fuel is 26.4 cents per gallon; the Federal Government tax on motor vehicle fuel is 18.4 cents per gallon. For Wisconsin residents, that is an extra 44.8 cents per gallon. If the average retail price per gallon of gas is now around $1.70 in our area, over one-quarter of that price is tax. If I am paying more at the pump because of fuel excise taxes and for new clean air regulations, I also have to pay more in income and property taxes to pay for the higher costs of services due to higher gas prices. Does that mean I am getting taxed three times now?

I am willing to pay for a clean environment, but the EPA must understand that its actions in Washington, DC, have ramifications throughout the local communities. There must be ways to help these agencies with responsibilities to the public, such as mine, to mitigate these costs or give us relief from the reformulated gas mandate.

I am seeing the regulation burden firsthand as a result of increasing fuel costs for the Racine Sheriff's Department. I think the public needs to be aware of all the unintended consequences associated with each new formula of gasoline called for by the EPA. As I see it, their safety depends on it.

Mr. Chairman, thank you again for this opportunity to present my views before this distinguished committee.

[The prepared statement of Sheriff McReynolds follows:]

Testimony of

Sheriff William L. McReynolds

Racine County Sheriff's Department

Before the

House Committee on Government Reform

National Economic Growth, Natural Resources,

And Regulatory Affairs Subcommittee

July 6, 2000

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Funding is crucial to ensure that the Department can successfully run these programs, investigate crimes, enforce traffic laws, operate the county jail, and maintain a law enforcement presence and availability throughout Racine County on a 24-hour basis – my first priority. Funding for the Sheriff's Department comes from local resident's tax revenue.

The recent high gas prices are straining my Department's budget. We have calculated that the increase in fuel prices for the Department's motor vehicles will cost somewhere over $25,000 in excess of budgeted amounts for 2000. This is money that should be spent on policing and preventing criminal acts. Fire departments, city police departments, and public works departments all depend on cars and trucks – and gasoline – to get their job done. For both the quality of life and safety of Racine County, I hope that none of these services is forced to cut back because of the impact high gas prices have on their budgets.

The extra money needed for gas this year has to come from somewhere. One way to make up for the increase is to cut back on vital programs and direct that our patrol squads drive less, the other way is to raise taxes. Neither of these are good options.

Businesses pass cost increases to consumers. In my business, the consumers are the residents of Racine County and increased costs are passed down through tax increases. From a personal perspective, I think it is unfair that local taxes should have to increase to pay for more expensive gas because of new Federal regulations, such as the EPA's reformulated gas mandate. In my view, it is double taxation. As an individual, not only am I paying more for gas because of EPA regulations, but I am paying more in local taxes to support those essential community services that must also pay higher gas prices.

On a separate note, I think it is important to note that the State of Wisconsin excise tax on motor vehicle fuel is 26.4¢ per gallon. The Federal government tax on motor vehicle fuel is 18.4¢ per gallon. For Wisconsin residents, that's an extra 44.8¢ per gallon. If the average retail price per gallon of gas is now around $1.70 in our area, over one-quarter of that price is tax. If I'm paying more at the pump because of fuel excise taxes, and for new clean air regulations, I may also have to pay more in income or property taxes to pay for a higher cost of services due to higher gas prices, does that mean that I am getting taxed three times now?

I am willing to pay for a clean environment, but the EPA must understand that its actions in Washington, D.C., have ramifications throughout our local communities. There must be a way to help those agencies with responsibilities to the public, such as mine, to mitigate these costs – or give us relief from the reformulated gas mandate. I am seeing the regulatory burden first hand as a result of increasing fuel costs for the Sheriff's Department. I think the public needs to be aware of all of the unintended consequences associated with each new formula of gasoline called for by the EPA. As I see it, their safety depends on it.

Mr. Chairman, I thank you again for this opportunity to present my views before this distinguished Committee.

Mr. RYAN. Thank you, Sheriff.

Now we will go to Mr. Greenwald. Your station is in Mukwonago. Correct?

Mr. Greenwald. Correct.

Mr. RYAN. Mr. Greenwald, please.

Mr. GREENWALD. I would like to thank you, Congressmen Ryan and Kucinich for the opportunity to express to you the various factors that I am aware of that have caused increases in gasoline prices at my gas stations and its effect on my business. I feel I am here to put a human face to the policies that are made by the EPA in Washington, DC, and how their ramifications are felt down to the local consumer.

I own two gas stations, a Citgo station and a Shell station, in the Village of Mukwonago, which is located in Waukesha County, WI, which are located on the non-attainment border and are required by the EPA to sell reformulated Tier II gasoline. Six miles down the road from my stations in the Village of East Troy, which is in the county of Walworth, WI, the stations are allowed to sell conventional gasoline.

The wholesale cost of gasoline began skyrocketing in May 2000. This was a result of the decrease in supply of gas as the gasoline terminals prepared for the Tier II reformulated gasoline, as required by the EPA. The terminals were draining their supply of the old reformulated gasoline and cleaning them out in preparation for the Tier II gas to be ready for the June 1, 2000 deadline.

The decrease in supply of reformulated gasoline was so great that during the months of May and June 2000, I was not able to get gasoline for my Shell station from their terminal in Milwaukee. Instead, I had to pay extra freight costs in having the gasoline delivered to me from the Chicago terminals. This happened to me seven times in May and June. The additional cost of shipping this gas from Illinois resulted in an increase in my cost of over 1½ cents a gallon. This is in addition to the higher base price of gasoline from Chicago, resulting in the wholesale cost of gas to me being 2½ to 5 cents higher than what it would have cost me if I was able to get it out of Milwaukee.

This was being caused by a decrease in supply due to the EPA's Tier II mandate; I had not had a problem with this in the past.

Another factor in the rising price of reformulated gasoline is that the Tier II gasoline costs more to produce. I have read where the EPA estimated the cost to produce the Tier II gas at 5 to 8 cents a gallon.

It is also my understanding that the EPA has not released any cost benefit analysis for the new reformulated gasoline, and that the EPA has not shown any scientific analysis it used to justify the formula changes and the higher costs. This leads me to believe that the EPA did not really do their homework on the additional cost but just sent down the mandate and let the chips fall.

I believe there are other factors that have caused prices to increase, such as the higher cost of crude oil, breakdowns of supply pipelines, rising cost of ethanol, the cost of refiners paying Unocal after they won the court case against six of the Nation's largest refiners for infringement on the patent of the formula for the new reformulated gasoline—which is also something else that bothers me,

how the EPA can require that only a certain type of gasoline can be used and it can only be made the way Unocal makes it. This would be like the government saying you can only own a computer if it has Microsoft software on it.

I realize the EPA and many blame big oil for the price gouging. I have a hard time seeing these leaders of oil companies getting together in a smoke-filled room and deciding to gouge the Milwaukee and Chicago markets. There is always someone who will try to lower the price to beat the competition. I know that is the way it works in Mukwonago and with every other station owner I know. I cannot imagine getting together with my competitors in Mukwonago and trying to gouge our community. The meeting would never happen, and even if it did happen, it would not have any lasting effect.

Whatever the cause is, I know for sure that the effect of the EPA's mandate had been devastating to my business. Both of our stations are fairly new: the Citgo is 3½ years old and the Shell is 1½ years old. Both are trying to get established in the already competitive market. It used to be that my competition was the other stations in town; now with the EPA changing the rules in the middle of the game, my biggest competition is with the stations across the county line.

Over the past 2 months I have seen them sell their conventional gas for up to 30 cents a gallon cheaper than I was. They were selling it for less than I was paying for it. People flocked across the county line to get their gasoline. Numerous times every day, people stopped at my station to purchase maybe $1 or $2 worth of gas just to get enough so they could go down the road to buy the conventional gas. Many of my regular customers, even friends, left and said they would be back when things settled down.

At the conventional gas stations, their lines at the pumps would often overflow out into the streets. People are filling their vehicles and numerous gas cans with conventional gas, creating mobile bombs on the road. There are even times when police have to direct traffic around these conventional gas stations. One station owner was quoted on the news saying that his conventional gas sales were up over 200 percent; at the same time, my sales were down 38 and 39 percent at both stations, as shown on the chart provided.

During the month of May, business is supposed to begin to pick up for the summer, but as you can see by this chart, this year the opposite has happened, and June 2000 was the worst month in over 14 months.

One loophole in the EPA's mandate is that they can require us to sell the reformulated gasoline, but they are not requiring anyone to purchase it, and this is putting me out of business. To make matters worse, the gas that we have been selling for the most part has been sold at a break-even point or even at a loss. Much of the last part of May and the month of June, we sold gas at both stations making a gross profit of only 2½ to 3½ percent. When you consider that when someone pays with a major credit card, I have to pay a 3 percent processing fee, I am, at best, breaking even on those sales.

Forty-seven percent of the purchases made at the Citgo station were with a credit card, and 53 percent at the Shell station, so on all those sales I either broke even or lost money.

If we were to try and match the prices of the conventional gas, we would be out of business by now. We have tried to be as low as possible on our gas prices, hoping to hang onto some of our customers, and attempt to make up for the loss of the income with convenience store sales, but it is not enough. It is interesting to note that back when we were selling gas at 89 cents a gallon, our gross profit margin was higher than it is now.

Our business continues to spiral downward. We have tried talking to our local bank to get some help, but with both stations being so new, there is not much equity built up in them, and they, too, seem hesitant about the future of the gas business in our town. We have been forced to reduce expenses to a bare minimum, to a point that has even hurt sales by not having enough products on the shelves to sell. We have cut inventory dramatically; we have gone from 37 total employees in April to 25 at the end of June, many of whom are not even regularly scheduled. I used to have a manager at each station but now I manage both stations, in addition to working 46 hours at the register and doing the landscaping.

This crisis in our business has not only affected me and my family, but it has affected each employee who is now or has recently worked for us. Our vendors are upset because I and many of the other stations around us are not buying as much as we used to, and so they are losing sales. Some companies who deliver to us have added fuel surcharges to their invoices, and the effect goes on.

I feel we have two of the nicest gas stations you will ever see. We have invested a lot of time and money into making these stations not look like your typical gas stations. Out of concern for the environment, we spared no expense in putting in the most up-to-date gas containment and leak detection equipment we could find. The name of our company is 5 Star Stations, Inc., and we have tried to build stations that live up to the 5 Star title. I feel strongly that we can compete in the open marketplace and do well if on a level playing field with our competitors.

One of the buzzwords we hear a lot today is "equal rights." Well, I would like equal rights as well. I want the right to run my business without the EPA and the Federal Government coming in and giving an unfair advantage to my competitors by telling me I have to pay 30 cents a gallon more for my gas than they do so they can undercut me and try to put me out of business.

I want the right to be able to sell the type of gasoline my customers want. Many customers inquire about reformulated gasoline at our stations. I have not had anyone say: Good, I am going to buy my gas here because you have reformulated gasoline. The response has always been: Where do I have to go to get the good gas? When I tell them that the EPA says we have the good gas, they usually have an unfavorable comment as well. I have never had a single customer comment favorably to me about the use of reformulated gasoline; I do not know of anyone who is glad we have had this forced upon us.

In my opinion, there are only two options for solving this problem. The first is to require reformulated gasoline nationwide. I do

not see how the EPA believes that the air is cleaner 2 miles down the road across the county line than it is where we exist. Wherever you create a border area for reformulated gasoline, you will have someone like me. I used to wish it was a statewide mandate, but then I realized the people on the Wisconsin, Illinois and Minnesota borders would be in the same position I am.

If the EPA is correct in stating that Tier II gasoline is only 5 to 8 cents a gallon higher, this will still not solve the problem. I will still lose customers for a 5-cent difference. Think about it yourself: if you were to come to a gas station that is 5 cents a gallon cheaper than one that you normally go to and you know that you will get better gas mileage using the cheaper gas, what would you do? You would probably do what most people do and start buying your gas where it is cheaper and runs better in your car.

If this reformulated gasoline is the answer to our ozone concerns, then make it nationwide. If not, if it is just a placebo that really is not making any difference, then the EPA needs to go with the second option and lift the reformulated gasoline mandate in Wisconsin. I strongly prefer this option. There may be areas of the country that need it or it may be doing some good, but it is not here. The six reformulated gasoline counties in Wisconsin do not live in a vacuum, mountains do not surround us. Our air is constantly moving. It is blowing in from places like Chicago and Gary, IN. The air that they are monitoring does not originate in Milwaukee; the EPA needs to focus their attention on the source of the alleged problem—which is not here—and leave us alone.

The fact that we in Waukesha County are in a reformulated gasoline area and we have an ozone level of 84 parts per billion, according to the Wisconsin DNR Bureau of Air Management, and that Door County, WI—which is almost entirely surrounded by Lake Michigan, which causes higher ozone readings, just like the monitors in Milwaukee—their county has the highest ozone level in the State, with 97 parts per billion, and they do not have the reformulated gas mandate forced upon them.

This is only one of the reasons that cause me to question the legitimacy of reformulated gasoline in our area. It seems there are many other valid reasons to lift the mandate, including air quality studies done by independent firms.

My biggest error in going into business was building these stations in the town I have grown up in and lived in most of my life. I should have built them 6 miles down the road, across the county line. As we did the site analysis and had projections done for both stations, we did not calculate in or expect the EPA to come in and try to put me out of business. Thanks to the EPA and the Federal Government, my American dream has turned into a nightmare.

I plead with you, Chairman Ryan, and members of the Subcommittee on National Economic Growth, Natural Resources, and Regulatory Affairs, to do the right and fair thing and to do whatever it takes to permanently—not temporarily but permanently lift the reformulated gas mandate before my family and I become another statistic of a small business gone under at the hands of the Federal Government and the EPA.

Thank you.

[The prepared statement of Mr. Greenwald follows:]

Testimony of
Darwin Greenwald
Before the House Committee on Government Reform
National Economic Growth, Natural Resources,
And Regulatory Affairs Subcommittee
July 6, 2000

Mr. Chairman,

I would like to thank you for giving me the opportunity to express to you the various factors that I am aware of that have caused increases in gasoline prices at my gas stations and its effect on my business. I own two gas stations (a Citgo and a Shell station) in the Village of Mukwonago, located in Waukesha County, Wisconsin; which are located on the non-attainment border and are required by the EPA to sell Reformulated Tier II Gasoline (RFG). Six miles down the road from my stations, in the Village of East Troy, county of Walworth, Wisconsin; the stations are allowed to sell Conventional Gasoline (CG).

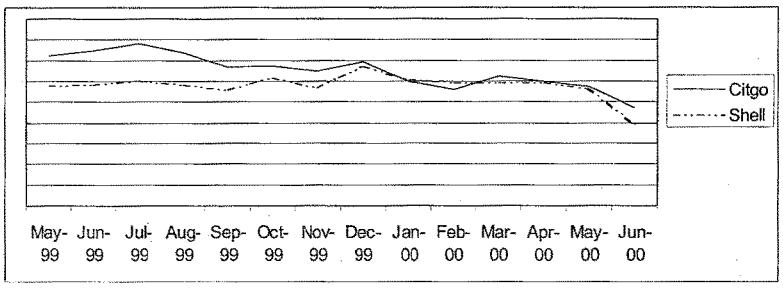
The wholesale cost of gasoline began to skyrocket to me in May 2000. This was a result of a decrease in supply of gas as the gasoline terminals prepared for Tier 2 reformulated gasoline gas as required by the EPA. The terminals were draining their supply of the "old" reformulated gasoline and cleaning them out, in preparation for the Tier 2 gas so they would be ready by the June 1, 2000 deadline. The decrease in supply of reformulated gasoline gas was so great that during the months of May and June 2000 I was not able to get Shell gasoline from their terminals in Milwaukee. Instead I had to pay extra freight costs in having the gasoline delivered from the Chicago terminals. This happened to me 7 times in May and June. The additional cost of shipping this gas from Illinois resulted in an increase in my costs of $.0177/gallon. This in addition to the higher base price of gasoline from Chicago resulted in the wholesale cost of gas to me being $.025 to $.05 higher than if I were getting it from Milwaukee. This was being caused by a decrease in supply due to the EPA's Tier 2 mandate. I had not had this problem in the past.

Another factor in the rising price of reformulated gasoline gas is that the Tier 2 gasoline costs more to produce. I've read where the EPA estimated the cost to produce the Tier 2 gas at $.05 to $.08 per gallon. It is also my understanding that the EPA has not released any cost-benefit analysis for the new reformulated gasoline, and that the EPA has not shown any scientific analysis it used to justify the formula changes and the higher costs. This leads me to believe the EPA didn't really do their homework on the additional costs, but just sent out the mandate and "let the chips fall."

I believe there are other factors that have caused prices to increase such as the higher costs of crude oil, break-downs in the supply pipelines, rising costs of ethanol, and the cost of refiners paying Unocal after they won a court case against six of the nations largest refiners for infringement on its patent of the formula for the new reformulated gasoline. (This also bothers me that the EPA can require that only a certain type of gas can be used and it can only be made the way Unocal makes it. That would be like the government saying you can only own a computer if it has Microsoft software on it.) I realize the EPA and many blame "big oil" for price gouging. I have a hard time seeing these leaders of oil companies getting together in a smoke filled room and deciding to "gouge" the Milwaukee and Chicago markets. There is always someone who will try to lower the price to beat the competition. I know that's the way it works in Mukwonago and with every other station owner I know. I can't imagine getting together with my competitors and trying to "gouge" our community. The meeting would never happen here, and I can't imagine it happening anywhere and having any lasting effect.

Whatever the cause is, I know for sure that the effect of the EPA's mandate has been devastating to my business. Both of our stations are fairly new. The Citgo is 3-1/2 years old and the Shell is 1-1/2 years old. Both are trying to get established in an already competitive market. It used to be that my competition was the other stations in town. Now with the EPA changing the rules in the middle of the game my biggest competition is with the stations across the county line. Over the past two months I have seen them sell their CG for up to 30 cents a gallon cheaper than I was. They were selling it for less than what I was paying. People flocked across the county line to get their gasoline. Numerous times, every day, people stopped at my stations to purchase $1

to $2 worth of gas, just to get enough gasoline to get them down the road to the conventional gas stations. Many of my regular customers and even friends left and said they would be back when things settled down. At the conventional gas stations there are lines at the pumps that often overflow out into the streets. People are filling their vehicles and numerous gas cans with CG (creating "mobile bombs" on the roads), there are even times when police have to direct traffic around the CG stations. One station owner was quoted on the news as saying his CG sales were up over 200%. At the same time my sales were down 38% and 39% at both stations as shown on the next page shows. During the month of May business is supposed to begin to pick-up for the summer, but as you can see, this year the opposite has happened, and June 2000 was the worst month of our last 14 months.



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To make matters worse, the gas that we have been selling has been for the most part sold at a break-even point or at a loss. Much of the last part of May and the month of June we sold gas at both stations making a gross profit of only 2-1/2% to 3-1/2%. When you consider that when someone pays with a major credit card, I have to pay a 3% processing fee, I am at best breaking even on those sales (47% of all sales at Citgo and 53% of all sales at Shell during June were with a credit card). If we were to try and match the prices of the CG we would be out of business by now. We've tried to be as low as possible on our gas prices, hoping to hang on to some of our customers and attempt to make up for the loss of gas income with convenience store sales, but it is not enough. It is interesting to note that back when we were selling gas at 89 cents per gallon our gross profit was higher than it is now. Our business continues to spiral downward. We have

tried talking to our local bank to get some help, but with both stations being so new there is not much equity built up in them, and they too seem hesitant about the future of the gasoline business in our town.

We have been forced to reduce expenses to a bare minimum, to the point that it has even hurt sales by not having enough products on the shelves to sell. We have cut inventory dramatically. We have gone from 37 total employees in April to 25 at the end of June (many of whom are not regularly scheduled, but are on an "as needed" status). I used to have a manager at each station, but now I manage in addition to working 46 hours a week at the register and doing the landscaping at both stations. This crisis in our business has not only affected me and my family, but it has affected each employee who is now, or has recently worked for us; our vendors are upset because I and many of the stations around us are not buying as much so they are loosing sales; some companies who deliver to us have added a "fuel surcharge" to their invoices, and the effect goes on.

I feel that we have two of the nicest gas stations you'll ever see. We have invested a lot of time and money into making these stations not look like your typical gas station. Out of concern for the environment, we spared no expense in putting in the most up to date gas containment and leak detection equipment we could find. The name of our company is 5 Star Stations, Inc., and we have tried to build stations that live up to the 5 Star title. I feel strongly that we can compete in the open market place and do well if on a level playing field with our competitors. One of the buzz words we hear a lot of today is "equal rights." I would like equal rights as well. I want the right to run my businesses without the EPA and the Federal Government coming in and giving an unfair advantage to my competitors by telling me I have to pay 30 cents a gallon more for my gas then they do, so they can under-cut me and put me out of business. I want the right to be able to sell the type of gasoline my customers want. Many customers inquire about reformulated gasoline at our stations, and I have not had anyone say, "Good, I'm buying my gas here." The response has always been, "where do I have to go to get the "good gas"?" When I tell them the EPA says we have the "good gas" they usually have an unfavorable comment as well. I have never had a single customer comment favorably to me about the use of the reformulated gasoline. I do not know of anyone who is glad we have had it forced upon us.

In my opinion there are only two options for solving this problem. The first is to require reformulated gasoline nationwide. Wherever you create a border area for reformulated gasoline you will have someone like me. I used to wish it was a statewide requirement, but then I realized the people on the Wisconsin-Illinois and Minnesota border would be in the same position I am in. If the EPA is correct in stating that Tier 2 gasoline is "only" 5 to 8 cents a gallon higher, this will still not solve the problem. I will still loose customers for a 5-cent difference. Think about yourself. If you come to a gas station that is 5 cents a gallon cheaper than the one you normally go to, and you know that you will get better gas mileage using the cheaper gas, what would you do? You would probably do what most people do and start buying your gas where it is cheaper and runs better in your car. If this reformulated gasoline is the answer to our ozone concerns, then make it nationwide. If not, it is just a placebo that really isn't making any difference, and the EPA needs to go with the second option and lift the reformulated gasoline mandate in Wisconsin. I strongly prefer this option. There may be areas of the country that it may be doing some good, but not here.

The six reformulated gasoline counties do not live in a vacuum. Mountains do not surround us. Our air is constantly moving. It is blowing in from areas like Chicago and Gary, IN. The air that they are monitoring does not originate in Milwaukee. The EPA needs to focus their attention at the source of the alleged problem, which is not here, and leave us alone. The fact that we in Waukesha County are in a reformulated gasoline area and we have an ozone level of 84 parts per billion according to the Wisconsin Department of Natural Resources - Bureau of Air Management, and Door County, Wisconsin (which is almost entirely surrounded by Lake Michigan -which causes higher ozone readings, just like the monitors in Milwaukee that are on Lake Michigan) has the highest ozone level in the State of Wisconsin at 97 parts per billion and they do not have the reformulated gasoline mandate forced upon them. This is only one of the reasons that cause me to question the legitimacy of reformulated gasoline in our area. It seems there are many other valid reasons to seek to lift the mandate, including air quality studies done by independent firms.

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Thank you.

Mr. RYAN. Thank you, Mr. Greenwald, for your insight and your individual story and your analysis.

What we will do is we will each do 5 minutes—Dennis and I will do 5 minutes of questioning each and we will just go back and forth. How does that sound, Dennis? Does that sound all right?

Mr. KUCINICH. Sounds great.

Mr. RYAN. Mr. Lyons, I would like to start with you. In your testimony you claim that the RFG mandate, in its isolated vacuum—or I will let you use your own words—had nothing to do with the type of price spike we had. When I spoke with your boss, Carol Browner, last week, she claimed that they work in concert with the Department of Energy and their experts in analyzing these markets. Is that correct that you work with the Department of Energy in analyzing the data that the DOE produces, that the Energy Information Agency [EIA] produces in trying to analyze the markets that you are involved in?

Mr. LYONS. Mr. Chairman, if I could just clarify. I do not believe I testified that the RFG had nothing to do with the price differential. We have consistently maintained that the RFG program at the production cost level, we would expect to see something in the neighborhood of 4 to 8 cents, and we believe that is exactly what has happened. We have never maintained that that necessarily means a corresponding retail differential of 4 to 8 cents per gallon, we have always said production costs of 4 to 8 cents. What that might mean on the retail end, frankly, Mr. Chairman, no one from my agency is qualified to say that.

Secretary Richardson and Administrator Browner have asked the FTC to look into that; that is more in their area of expertise, not ours. We have never said the production costs of 4 to 8 cents must translate into a corresponding retail cost, and in fact, the data bears that out.

If I might, Mr. Chairman, yesterday the wholesale prices in the Milwaukee area were 108.57 and the corresponding retail cost was 174.27, so indeed, there is quite a differential between wholesale and retail. But we have never said that 4 to 8 cents must translate into retail. We have asked the FTC to look into it because, frankly, Mr. Chairman, we could not account, based on our significant discussions with the oil industry and the refineries, what would account for the different differentials. We have heard from a number of the panelists suggestions of a number of things, and the Department of Energy and the Environmental Protection Agency was not able to reconcile those different factors with the price differentials that we were seeing, and, therefore, asked the FTC to look into it.

I have not come here, Mr. Chairman, to point fingers, I have not used the word "gouge," I have not used the word "collusion." I have simply maintained that we are willing to stipulate that the RFG program may have accounted for 4 to 8 cents differential, but the price increases we have seen have been in Chicago in the neighborhood of 50 cents per gallon, and we are at a loss to explain that, and so have asked the FTC to look into it.

Mr. RYAN. Let me ask you a brief question, if you could give me a very brief answer. We want to keep to the time limit. In doing this analysis on what RFG would cost at the wholesale level, did

the EPA look at how reformulated gas might affect the supply in this region?

Mr. LYONS. Mr. Chairman, yes. This was looked at back in 1994 when the regulation was developed. And I might add, we have heard the word "EPA mandate" used a lot today.

Mr. RYAN. It is a congressional mandate, for the record.

Mr. LYONS. This is a congressional mandate, this is part of the Clean Air Act; EPA did not impose this midstream or anywhere else. This was a congressional mandate that was passed in 1990 by the Congress, went into place in 1995, phase II in the year 2000. Our estimates were based on significant discussions with the industry itself.

Mr. RYAN. So the last supply estimates were done in 1994?

Mr. LYONS. Well, we certainly looked at the supply issue this spring when the price spikes began to happen. We looked into it; we had heard from a number of refiners who said that their supplies were adequate, so that is why we are at a loss to explain this. We looked at the pipeline breakage; that, we were not able to determine, would account for this. I am sure that it accounts for some of the price spike, Mr. Chairman, but not the numbers that we were seeing.

Mr. RYAN. See, this is a cause for my concern, because your own Department of Energy contradicts what you just said. The Department of Energy, in a memorandum on June 5, says that the problem we have here in the Milwaukee and Chicago region is largely a supply problem. It goes on to say, through a very elaborate study and memo, that there are several reasons brought forth with the reformulated gas mandate that has given a supply shock.

Now, I am not here to point fingers at the EPA solely to suggest that the EPA manufactured all of this. OPEC has a lot to do with this as well, and when the base price of crude oil goes up, as has been happening, that clearly increases the price of gasoline for the entire country. The problem with us here in Wisconsin is that it did not just happen—we did not get the national average, we got a huge price spike, 40 to 50 cents more for a gallon of gasoline in southeastern Wisconsin than the rest of the country.

And the Department of Energy—which is a department that I do realize the EPA relies upon for expert analysis—has said that there is a supply shock, there is a supply problem associated with this mandate. The Congressional Research Service, a very non-partisan objective think-tank within Congress, says that the RFG situation in the Milwaukee-Chicago area can be accountable for, at the retail level, between 25 and 34 cents to a gallon of gasoline because of the unique RFG situation that we have here.

I understand your analysis shows that at the wholesale, RFG in a vacuum on its own only adds 4 to 8 cents per a gallon of gas, but we do not live in a vacuum. The retail level is not a vacuum. We have several factors that on their own are not excessively high: the Unocal patent, the pipeline problems, the fact that Mr. Greenwald had to truck in his gasoline from a new place in Chicago rather than the typical place from Milwaukee, and the fact that we have our refineries at top utilization rates, meaning they are basically topped out, and the fact that the kind of gasoline we have to use here in Wisconsin is a boutique fuel, so to speak. It is

unique to this area. We cannot get the gasoline from Minnesota or from Iowa because they do not have the same kind of gasoline.

So it is a supply problem and that is not my words, that is your own Department of Energy which said in the beginning of June that it is a supply problem. So all of these factors, when combined, when brought together by the reformulated gas deadline and mandate, according to the Congressional Research Service and the DOE, have given us this problem.

I along with Senator Herb Kohl, Russ Feingold, and Jim Sensenbrenner, asked for a waiver, a temporary waiver on May 23. We saw that these unique situations were occurring here in Wisconsin, that there are a lot of factors, not just EPA factors, but a lot of factors, and that if this regulation were to actually occur on June 1, as it was scheduled to occur, we would have this huge price spike.

On May 26, the Environmental Protection Agency rejected our waiver, suggesting there was no supply problem. Then on June 5, the Department of Energy wrote in their own memorandum that, in fact, there was a supply problem, a very large supply problem which was a convergence of several factors brought together by this unique RFG mandate. The Congressional Research Service followed up with exactly the same request.

My basic question is this. In St. Louis you were able to use what you referred to as enforcement discretion in granting them a temporary reprieve or waiver from the reformulated gas mandate for a number of weeks due to their supply shocks from the Explorer Pipeline which does provide gasoline to this area as well. Why did the EPA reject the waivers here in Wisconsin and Chicago and not use the same kind of enforcement discretion that was used in St. Louis?

Mr. LYONS. Mr. Chairman, the factors that contributed to the St. Louis shortage was a pipeline breakage from a pipeline that serviced the St. Louis area for a much, much higher percentage—I believe 70 percent of the fuel in the St. Louis area.

Mr. Chairman, I agree with you there are a number of factors, and we have heard some of them today, that have contributed to a shortage and I have never maintained that there has been no shortage or tight supply. What we have said consistently is that the supply has been adequate to meet demand and was not a tight enough supply and did not rise from an acute enough situation, an extraordinary circumstance that would justify granting such a waiver under the regulations, and that is why that request was denied.

I might add, Mr. Chairman, that we received a letter from May 25 of the year 2000 from the American Petroleum Institute specifically expressing concern about the waiver application and requesting that the EPA in fact deny that waiver application. We have received a number of similar letters from other refiners who have said it would give an unfair advantage to competitors who, for whatever reason, may not have planned ahead. The American Petroleum Institute asked us not to grant the waiver, and in fact, it was the following day that that waiver was denied.

Mr. RYAN. Yes, well, that also is a compelling point. I think for the interest of this waiver discussion, waivers earlier, I suspect, would have had a much, much more profound effect; waivers now,

now that conventional gas in this area is nonexistent because of the EPA standards, would actually probably produce a price spike because if we all of a sudden got a waiver off of RFG on to conventional gas, we would not have any conventional gas in the area, and we would, in fact, experience a price spike. That is why I think the waivers earlier on made more sense than they do right now.

But I see that my time has expired and I would like to turn to Mr. Kucinich for some questioning.

Mr. KUCINICH. Thank you very much, Mr. Chairman, and again, I appreciate the chance to be here. I want to thank the witnesses. I have to say that as a Member of Congress, I have always been appreciative of the information provided to my office by the Cato Institute. I always find it quite informative, and occasionally I find something that is of great use for my office.

I am concerned about some of the testimony on page 9 of Mr. Taylor's comments for the record, and it said, "Spectacularly high industry profits are not evidence of gouging." Well, before we saw this sharp increase in the price of gasoline, even before that, Mr. Chairman, oil companies had profit increases as high as 473 percent, 371 percent, 257 percent over 1999 figures, and they were making high profits before the latest rounds of increases.

The thing that concerns me in this latest round of increases, I have a copy here of a subscription circular from an industry publication called Octane Week, and I am going to submit it for the record.

Mr. RYAN. Without objection.

Mr. KUCINICH. Without objection. Anyhow, they go on—you know, this is their promotion—"There has never been a more critical time to read Octane Week. As refiners gear up for the 2000 gasoline season, EPA issues the toughest sulfur diesel specification imaginable. And while this might be the most challenging season in years, with the new phase II RFG summer spec gasoline proving to be tough to produce, its differential over conventional gasoline shows this might be the most lucrative season in years." So the oil industry was getting ready to play RFG during a period of peak demand in order to sock it to the consumers.

Now, I understand it is the position of some that there are inelasticities of consumer demand for gasoline. Well, the truth is that the oil company knows that, and if demand is going to be constant at a period when people want to go places during their summer vacations, they are going to pay. Many people will pay it, and the oil companies can anticipate even higher profits. I mean, we are not talking about charitable institutions here, we are talking about oil companies, and in some cases, you are talking about oil companies in an industry where there has been less oil companies because of mergers, so there has been growing monopolies in oil as well.

So you know, I am not here to become moist-eyed about the oil companies and about how tough they have it. They have really been sticking it to consumers and with all due respect to the Cato Institute, I think the EPA ought to have a chance to answer this suggestion that Congress would be best advised to eliminate the reformulated gasoline mandate in its entirety, that it accomplishes absolutely nothing in the way of air quality, according to one witness.

Now, would the EPA like to respond to that?

Mr. LYONS. Thank you very much, Congressman Kucinich, I certainly would.

I think it is stating the obvious to say I strongly disagree with any suggestion that the RFG program has not been extremely successful in increasing the air quality of our Nation in the areas where RFG is used. In fact, the American Lung Association of metro Chicago has found that RFG has done more to reduce air pollution in the Chicago area than any other program that we have had.

If I can just be permitted to cite a couple of statistics to you, because I think it bears directly on this question. In phase I of the RFG program—which was instituted in 1995—the program reduced smog-forming emissions from automobiles by 17 percent and toxic air pollutions from auto emissions by 17 percent. Monitored levels of benzene—which is a known human carcinogen—were reduced by 50 percent from automobiles under phase I of the program.

Under phase II of the program, we expect further smog-forming emissions to be reduced by 27 percent over conventional gasoline and toxic air pollutants by an additional 22 percent over conventional gasoline, and phase II is expected to reduce the risk of cancer to humans from automobile emissions by 19 percent.

The RFG program, Mr. Chairman, has gotten us the equivalent of removing 16 million automobiles from the Nation's roadways and reducing 105 tons of smog throughout the Nation. Sixteen million automobiles removed from our Nation's roadways is a very favorable statistic. I think it bears in mind when we talk about 4 to 8 cents, or we could quibble about the amount that that might translate into retail. I would suggest, Mr. Chairman, that a 4 to 8 cents production cost would not rise to the level of a——

Mr. KUCINICH. I would like to cut in here a minute and just ask the EPA. According to the oil companies, Americans have to choose between clean air and cheap gas, and over the past 30 years we have enacted numerous environmental laws and regulations over their objection that we cannot afford the massive costs associated with them. Are there instances where the issue of cost was raised by the industry yet, in reality, it was not so costly to comply with the regulations?

Mr. LYONS. Mr. Chairman, we have frequently seen numerous times over the 30-year history of the Environmental Protection Agency when a new environmentally beneficial regulation is proposed that there are those who would pit that regulation against the cost of putting that regulation into play, and those who would pit environmental regulation over gas prices, I think, miss the point. Americans are entitled to clean and healthy air.

This regulation was arrived at after heavy consultation with the industry itself back in 1994, and it was approved by Congress after extensive debate and deliberation over the cost-benefit analysis, what the health benefits would be, the environmental benefits would be, and what the corresponding incidental minor cost adjustment would be, and it was ultimately determined by the Congress and by the President that it was well worth that minor expense.

And so I cannot make the point strongly enough. This is not an EPA mandate that was imposed midstream, this is a well-thought-

out, well-deliberated, well-crafted program that was contrived back in 1990 by the Congress, signed into law by the President. No one should be surprised by this; the oil companies have known for 6 years now that June 1, 2000 was coming; it was their responsibility to plan adequately for supplies.

Mr. Chairman, you mentioned the Department of Energy study. We concede that the supplies were tight, but not tight enough so as to meet the requirements of granting such a waiver.

Mr. RYAN. Well, in reclaiming time, I wonder where that threshold is a tight enough threshold. The markets were tight enough to give us a huge spike in gas prices.

Now, as far as the point of price gouging, I want to differentiate myself with my colleague from Ohio. It clearly could be happening, but I do not think either of us know that for sure. I for one do not know whether or not price gouging is occurring. That is why I, along with every other member of the Wisconsin congressional delegation, Republicans and Democrats, met with Robert Pitofsky before the DOE and the EPA did, asking him to investigate whether or not price gouging is occurring, not just in the RFG counties but in the other counties as well, and we were able to secure that investigation before the June 15 date in which the Secretary of DOE and Administrator Browner did.

The point I am trying to make is we do not know, we simply do not know. I am simply not enough of an expert to know whether or not collusion or gouging occurred. That is precisely why we have experts such as the Federal Trade Commission to do that.

Mr. KUCINICH. Would the gentleman yield?

Mr. RYAN. Sure.

Mr. KUCINICH. Just to quote Shakespeare, "Something smells rotten in Denmark."

Mr. RYAN. But the point is there are other factors as well, and it is not myself as a member from Wisconsin who is simply saying that, it is the Department of Energy, it is the Congressional Research Service, it is the maps that are before us that are pointing to many other factors that are causing the price of gas to increase which do not talk about price gouging. It could clearly be the case that gouging may be occurring and adding to the price increase of gas, but clearly, from the Department of Energy's own analysis and the CRS, there are many other factors out there, and to simply brush those other factors aside and point at price gouging and wait for the FTC to give us an answer in my opinion is just totally irresponsible.

Mr. Taylor, you were involved in this last question and this last discussion. Just in the interest of fairness, I would like to give you an opportunity to respond to the discourse that has just taken place.

Mr. TAYLOR. I appreciate that, Congressman Ryan.

First, for Mr. Lyons, there were a number of remarks that, frankly, are rather jaw-dropping. The first is the allegation which is commonly made that business anticipates that regulations will cost a tremendous amount of money, EPA says they will not, it turns out it does not, and it proves once again, according to some, that industry is either making this stuff up or that industry is

somehow nefarious, that industry is incompetent when it comes to counting beans.

The real story here is fascinating, and I cannot resist from telling it for a moment. When industry calculates the cost of a regulation, it assumes that it will be enforced fully and that the standards being imposed will be met fully, and they then calculate the cost of what that will mean.

When EPA issues a regulation, they do not necessarily calculate cost based on full implementation, based on total compliance. A classic example of this was 2 years ago when the administration issued a rule to reduce particulate matter emissions in urban areas. Particulate matter, for those who are not immersed in this jargon, is basically dust and fine particles.

EPA said it would cost $4 billion to comply with the rule; industry economists said $60 billion. Well, where is the truth? The truth is, as it turns out, is that EPA anticipated virtually very little compliance and a lot of waivers; industry calculated full compliance. And when EPA was put up against the wall a year later, they increased their estimate to $40 billion based on an increased assessment of compliance.

So this is the reason why sometimes industry estimates cost will be X whereas an agency estimates cost will be Y and the numbers might turn out differently, because generally EPA rules and regulations and mandates and standards are not fully enforced, and thus, the costs are a lot less than anticipated by industry.

Now, as far as Mr. Lyons' charge that there have been reduced emissions in RFG areas and somehow that proves that RFG has something good to do with it, this is silliness. There are a lot of things which go into urban air quality, there are a lot of sources of emissions, and emissions have been reducing across the country steadily year-in, year-out, whether it is in an RFG area or a non-RFG area. There are co-founding variables, in other words, and it would be silly to simply assess where air quality is moving and attribute all that improvement to RFG, particularly since it has not been refuted anywhere, that I can tell, modern fuel injector systems do what the fuel is designed to do already.

In other words, the technology is already there, and this from Eric Stork—no employee of the oil company—the former guy at EPA who ran these programs in the 1970's. He has no reason to make this up.

The argument that oil industries had 6 years to get involved in making things work smoothly in Milwaukee and Chicago is another bit of silliness. The industry is not a welfare organization, it does not work simply to make Congressmen happy or to make the EPA happy; industry is there to make a profit and Congress has ensured that there are virtually no profits in the refining business. There has not been a new refinery built in 30 years, they keep shutting down, even though demand is going up. That should tell you about how little money there is to be made generally in this business. They do not invest simply to make us happy, they invest to make a profit, and if Congress is going to ensure that no profits can be gained, they will not invest.

And the argument that supplies were not tight enough to induce increasing prices is the statement of someone who still does not get

the inelasticity question. If supplies are only 2 percent lower than they otherwise would be, that is 50 cents at the pump. Now, anybody who has taken an economics course understands that. That is why people at the DOE understand that and people at EPA, which generally are scientists and other analysts, do not.

Now, as far as Mr. Kucinich, I think as he realizes, profiteering can only occur if there is collusion. After all, as Mr. Greenwald pointed out, in business you make profits when you can underprice your competition and still make a profit. So only if industry gets together and colludes can any profiteering really be going on here, because otherwise there is still competition. Mobil still wants to make money, as do other companies, and to set prices without colluding is to voluntarily choose to make less money than they might otherwise would. So that is why collusion is a necessary ingredient to this profiteering.

Is there any evidence of collusion? I have not seen a bit of it. Mr. Kucinich, I have not heard any evidence suggested by EPA, DOE, or anyone else that any back door meeting has ever occurred. You say that something is rotten in Denmark. For 30 years, Mr. Kucinich, this industry has faced these investigations of collusion. For 30 years, FTC, DOE, special White House panels, special congressional investigations, all through the mid-1970's has been charged with collusion. Never once has a single shred of evidence of collusion ever arisen. The reason why is that too many of us really do not understand this question of inelasticity.

Even a small change in supply or demand in either direction will send prices moving dramatically in either direction. A small change in supply, a small reduction in supply compared to demand will send prices shooting through the roof; a small increase in supply without a corresponding change in demand will send prices collapsing through the floor.

Two years ago, as Mr. Greenwald mentioned, gasoline was selling at 89 cents a gallon. If industry had the power to gouge us or profiteer at will, believe me, that would have been the time to do it. They laid off hundreds of thousands of employees, they returned no profit whatsoever. If you talk to your stockbroker and ask him what kind of investment are oil companies over the past 20 years, they will tell you not as good as a lot of them, believe me.

It is amazing to me that somehow we are to believe that industry has all along had this power to collude at will and set prices but they only chose to do it this year and they only chose to do it to Milwaukee and Chicago. It is amazing. That is my reaction.

Mr. RYAN. I will yield to Mr. Kucinich now for 5 minutes.

Mr. KUCINICH. The FTC is conducting its investigation on issues of price gouging, collusion, price fixing, whatever you want to call it, and I think we will wait for those returns to come in. I would maintain that absent any formal meeting that takes place—and I am not about to say that I have any information on that and I do not know that anyone does—you do not have to have a formal meeting to be able to just go out and look at—as soon as someone raises their price of having one price chase another. You do not have to meet for that.

Mr. TAYLOR. Have you ever been in business, Mr. Kucinich, and been involved in these decisions?

Mr. KUCINICH. Yes, I have, and the witness, when I direct the questions, will answer it. I am not here to answer your questions, sir.

I am here to say on behalf of the people I represent that we believe that the oil companies have taken advantage of market conditions to be able to sock it to the consumers during the summer when they know the demand is the highest and to withhold from the market gasoline in order to make sure that people are going to pay more. That is what I believe; that is what people that I represent believe.

And a lot of them, frankly, do not have stock in the oil companies so they may not know as much as you do about oil company stocks, but they do pay twice what they have been paying before. At least it is costing them $30 to $40 to fill up their tanks; that is what they understand, and they understand that they are being taken advantage of.

Now, you know, I am here to hear what you have to say—and I am listening. I listened to Mr. Greenwald say there were long lines for conventional gas, and I heard the gentleman from Cato state that raising the price of RFG would avoid such lines. You know, they raised it so high that RFG sat in tanks, but what happened was that the environment suffered because no one purchased the RFG, Mr. Greenwald, and consumers suffered by waiting in long lines or paying higher gas prices, and the oil industry made high profits, because they could abuse their position of selling a product with inelastic demand.

So you know, I am impressed by the testimony by Cato but I do not think that it covers the entire situation. It seems to me that the price increase for RFG did not put any more RFG in anyone's tanks. In fact, the price hike meant a lot of RFG, as I mentioned, sat unused at the gas stations and consumers who needed gas were forced by high prices to buy dirtier conventional gasoline. I would ask the gentleman from Cato it does not sound to me like this result really helped anyone but the oil industry, do you agree, and I would be happy to hear your response.

Mr. TAYLOR. No. It was exactly what it was supposed to do.

Mr. KUCINICH. I am sorry, I did not hear that.

Mr. TAYLOR. The price increase accomplished exactly what it had to accomplish which is reduced consumption of the scarce commodity. There was not enough RFG to go around, given demand. There was a shortfall of about 4 percent in mid May and about 2 percent by early June. Prices, because of the inelastic demand for this product, had to go up a lot just to reduce consumption a little. The fact that they went past Mr. Greenwald's store and went to the other one to buy the conventional gasoline meant that the high prices did exactly what they had to do: it had to ration the scarce good.

The reason why lines formed, nonetheless, is because in border areas consumers——

Mr. KUCINICH. I have never heard Cato make a statement on behalf of rationing before.

Mr. TAYLOR. No, I am not. I am saying that prices ration scarce goods; that is what prices do. Now, when politicians ration scarce goods, they generally mess it up; when markets ration scarce goods, it usually works as intended, and in this case it did. There

was not enough gasoline to go around; that is why prices had to go up, people avoided buying the product, they went to competitors' stores that did not sell RFG, and that is one of the reasons why lines formed there, there was a border area.

Mr. KUCINICH. I am sorry, but I have heard the gentleman argue both sides of this question and it is very impressive. On one hand you have said that gasoline, you have inelastic demand, and there is a point at which in your prepared testimony you stated that people are going to keep buying it up to a point. On the other hand, you are saying that people will not buy it, there is a shortage, and that helps to provide for prices to go up because there is a shortage. Which is it?

Mr. TAYLOR. Gasoline demand is inelastic, but not zero. In other words, as economists will tell you, if you increase prices by 1 percent, demand will decrease by 1/20th of 1 percent. In other words, consumers do not react very quickly or very efficiently to higher prices. Now, that is what makes gasoline different from apples or frozen food or something like that. If the price of apples goes up, maybe I will buy an orange instead; it is easy to transfer. But gasoline is not like that.

Now, high prices can affect consumption, but the price hike has to be very steep. In other words, if there is a 4 percent difference between supply and demand, prices have to go up 100 percent. According to what economists tell us about consumer demand for gasoline, it is different than consumer demand for other things, and what do you know, there is about a 4 percent shortfall between supply and demand in this market, according to everybody who has examined the data that I am familiar with, and that correlates quite efficiently with the 100 percent price increase. It seems to me the market realties of consumer demand for gasoline explain everything we need to explain.

Mr. RYAN. We are going to give Mr. Kucinich another 5 minutes simply because he has a flight to catch.

Mr. KUCINICH. And I appreciate that. We have 5 minutes. Is that right? OK.

Again, to the gentleman from Cato, you testified that the oil industry did everyone a big favor by raising prices when you said, "Prices had to go up substantially to bring demand in balance with supply. If they had not, then the Milwaukee-Chicago area would have undergone a replay of the 1970's, when long gasoline lines and dry service station pumps traumatized the nation." That was in your prepared testimony.

However, Mr. Greenwald testified there was no threat of long lines, because consumers fled to nearby stations that sold conventional gasoline.

Now, would you, sir, explain why this region would have seen long lines even though conventional gasoline is available nearby?

Mr. TAYLOR. Well, the reason why long lines did not form in the Chicago-Milwaukee area is because prices went up and moderated demand by about 2 percent. When EPA and DOE asked refineries and asked merchant facilities do we have enough supply, their answer was yes. Well, of course their answer was yes because prices had gone up enough to reduce demand by about a couple of percent, which balanced the market.

Now, given what we know, if prices did not go up, and let's say they only went up by a nickel, we know that that would reduce demand by only a smidgeon. If there was 2 percent or 4 percent less gasoline in the market than there is demand for it, there is not enough gasoline to go around. That just follows. If there is not enough gasoline to meet demand, given price, then shortages will exist.

Now, why were there lines in the border area where they were selling conventional gasoline? In that particular circumstance, of course, drivers avoided the high price—which the high price was designed to do, reduce demand—they went to a borderline area, bought this gasoline. You did not see gas lines anywhere else except at these borderline service stations.

So in other words, there is no mystery here. If you do not believe that high prices affect demand, then I am not sure what to say. If you do not think that the prices had to be this high to affect demand, again, I am not sure what to say.

Mr. KUCINICH. Well, I would say that consumers kept buying the gas. They became very upset about it because it started to affect materially their quality of life, because we can have a nice little esoteric discussion about supply and demand here, but the reality outside of this chamber happens to be that people have their lives affected by these high prices and they want to know what is happening, and I have to give the gentleman from Cato credit because he is making an attempt to try to explain the position of the oil industry, when in fact, the oil industry has not anywhere come before——

Mr. TAYLOR. Excuse me, Mr. Kucinich. I am not explaining the position of the oil industry.

Mr. KUCINICH. No, excuse me.

Mr. TAYLOR. You made an accusation.

Mr. KUCINICH. Mr. Chairman.

Mr. RYAN. We will have order. You have to respond to his questions.

Mr. KUCINICH. You may not be familiar with congressional hearings.

I thank you for your testimony. It is time right now—I have to go catch a flight. I would hope that the EPA at some point in the rest of the hearing would be able to speak to whether or not they are advocating replacing the RFG program and they have a particular program that they would advocate to bring about similar improvements in air quality.

I want to thank the Chair for giving me this opportunity. It is nice to work with you. We do not always agree on things but we are here to try to answer questions that I am being asked by my constituents, and frankly, that is why I am here, to represent people in the 10th Congressional District from Ohio and across this country.

Thank you, Mr. Chairman. I applaud the work you are doing for your constituents.

Mr. RYAN. Thank you, Dennis. I really appreciate you coming by.

[Applause.]

Mr. RYAN. I just want to thank Congressman Kucinich for traveling up here from Cleveland. He spent a good portion of the day

leaving his family and his district to fly up here from Cleveland, so I just want to thank you very, very much for doing that.

We are going to continue on with questions, but I wanted to give him ample time to get his questions in before he had to go catch his flight.

We will come back to this issue with the EPA and with Mr. Taylor, but I would like to involve the other witnesses as well, and specifically I would like to get into the ozone transport issue that you have identified, Mr. Koerber. Mr. Koerber, looking at your maps, and actually looking at your map on page 3, on No. 2—and I know everyone does not have these maps, but the testimony is available outside—looking at the 1997 to 1999 graph where you explain that the 1-hour ozone air quality levels in the Lake Michigan region have improved in the last 10 years, that the number of sites measuring a violation of the standard have decreased from 25 to 6, and the magnitude of peak violation has actually decreased. What is the lowest point of your Wisconsin point which is 0.128, where is that? Is that Milwaukee?

Mr. KOERBER. That is actually in Kenosha County near Pleasant Prairie.

Mr. RYAN. No. That is the one that you have down on the border there. Correct?

Mr. KOERBER. Correct.

Mr. RYAN. And then the one up on top?

Mr. KOERBER. Sheboygan, I believe.

Mr. RYAN. That is Sheboygan. So in between Sheboygan and the Illinois-Wisconsin border. Correct?

Mr. KOERBER. Right.

Mr. RYAN. So from the 1997 to 1999 region, the 1-hour standard has not been hit in the area below Sheboygan and above the Wisconsin-Illinois border. Is that correct?

Mr. KOERBER. Right. That is the only area that currently violates the 1-hour ozone standard in the Lake Michigan region.

Mr. RYAN. It is the 1-hour ozone standard that determines nonattainment. Correct?

Mr. KOERBER. That is the current basis that EPA used. As you may be aware, a couple of years ago EPA adopted a new ozone standard, an 8-hour ozone air quality standard, which has been challenged and subsequently appealed to the Supreme Court.

Mr. RYAN. That is right; that is a court challenge that is coming out in the near future. The 8-hour map is the one you have on the bottom of the page. Correct?

Mr. KOERBER. Right.

Mr. RYAN. And the most recent one, 1997 to 1999, I believe, is the one you have on the right?

Mr. KOERBER. Right.

Mr. RYAN. And the one on the left is the up above 1-hour standard. Correct?

Mr. KOERBER. Right.

Mr. RYAN. So under the current EPA 1-hour standard, all of the areas above the Wisconsin-Illinois border and below Sheboygan are within attainment—correct—according to the 1-hour standard from the 1997 to 1999 period? Am I reading your map correctly?

Mr. KOERBER. Between Sheboygan and the State line, going from north to south, those are in non-attainment.

Mr. RYAN. Those are in non-attainment.

Mr. KOERBER. Those counties are considered to be in non-attainment.

Mr. RYAN. I understand that. But where the meters or the measurements triggered a non-attainment measurement, that is the Wisconsin border and then Sheboygan, not in between. Correct?

Mr. KOERBER. A number of counties between Sheboygan and the State line are also classified as non-attainment, even though monitors in those counties may not currently be showing a violation.

Mr. RYAN. Right. OK, thank you. Since there are only a handful of days, usually one or two a year, when counties such as Racine and Kenosha exceed the 8-hour standard—which is not in place now—and they have not exceeded the 1-hour standard in the last 3 years—which is in place right now—is it safe to say that if Racine County and Kenosha County were not sandwiched in between Milwaukee and Chicago, say in the western part of the State, over by Janesville or Prairie du Chien, that they would not be in the non-attainment area? Meaning, is it safe to say that if Racine and Kenosha were not between Milwaukee and Chicago, it would be in attainment?

Mr. KOERBER. I think that is a question for Mr. Lyons, because EPA is actually in the business of classifying areas, but for me to respond to your question, I would agree with you. It is a matter of geography. The approach that the States have taken, the Lake Michigan States, is to recognize that we have a regional air quality problem which requires a regional solution, so involving a number of counties throughout the region need to adopt emission control regulations in order for the entire region to meet the ozone air quality standard.

As you mentioned earlier in your opening remarks, the local contribution might be about one-third of the ozone problem that we are seeing in this area which means two-thirds is coming in from outside, so clearly there is a very heavy regional contribution that needs to be addressed, and EPA has a number of programs in place with requirements for controls on power plants, industrial boilers, their new Tier II low sulfur standards for motor vehicles, a number of programs focused on reducing the regional contribution. Programs like RFG are focused more on the local contribution, specifically the VOC emissions within the local urban areas, Chicago, Milwaukee, Gary.

Mr. RYAN. So given your data and looking at the statistics on your maps and your modeling, you can basically say that those who live in Racine and Kenosha Counties, sandwiched in between Milwaukee and Chicago, are essentially through the mandates paying for the pollution that is being created, based on your wind charts—I know it is a crude term—are paying for the pollution that is being emitted from Cook County, IL, Lake County, IN, and those areas.

Mr. KOERBER. They certainly are a recipient, but it also needs to be recognized that they are a source. Because they are within the Lake Michigan region, they do contribute locally to the problem. They do not contribute as much, I certainly agree with you, Mr. Chairman.

Mr. RYAN. And if these two counties, Racine and Kenosha, were not within the region, if they were in western Wisconsin, they would not be designated in non-attainment. Correct?

Mr. KOERBER. Correct. It is a matter of geography here.

Mr. RYAN. So it is a matter of geography. I think that is just a very compelling point that because Racine and Kenosha are where they are, they are not a significant contributor to the ozone pollution as measured by the EPA, but because of where they are, they are designated in the non-attainment zone and thereby required to have reformulated gas. That is essentially a summary of what we just discussed here?

Mr. KOERBER. The term "significant" that you mentioned has come under challenge over the last several years. I do not know exactly what their contribution is. Certainly they emit less so they contribute less than, say, Cook County, the Chicago area, but because they are within the region, they do have some contribution. It is less than Cook County, but there is some.

Mr. RYAN. And Kenosha County is 1/100th of Cook County and Racine is around the same area?

Mr. KOERBER. I do not have the specific numbers in front of me, but I do not doubt that.

Mr. RYAN. I think that is what we calculated from your maps.

Mr. KOERBER. OK.

Mr. RYAN. Let me get to you, Sheriff McReynolds, briefly. Those are probably your cars right out there that we hear out the window now. What kind of impact did you foresee in your budgets? When you do your budgeting—and you probably can speak to the police department and the fire department, because I know you are very familiar with how they do business—when you are putting together your transportation budget for Racine County Sheriff's Department, do you factor in price fluctuations in gasoline? And clearly, you did not factor in this kind of price spike to gasoline. I would just like to ask you to repeat from your testimony what kind of hit this did to your budget for the gasoline prices.

Sheriff MCREYNOLDS. Well, one thing during the budget process that we figure in and that we did notice and look back, from the year of 1998, comparing 1998 to 1999, the gas usage for our operation—and I should clarify that, the gas usage that we found for Racine County, and that would be some other vehicles, not just the sheriff's department—went up about 19,000 gallons from 1998 to 1999, so we did adjust in our budget for 2000 for that, but what we did not do is adjust for the spike that we were experiencing in the year 2000.

Now, also looking at it, we actually, in discussing this, we were kind of surprised at the number of gallons that we had been using compared to other years, because our automobile usage has not increased. I mean, the number of cars we have out on the road every day has not increased, our number of staff people has not increased.

Mr. RYAN. What do you think the cause for that is?

Sheriff MCREYNOLDS. Well, you know, I do not have any scientific evidence, but I do not think that we are getting the mileage that we were at one point. That is just a gut feeling from my opinion; I cannot substantiate that with any good figures. But we have

seen increased gallons going up every year, so we do adjust for that but we do not adjust for the spike.

Mr. RYAN. With this hit to your budget, what will you have to do now to compensate for that? Are you going to have to cut back on driving, on policing certain areas, or what are you going to try and attempt to do to solve this?

Sheriff MCREYNOLDS. What will happen, we are not going to advocate that we are going to cut down on patrol time, that we are going to do less investigations. We will start looking at this about October 2000, and what will happen is one of our line items in our budget that we have saved money on will have to be used to offset the cost in gas prices and the increase.

The thing that will happen, though, is that looking at 2002 budget, if this would continue at the rate it is, something will have to suffer within our operation. And a lot of times when those types of cuts occur, it is the preventive side of our operation that gets cut, it is your Deputy Friendly programs, your DARE programs, those types of programs which I think are essential but really nonessential when you are taking care of responding to calls and serving the public.

Mr. RYAN. Mr. Greenwald, you mentioned that—did you not say an East Troy station was the one you were comparing to? I actually drove by there quite a bit and saw those lines, and I think the radio was broadcasting that there was cheap gas over in East Troy.

You mentioned that it was 30 cents cheaper in East Troy which is in Walworth County, a non-RFG county, than what you had to sell it for. Clearly, as Mr. Taylor mentioned, demand is not totally inelastic, it is not zero, so a 30-cent difference and then the perception that the mileage difference exists has changed consumer behavior. How long can you sustain that kind of a difference? How long do you think—did you calculate how long you would have been able to sustain that, and what do you think, in a nutshell, your consumers were saying and what was their impression as to the cause for that, and what does this do to you in your business as far as sustaining that kind of differential?

Mr. GREENWALD. As far as sustaining it, it has been very difficult. We have not made any projections; all we know is that I guess the answer is not long—we are talking months, not years, that we could last at that present rate. The consumers, we have had some at the beginning who came in and were actually mad at me, feeling that I was making this big profit off of them. I had to explain to them that it is not me, and most of them seemed to understand that. But in the meantime, like I said in my testimony, most of them had the comment that, well, when things settle down, hopefully we will be back, but that does not help the immediate need.

When you are talking for us a tank load of gas would roughly cost around $10,000—now the cost has gone up to around $15,000. Well, when you get maybe two loads a week—we used to get them every other day, sometimes even more—now you get them twice a week and you are not making anything on it, it does not take long to go in the hole.

I think maybe initially there was a shortage of conventional gas—or of reformulated gas, but when the price difference took

place, actually the opposite happened. There was a surplus, from what I understand, of reformulated gas because nobody was buying it. They had time to bring it in and let it sit in the tank, but at the same time, conventional gas, they could not keep up. If my Citgo station was across the county line, I would not have been able to get gas for a week from Milwaukee, because the tanks were drained out; they would have had to go to Madison or Illinois.

So by putting in reformulated gas, it has not, I do not think, made any—I have a hard time seeing where it would make a big decrease in the environment because people are still going somewhere to buy conventional gasoline. We have always had problems from day one of people wanting the conventional gas. And to think that we are making the big profit or big oil is making the profit. Congressman Kucinich mentioned these "astronomical profits" and this was during the time when gas was $1.25 and sometimes less than $1. You know, when milk prices go up, I do not see a big study, the Congressmen getting after the farmers saying you guys are gouging us out there, but yet in the oil industry that seems to be the mentality, that that type of thing is going on.

Things are getting better. As you mentioned, prices have started coming down and people are starting to come back, but we are not anywhere near where we were a year ago. Our stations are new, our projections show that every year business should be building, and that is not happening now. It was doing that up until around the June turnover time, then business just dropped off the charts.

Mr. RYAN. If I could ask you to pass the microphone down to Mr. Lyons, and we will involve you, because I know Dennis wanted to get you back involved in the mix of things, and sorry to make you guys keep passing the mic around.

Mr. Lyons, the reason I wanted to ask Mr. Greenwald to just answer before your questioning is I think there is a real life example, a case in which 2 miles—is it 2 miles that separated?

Mr. GREENWALD. Two miles to the border, 6 miles to the station.

Mr. RYAN. Six miles to the station, 2 miles to the border. You saw a difference in price of 30 cents per gallon of gasoline, a distance of 6 miles between these two stations where the non-RFG Walworth County gasoline station in East Troy was 30 cents lower than the RFG gasoline station in Mukwonago. Do you believe that that differential is because of price gouging?

Mr. LYONS. Mr. Chairman, I really do not know what would account for that differential. I strongly believe that the RFG program, in and of itself, does not account for that price differential, as I have stated earlier. It would account for a small portion of that price differential, but I cannot account for what would completely account for that, no.

I might add you have to draw the line somewhere. The lines have been drawn at the Milwaukee-Chicago-Gary, IN non-attainment area, and Mr. Greenwald's gas station is located in a border area of that non-attainment area. Unfortunate as it is, I believe that his situation represents somewhat of an anomaly similar to what you would have with tobacco taxes or alcohol taxes in State border areas or county border areas, but we do have to draw the line somewhere, and the way the line has been drawn is with Milwaukee, Chicago, and Gary, IN. That line actually is based on a census

tract which involves a non-attainment area that goes back to the Clean Air Act Amendments of 1990

I might add it was the Governor of the State of Wisconsin that requested that the Milwaukee area be included within that Chicago-Gary, IN area rather than be separated out.

Mr. RYAN. And that is, I think, one of the reasons why the Governor and the State assembly and others are proposing a lawsuit to try and get Wisconsin out of the Chicago attainment area, based on the newer evidence revealed by the charts that we have just been seeing to give us our own attainment area.

But given the fact that we are in the same attainment area, I would like to ask a question which I think is very compelling, posed by a professor from a local university here, from University of Wisconsin-Parkside, Dr. Frank Egerton, who makes a compelling point in something that I think has been handed out here, that if the air quality in southeast Wisconsin can be improved by placing greater control in Illinois and on their air that blows into Wisconsin, that would be great he says. Let me ask you this—and for Mr. Koerber as well—if the air quality was significantly controlled and improved in Illinois, meaning specifically Cook County and possibly Gary, IN which is Lake County, IN, would that improve our air here in Wisconsin?

Mr. LYONS. I believe it would, Mr. Chairman, and in fact, EPA has proposed new tighter NOx standards for NOx emissions and has required the State of Illinois and the State of Indiana—this actually was proposed over a year ago; it was stalled in litigation for 1 year; the courts have now recently lifted that stay and have ordered the State of Illinois and the State of Indiana, among others, to submit a plan under what is known as the NOx SIP call. That would have significant NOx reduction both in Illinois and Indiana, as well as across the border into Wisconsin, and I think this area would benefit greatly from that.

However, Mr. Chairman, this area still has its own emissions and the NOx is a regional component of the smog and ozone problem. You still need VOC, volatile organic chemical emissions reductions locally right here in this area in order to ultimately come into attainment, and the VOC reductions come, in large part, due to the RFG program.

Mr. RYAN. But we are producing 1/100th of Cook County, so it seems to me that the statistics bear out that given the way the regional wind patterns are directed, given the fact that we produce 1/100th of the emissions coming from Cook County and Lake County, IN, that that is where the brunt of the burden ought to be borne. I think that is one of the reasons why many of us would like to see a separate attainment area for Wisconsin.

I think it is just very unfortunate that those of us in Racine and Kenosha Counties are saddled with this kind of designation, this kind of mandate simply because of where we are located geographically, and that if we were located over by Janesville or Lake Geneva, we would not have this mandate, given the current makeup of the VOCs in Racine and Kenosha Counties.

Mr. Taylor, I would like to actually turn to you for a second. I know there was a good back and forth going on there, and you have done a lot of studying on this. I would like to ask you for your com-

ments, and what I would like to get to is what are the reforms that are out there that we can do to go after the emissions, go after the source of the pollution rather than necessarily the recipients of the pollution, and what in your opinion is your response. I know Mr. Kucinich and you went back and forth and I know you wanted to comment about that, and I wanted to give you that opportunity as well.

And if anybody else wants to comment on some of those questions, I would be happy to offer that opportunity to any other witnesses.

Mr. TAYLOR. Regarding the back and forth with Congressman Kucinich, Mr. Chairman, I am unusually sensitive to suggestions of motive. It is one of the reasons I do not like oftentimes being involved in politics, and twice Mr. Kucinich made a suggestion that my motives were less than pure. He suggested that maybe somebody does not know as much about oil companies as I do because they do not have stock. I do not own any stock in oil companies but I do look at a business page and understand that they are not a particularly profitable industry, say, compared to the telecommunications industry.

And second, I do not represent big oil, I do not represent oil companies, I have no idea what their opinions are, they do not talk to me, I do not talk to them. The opinions that I am offering today are the opinions of every economist who has spent more than 20 minutes looking at the data regarding the market in this area, and I get rather sensitive to suggestions that——

Mr. RYAN. If I could just ask, please. Mr. Kucinich is not here to defend himself, so if you could just stick to the topic.

Mr. TAYLOR. All right. Now, regarding the issue of pollution, I thought it really ironic. One of the reasons that we all celebrate the Clean Air Act is theoretically it allows us to protect ourselves from other polluters in other areas. In other words, if I were to say, well, why do we not just allow Chicago to worry about Chicago's own pollution, why do the feds tell Chicago how to reduce pollution, why not just leave it to Chicago? Well, someone would say, well, if we did that, then Chicago would just pollute all the nearby areas at will; they would maybe not optimize their control practices, and they would impose pollution burdens on Kenosha and other cities and towns. That is why we need a Federal law to make sure that local communities do not impose pollution burdens on somebody else who does not want them.

Well, here we are 30 years after the Clean Air Act, and what is happening? Places like Chicago are imposing their pollution burdens on other neighboring communities and getting away with it. Everything the Clean Air Act was supposed to address when it comes to urban ozone is being unaddressed today by the EPA.

What should we do about that? I think one thing we could do and should allow are communities to sue neighboring communities that are imposing these environmental burdens. Today most courts will not accept a suit from, say, the city of Racine against the city of Chicago based on pollution burdens it is imposing, because the Clean Air Act preempts such suits. In other words, the Clean Air Act is implicitly suggesting that the Federal Government has all property rights in this area, Racine has no property interest here,

and that the right place for adjudication of this dispute between, say, Racine and Chicago, is in the halls of Congress.

Far better, I think, to allow Racine to exercise its own prerogatives and to initiate suits against those who are polluting it and imposing burdens. We could allow this sort of regime in such a way, I think, as to alleviate much of the need of the Clean Air Act, because the Clean Air Act is not accomplishing what it is supposed to accomplish. Just the virtue of the fact we are having this debate tells us that the Clean Air Act is not living up to what it is advertised to do.

Mr. RYAN. Yes, Mr. Koerber.

Mr. KOERBER. If I could, a bit of history, Mr. Chairman. Twelve years ago, the State of Wisconsin sued Federal EPA over ozone transport. That led to, among other things, the Lake Michigan Air Directors Consortium and the regional approach that we are trying to take with our four States to address this problem within this air shed. We are trying to account for the differential contributions of areas like Racine and Kenosha versus Cook County, Chicago area, Gary, IN. So that clearly is a factor that has gone into the policymaking in assigning the relative contributions in developing control strategies.

But as Mr. Lyons noted earlier, the general approach to adopt NOx controls on power plants and industrial boilers regionally and to adopt VOC controls locally has been shown through our studies to be the most effective approach for this area to achieve the 1-hour ozone quality standard, and preliminarily, to also meet the 8-hour ozone air quality standard.

Mr. RYAN. Mr. Lyons.

Mr. LYONS. Yes, Mr. Chairman. A lot has been stated and I will not be able to respond to each of the points, but certainly I would agree with Mr. Koerber that we work very closely with his organization and our State partners in ensuring a regional approach in reducing smog in the ozone non-attainment area. We feel very strongly that a regional approach is the only way that we will ever achieve the goals that we need in the NOx area. And again, I would like to re-emphasize the VOC reductions need to come locally and the RFG program is a significant part of that.

I would also add that, Mr. Chairman, you are very much correct that Chicago and Gary produce a much higher amount of smog than this area here, but I might note that they have reduced their smog in almost a corresponding fashion: the larger the emissions, the larger the reductions there will have to be, and they are making significant progress in that area. I think that those benefits will be seen here in Kenosha County.

Mr. RYAN. Let me ask you this, just on behalf of the Illinois delegation, I think, did they not appeal to you for an emissions credit from the RFG mandate?

Mr. LYONS. Yes, they did, Mr. Chairman, and the agency right now is proposing to approve a portion of that credit. It is not as significant as the State of Illinois initially proposed but it is something more than the EPA was initially proposing to do. So that is still under review right now, but I believe that the end result will be a credit. That might have a minor effect on production costs, very minor. It is really kind of a tempest in the teapot, I think.

Mr. RYAN. Well, I would like to summarize and say I think we reached the purpose of this hearing, and the purpose of this hearing was to hear all sides of the debate, hear from who is being affected by high gas prices and hear from all different sides of the debate as far as what has been going on.

We in the Wisconsin congressional delegation, meaning myself and other members from the Wisconsin congressional delegation, have repeatedly appealed to the EPA for waivers early on in the hopes that we could have some more time to have a smooth transition into the reformulated gas mandate. Those waivers were denied, and I think that I would agree with Mr. Lyons now that if those waivers were actually given today we would have a supply shock, because we do not have conventional gas here in southeastern Wisconsin.

The problem, as I have seen it, from listening to the EPA, from reading internal documents and studies, from the Department of Energy, the Congressional Research Service, and many others, is that this regulation and the timing of it, in conjunction with all of these other factors, the Unocal patent, the transportation costs and problems, the supply disruption from the pipeline—which is still not at full capacity—all of these factors combined, on their own are not a large total, but all these factors combined and brought together by the imposition of this mandate on June 1 balkanized the market in Illinois and Wisconsin.

And what I mean when I say balkanized the market, it placed us out of touch, it said that the gasoline in Wisconsin, the gasoline in Illinois is different than everywhere else, we cannot tap into reserves over in Minnesota, over in southern Illinois, in Iowa, we have a unique situation here. The situation was defined unique by the Department of Energy.

The price that has been affixed by the most recent studies suggests that the RFG mandate, in its unique situation, accounts for about 25 to 34 cents a gallon of gas. Thirty cents was a gallon of gas difference between Mr. Greenwald's pump and that which was in East Troy. Maybe that hits the mark right there.

The point that was frustrating, I think, from consumers in southeastern Wisconsin, from those of us trying to get this temporary regulatory relief, is that your estimations, your models were way off the mark. The models that we were told was that the price of gasoline would be absolutely minimal at the pump, at the retail level, when phase II of RFG came into place. What then occurred was a 40 to 50-cent change, meaning that we were paying 40 to 50 cents more for a gallon of gas than the rest of the country.

Was price gouging the cause for that? Well, the Congressional Research Service and the Department of Energy say no. Is price gouging a part of this? It certainly could be, and I think that is why we asked for the experts at the Federal Trade Commission to determine that, but to suggest that that is the only answer, when in the face of all this other evidence, when in the face of the internal documents with the Department of Energy, the Congressional Research Service, when in the face of the fact that we have what is typically referred to as a balkanized market, is irresponsible, I believe.

So hopefully from this we will learn a couple of lessons. We will learn the lesson that it is unfortunate that Racine and Kenosha Counties are between these areas that if they were over where Janesville is, so to speak, we would not have the reformulated gas spikes. It is unfortunate that we as a country have become more dependent on foreign oil to the point where we are now 50 percent dependent on foreign oil. It is unfortunate that when trying to clean up our air, we cannot pinpoint the source of the pollution and treat it at the source; rather, in many ways we miss that and go and treat the pollution where the wind blows and where it ends up being.

So hopefully from this hearing we will have gained more insight as to the different explanations that are out there and hopefully the Environmental Protection Agency in the future, when it is doing its cost estimates, will not do simply a national average estimate of what is going to happen in the country as a whole, but it will look at the individual regions; it will look at the individual unique situations in regions like Milwaukee and Chicago.

The cost estimates from the EPA did not incorporate what would happen in individual regions. Rather, it just said nationwide. That is unfortunate. And had we been given the same kind of enforcement discretion such as the one that St. Louis got, whose prices did not spike as high as ours, I think we could have avoided this kind of crisis that we have incurred.

So the goal now is as prices are declining—which is a good thing—they are still high but they are declining, the goal now is to try and learn from this, and I hope the lesson that the EPA learns is do regional analyses, look at the separate regions, and hopefully for those of us who are in public policymaking, who are truly interested in cleaning up our air, that we do it in the most common sense, scientifically based method that is attainable for us.

So no one is right 100 percent in this issue, I think. There is a lot of finger pointing that is going around here. Hopefully we have gained some more insight into this issue, and I want to thank those of you who have traveled large distances to get here. Specifically, Mr. Taylor, I know you came from Washington, DC; Mr. Lyons and Mr. Koerber, I know you have traveled a good distance to come here; and Mr. Greenwald, thanks for coming over from Mukwonago; and Sheriff McReynolds, I know it is a few blocks but I know you are a busy man, and I appreciate you taking your morning out to share with us your insight.

I appreciate those of you for coming, and right now I will adjourn this hearing.

[Whereupon, at 11:14 a.m., the subcommittee was adjourned.]

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