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ANWR'S BENEFITS FOR SMALL BUSINESS

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SUBCOMMITTEE ON REGULATORY REFORM AND OVERSIGHT

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ANWR'S BENEFITS FOR SMALL BUSINESS

THURSDAY, MAY 19, 2005

HOUSE OF REPRESENTATIVES
SUBCOMMITTEE ON REGULATORY REFORM AND OVERSIGHT
COMMITTEE ON SMALL BUSINESS
Washington, DC

The Subcommittee met, pursuant to call, at 3:07 p.m., in Room 2360, Rayburn House Office Building, Hon. Todd Akin [Chairman of the Subcommittee] Presiding.

Present: Representatives Akin, Westmoreland, and Bordallo.

Chairman AKIN. The hearing will come to order. This is a hearing on the subject of ANWR, and I believe that we are going to have a double panel situation with our first witness being my good friend Congressman Steve King. But let me start with a quick opening statement.

I would like to extend a warm welcome to those that are here and have taken time out of their busy schedules to testify before this committee. First of all, we are here to discuss an issue which I think all of us recognizes as one of high importance, and it is important particularly not just to the oil and gas industry but the whole future of our country and our energy needs as a nation.

We are going to be taking a look at the question of drilling in ANWR, and it is a sensitive topic for a variety of people and one that deserves to be considered with diligence and care. Now, opponents of this policy decry what they call the inevitable apocalyptic fallout of the environment.

Yet, over the next 20 years, America's oil consumption will continue to rise even after increases in renewable energy supply and energy efficiencies are factored in. That is why safe and efficient drilling in ANWR is so essential. Today our witnesses have been asked to come to speak about this issue from an often overlooked perspective, that of business, particularly small business. The intent of the hearing is to illustrate the benefits ANWR will have on small business owners.

There is no doubt that small business owners are leaders in innovation. They pay the majority of our nation's taxes, employ the majority of our nation's workforce, and more specifically, according to recent Bureau of Labor Statistics data, employees of small businesses in the oil and gas exploration industry average an income of $3,214.16 per month. This wage is higher than any other nonmining industry.

Keeping this in mind, at current levels, U.S. crude oil production is expected to decline by 1.5 barrels a day by the year 2020. This drop in production translates directly to thousands of lost jobs in an industry that has already lost a half a million jobs over the last 10 years. Oil exploration in ANWR will revitalize this important industry, creating millions of dollars in opportunities for our small businesses, not just in Alaska but throughout the Nation.

One of our guests today, Ms. Karen Wright, president and CEO of Ohio's Ariel Corporation, has travelled all this way to explain to us how manufacturing in the Midwest will get a much-needed jolt from oil exploration.

The subject of energy exploration in ANWR is not a new one. A segment of Alaska labeled 1002 was set aside by Congress in the Alaska National Interest Claims act of 1980 to study the feasibility and potential yield of production area; 1002 would only use 2,000 acres of ANWR's 1.5 acre coast line and could yield up to 700,000 jobs.

My friend, Congressman Steve King, who has been very active in this issue, has offered to share some critical insights on our need to proceed with energy exploration as well as how to best go about it from a legislative standpoint.

[Chairman Akin's opening statement may be found in the appendix.]

Welcome, Steve.

Mr. Gerry Hood is also in attendance today to explain what impact drilling in ANWR will have on the overall development of small business domestically, the opportunities small businessmen have been able to take advantage of as a result of projects under way in Prudhoe Bay, the Nation's largest energy complex.

Professor Eban Goodstein of Lewis and Clark College has come here from Portland, Oregon, to discuss certain economic ramifications that he feels should be taken into account when discussing this important issue.

Witnesses, I thank you for coming.

Before we get started, I would just like to greet my colleague, Ranking Member Ms. Bordallo of Guam who is, I am told, on her way immediately, and we will have her make a comment. But we like to keep things moving here.

So in her absence, also, Congressman Westmoreland, thank you for being here because, if you weren't here, we couldn't get started. I like to keep the hearings moving.

Chairman AKIN. So let us go directly to our witness, Steve, welcome. We are eager to hear what you have to share with us. Thank you.

STATEMENT OF THE HONORABLE STEVE KING (IA-05), US HOUSE OF REPRESENTATIVES

Mr. KING. Thank you, Mr. Chairman, I appreciate you holding this hearing today, you and Ranking Member Bordallo and the gentleman from Georgia. As I listen to your opening comments, a lot of things about energy raced through my mind. I would ask also unanimous consent to revise and extend my remarks and enter those into the record.Chairman AKIN. So ordered.

Mr. KING. Thank you. That will allow me then to maybe flow a little more freely about some of the things that I think are important with regard to ANWR.

My involvement, first, I represent Iowa's Fifth Congressional District. It is the western third of Iowa. We sell—we are fourth in the Nation of Congressional districts on the value of agricultural products sold. Yet we sell large commodities, so we are producing a lot of agriculture.

Natural gas costs are killing us there. We get beat up on both ends, because it is an input cost. It is a grain-drying cost, and it is a harvesting cost, et cetera, both gas, diesel and natural gas, or all three of those. So it is essential to us. We also produce ethanol and biodiesel on it. We are an energy export center from that perspective. We have a lot of wind energy up, about 359 huge wind chargers are right here where I live. So we are not proprietary on energy.

My point is that there is a huge energy pie out there that is comprised of crude oil, natural gas, wind energy, hydroelectric, ethanol, biodiesel, go right on down the line. What we need to do is continue to increase the size of that pie so that the overall energy supply is greater. When we do that, then, we can slowly increase in cost or actually diminish the cost of all of our energy which is a component of everything that we sell.

Well, I got involved in ANWR from this perspective: Back in 1970, I was signed up to go up to Alaska to be one of the first people working there in the North Slope area of Alaska. I was signed up with a company at that time named Green & Grossbeck. We had 600 miles of right away from Fairbanks north.

Well, I planned everything to do that, adjusted my life schedule to do that, and I got poised to go up there into the frozen north land and make some of the best wages ever known to the construction business for a worker, but a court injunction was slapped on that project of developing North Slope. So it was lifted 2 years later, and 2 years later was a different type of requirement for my life, and so I didn't go.

Yet I always watched Alaska. I watched that energy supply. I watched that pipeline supply be built. I watched those tankers go out of Valdez. I watched what happened to our overall energy supply in the North American continent because we had the courage and the vision to go up and address the North Slope issue of Alaska.

It supplied a lot of oil and built a pipeline, a pipeline today, if it is left to go dry, will erode on the inside of it and may not be salvageable if it sits empty for a period of time.

I went up to ANWR a year ago last August, thinking I was going to see the Arctic National Wildlife Refuge. I thought, when we flew across that 1.5 acres of coastal plain, that you had spoken to in your opening remarks, that I would see vast herds of caribou and pristine alpine Forests. But what I saw was, long before we ever got to the coastal plain, we had seen our last tree.

The definition of the Arctic Circle is a line north in which trees do not grow. So when those commercials say, don't disturb a pristine alpine forest, that is not a problem. There is not a single tree in that entire coastal plain, not enough for a lath or a picket fence.

There is not a single resident caribou on the coastal plain at ANWR, not a single resident caribou, not one.

There is a herd that comes in from Canada about thefirst part of May until about the middle of June. They have their calves over there in the ANWR region, and then they leave and go back—

Chairman AKIN. Mr. King, I don't want to interrupt you, but you might want to know you have amendment on the Floor. So if you would like to scoot and do that, we will try to fit you back in. It is up to you, but we have a message you are probably needed on the Floor.

Mr. KING. Mr. Chairman, in order to keepin the good graces of my wonderful staff, as you would do, I appreciate the opportunity to have a moment, and I will come right back.

Chairman AKIN. We will have you right back and give our ranking member a chance to give her opening statement. We will fit everything in and still get it all done in time.

Mr. KING. Thank you.

[The Honorable King's statement may be found in the appendix.]

Ms. BORDALLO. Thank you very much, Mr. Chairman, I apologize for being late, but I was down on the Floor as well.

I want to thank you, Mr. Chairman, for calling a hearing today on the issue of oil and natural gas extraction and development in the Arctic National Wildlife Refuge, ANWR. Issues surrounding the development of ANWR transcend traditional public policy jurisdictions as legislation to permit drilling in ANWR will have far-reaching consequences in terms of energy trade, the environment, foreign policy and national defense.

I am pleased that our chairman here has taken pains in organizing today's hearing in order that we may thoroughly investigate the specific consequences for small businesses of enacting legislation to permit ANWR development.

For the record, I have voted in favor of allowing natural gas and oil exploration and extraction in ANWR during consideration by the House Resources Committee of the energy bill.

However, this was not an easy decision for me. In reviewing the many competing facets of this debate, I decided to join a congressional delegation to visit ANWR in order that I might meet the people living in the region and hear firsthand their views on development of the coastal plain.

I learned that they are generally supportive of oil and gas extraction in the region for reasons of local self-determination and local economic development. They dreamed that the economic infusion of oil and gas extraction will translate into jobs, education for their children.

In fact, I remember one that came to a public hearing said, I would like to see my granddaughter go to Harvard, and the opportunity for the development of presumably small local businesses that would serve as mainstays of the development of their communities. Therefore, despite my many concerns about the environmental impact of ANWR drilling, I have lent my support to this initiative.

There are parallels between the desires of Alaskan natives and the sentiments of the people of my home district in Guam. Most of

Guam's economic development was made possible by years of Federal investment, supporting military installations.

The ability to provide support services to the military has translated into economic opportunities for our locals in Guam. Local entrepreneurs have developed numerous small businesses in areas such as waste management, construction, transportation, housing, banking, insurance, retail and other industries to support the military infrastructure. The result has been the opportunity to retain wealth on the island for continued development of other industries and the accrual of economic benefits to local entrepreneurs who, in turn, provide jobs and contribute revenues for public services.

I want to stress, however, that the benefits of economic growth will not automatically accrue to local residents if strategic plans do not prioritize the development of and the support of locally-owned small businesses. Today's witnesses will largely focus can on potential small business gains at the macro-economic level, and I am hopeful that energy development in ANWR will yield benefits that will be felt throughout the Nation.

However, national small business growth and national energy policy are abstract in the context of local economic development, and I hope to learn from today's witnesses about how economic benefits of drilling in ANWR will be used to allow residents of these villages in Alaska to develop economically sustainable communities and how developing local small businesses will fit into the larger plan. Thank you, Mr. Chairman.

Chairman AKIN. Thank you, Ms. Bordallo. That was eloquent, very well done.

I think what we will do now, since Steve is over on the Floor working an amendment there, that we will just go ahead and call our second panel.

Gerald Hood, Karen Wright and Eban Goodstein, please have a seat. Okay.

Gerald, who heads Government Affairs with Arctic Power's office in Washington D.C.—what we usually do in terms of these hearings, we try to start off with—I will give each of you a chance to make a 5-minute opening statement. If you want to submit written comments for the record, you can do that. So if you want to be just more relaxed— I prefer to run it—it is not like we have thousands and thousands and thousands of people in here. I like to run it a little bit more like a conversation, but we try to keep more or less at 5. That is what that little box is. It turns red when you have run out of your 5 minutes.

What we will do is come back and try to do some interacting. I will ask some questions. If I can, I usually like to wrap these things up within an hour of when we start. So it should be fairly quick.

Obviously, the material that you are giving us is being distributed to other members of the committee. It is actually public record and everything. So this has some influence in the way the course of decisions are made down here. We are so thankful for your taking time, especially coming all the way from the West Coast, to join with us.

Chairman AKIN. I think we will just go ahead and start with—is it Gerald or Gerry?

Mr. HOOD. I like Gerry.

Chairman AKIN. Gerry Hood, please go ahead and share with us.

STATEMENT OF GERALD HOOD, ARTIC POWER

Mr. HOOD. Thank you, Mr. Chairman, Ranking Member Bordallo and the gentleman from Georgia. I appreciate the opportunity to come here today and the development of ANWR and how it affects small business. I expect considerable time educating the members of Congress and the general public about the positive aspects of opening ANWR, and I appreciate the opportunity to focus today on small business.

America's 23 million small businesses employ over 50 percent of the Nation's private workforce, generate more than half of the Nation's gross domestic product and are the principal source of new jobs in our economy, according to the Small Business Association.

These small businesses must have a stable, reliable source of energy to fuel their continued success and contribution to our economy. The surge in oil and gas prices has tremendously impacted America's small businesses.

Senator Stevens from my home State of Alaska reported on the Floor of the Senate last year, for every $0.01 increase at the gasoline pump, we lose $1 billion in consumer spending. A recent poll conducted by the International Profit Association found that over 66 percent of small businesses are feeling the impact of rising fuel costs.

Gregg Steinberg, President of International Profit Associates said, and I quote, ″small business owners and managers are caught in an environment where costs are escalating and margins are being squeezed.″ this situation is forcing small business owners to decide between passing on their increased costs to the customers, absorbing them or cutting jobs.

Kenny Crenshaw, owner of a small lawn-care company in Memphis, Tennessee, recently told MSNBC that the spike in gas prices has—and I quote him—″put pressure on everyone to raise prices for everything. If there is a 20 percent price increase and 10 percent of our customers leave us, we are going to have to lay somebody off.″

Well, the United States is vulnerable. Declining domestic production coupled with decreasing dependence on foreign sources of oil, especially from a region of the world that is hostile to U.S. interests, is leaving Americans and American businesses defenseless against higher fuel prices. They are threatening American jobs, and it is costing the United States economy.

Small business owners are feeling the brunt of this as their costs go up and the consumer spending goes down. Increasing domestic oil production through responsible ANWR development is one component of a commonsense approach to this problem.

Although economists vary in opinion on the degree to which ANWR development will affect the price of oil, it is more than reasonable to assert that increasing domestic production will ease our energy crisis and the burden that it has placed on small businesses. The mean estimate of recoverable oil in ANWR is 10.4 billion barrels, none of which, under the proposed legislation, will be exported. That is more than twice the proven reserves in all of

Texas, nearly half of the United States proven reserves of 22 barrels and represents a 20 percent increase in domestic production by the year 2025.

New technology will allow us to produce ANWR's 10.4 million barrels from just 2,000 acres of the 19.6-acre refuge. That is just one-tenth of 1 percent of the entire refuge. While minimizing environmental impact, responsible development in ANWR will create hundreds of thousands of new jobs for Americans in every State of the Nation. It will generate billions of dollars in revenue.

A job study conducted by the Wharton Economic Institute at the University of Pennsylvania concluded that ANWR development will create 735,000 jobs nationwide. It also forecasts where those jobs would be created and calculated, for example, that 14,100 new jobs will be created in Missouri; 15,500 in Indiana; 18,000 in Georgia; 60,000 in Texas; and 48,000 in New York. This study has been criticized as being overly optimistic, as it has assumed a price of $40 a barrel at a time when oil was running under $20.

However, based on current prices hovering around $50 a barrel, the study's findings are more relevant today than ever. Moreover, it should be noted that the study was conducted under the assumptions of 1990s recovery technology. Since that time, advances in Arctic technology have reduced the cost to producing a barrel of oil and increased the amount of technically and economically recoverable oil. Given those facts, the study's conclusion on the number of jobs that ANWR development would create seems to be not only relevant but conservative.

In addition, between 1997 and 1994, the oil industry spent roughly $60 billion throughout the United States on the products and services required to bring that oil to market. Literally, thousands of small businesses across the country benefitted from this consumer spending.

For example, Mr. Chairman, small business shared in the roughly $203 million spent in Missouri; over $15 billion in Texas; $1.5 billion in New York; and $236 million in Georgia.

Mr. Chairman, oil fuels America's small businesses and small businesses in turn fuel our economy and employs over half of the country's private workforce. Everything we can do we must do to ensure their growth and success.

Chairman AKIN. We are about out of time here.

Mr. HOOD. In closing, if I could just have 10 seconds, more, sir.

ANWR development will not only enhance our energy security and affordability, it will create jobs for Americans and yield America's small business billions of dollars in consumer spending. Thank you.

[Mr. Hood's statement may be found in the appendix.]

Chairman AKIN. Thank you very much. You had some interesting statistics. I am sure they will come back up in some of the questions and discussion.

Now we have Karen Wright, President and CEO of Ariel Corporation, Mount Vernon, Ohio.

Welcome.

STATEMENT OF KAREN WRIGHT, ARIEL CORPORATION

Ms. WRIGHT. I am glad you corrected the name. It is Ariel, and it was named after my dad's Ariel Square motorcycle. Our company is a small business.

Chairman AKIN. If you could just slide the mike a little closer. Thank you.

Ms. WRIGHT. Is that better?

Chairman AKIN. I think so. Is it on?

Ms. WRIGHT. I think so, yes. My company employs about 700 people. We are in a small town in the center of Ohio. We manufacture natural gas compressors, which is a capital good. You will never buy one, probably. We are the largest manufacturer of this type of compressor in the world. We are a small private family business, started by my father in our basement in 1966.

So I am the second-generation owner and president of the company, and I am grooming my four sons to succeed me eventually, I hope. So, consequently, I have a pretty good perspective on family businesses, manufacturing, the oil and gas industry, which we are right in the heart of, and also motherhood, not necessarily in that order.

That being said, I have been involved in this business for about 26 years, and I can say with a lot of certainty that we are a patriotic business, both manufacturing and the oil and gas industry.

Oil, which is kind of the thing that everybody talks about as regards to ANWR, is not the only thing that is there. There is also a great deal of natural gas.

The interesting thing about natural gas is it is not a global commodity. It is a regional commodity; 96 percent of the gas consumed in the United States is produced here in Canada and in the United States.

Even if all of the blockades are removed for LNG, which you see a lot of stuff about, even if all of those blockades are removed, only about 10 percent maybe could be produced by about 2010. So that isn't something that we can count on to supply the gas needed for heating homes, generating electricity, agricultural and industrial feedstock, steel production and, more importantly, the military equipment that is needed to maintain our strength in the Nation, manufactured here, and maintain our strength as the peacekeeper of the world.

It is really up to our industry to meet the increased demands for a growing vibrant economy. In short, it is important that we make sure America doesn't run out. It has to come from here. We don't get much thanks for that. We are on a roller coaster with regard to price and profit margins. The public perception of our industry is that we don't care about the environment. While we are at it, if you look at the media representation of our industry, the average American thinks that oil and gas and manufacturing are dirty, rotten, dishonest and insensitive.

I beg to differ. The public doesn't realize that hundreds of thousands of people, as Gerry pointed out, are employed in the oil and gas industry right here in America.

These jobs cannot be exported overseas. They are not going to go to China. The public doesn't realize that the strength of the Amer-

ican economy rests on our shoulders, First, energy and then manufacturing. The two go hand in hand.

The public doesn't realize that American manufacturing alone, if it were a country, would be the fifth largest economy in the world. Over 14 million people are employed in manufacturing with about 40 million people directly affected, if you count their families, so a lot of people. That is 14 percent of the population.

Manufacturing contributes about 13 percent to the GDP. But the energy industry—and without us, the manufacturing that it supports, there wouldn't be a service economy, because there would be nobody to provide service to.

The other thing that I think people fail to realize is that we live here, too. We are concerned about the environment. We do care about ANWR and other places in this Nation. We don't want to see it ruined either.

I think the great thing that has happened today is that technology has caught up with conscience. We can produce the natural gas that is required and the oil that is required for our manufacturing and for our whole Nation's strength without damaging the environment. The technology available today allows us to act in good conscience. I think we can be like the Boy Scouts. We can leave it like we found it or better.

This applies to ANWR and is really probably the most important factor in my mind. We can only develop it if we make sure that we set the rules out and make sure that it stays pristine. We need to take care of it. But I think that that is possible today.

I see that I am running out of time. So I will skip a few pages, and I will just go to the end.

I think the most important thing today is that energy is the base of our economy. It is absolutely essential, especially natural gas. We have to produce it here. We are not going to be able to get it anywhere else. We probably are not going to be independent, as far as oil production is concerned, but certainly this will make a big difference. And it is affordable energy. It is critical to our Nation's strength across the board.

So I think ANWR is just part of that, but we also need to open up the continental shelves. We need to open the Rockies. We need to start producing and turn this industry loose, let it do what it does well but set the rules. Okay. Sorry.

[Ms. Wright's statement may be found in the appendix.]

Chairman AKIN. Thank you very much.

Both of you have raised a lot of very interesting points and questions. It is clear that you are well prepared. We just appreciate your coming.

Last but not least is Eban Goodstein.

You are a Professor of Economics, I believe, at Lewis & Clark College, Portland, Oregon.

Mr. GOODSTEIN. That is correct.

Chairman AKIN. Proceed, please.

STATEMENT OF EBAN GOODSTEIN, LEWIS AND CLARK COLLEGE

Mr. GOODSTEIN. I thank you for the opportunity to testify today. I am a economics professor. I teach natural resource economics and

am author of a widely-used college textbook, Economics and the Environment, as well as another book and a number of articles related to energy policy and the environment.

Small businesses are particularly vulnerable to oil price increases like the doubling we have seen this past year, both because of the direct bottom line impact but also because of the macro-economic slowdown that major price shocks can create. I want to emphasize one point today on which economists agree: This vulnerability does not have anything to do with our dependency on oil imports, but instead depends on our overall economic dependence on oil, whether that oil is imported or domestic.

Given this economic fact, Arctic Refuge development will do nothing to reduce the exposure of small businesses to high and volatile world oil prices. In addition, it will not create many jobs outside of Alaska. Instead, small business would be better served by policies that reduce the oil intensity of the economy, win/win solutions that would improve energy security for businesses, create jobs and save consumers money to spend on domestic goods.

I would like to make five quick points. First, quoting the Energy Information Administration,"The impact on world oil prices of ANWR is not expected to be significant." in their optimistic scenario, the EIA projects a price decline of $0.30 per barrel—that is not per gallon—a less than 1 percent price decline.

More likely, OPEC will respond to any increase in Arctic production capacity with a slight decrease in their own rate of field development, and as a result, there will be no noticeable effect on world oil supply or prices.

Second point, since the 1970s, the U.S. economy has become much less petroleum intensive and is, as a result, much less sensitive to oil price shocks. Most noticeable is that, in spite of price increases of around $4 a barrel during 2000 to 2002, the economy rebounded solidly out of the 2000 recession.

It wasn't until the dramatic price increases last year, near doubling, that analysts have begun to pin negative macro effects on rising oil prices. So any small reduction in world oil prices from refuge development will thus have no noticeable effect on job creation from accelerated national growth.

Third point, as the past year has shown, the U.S. economy does remain vulnerable to large and sudden increases in world oil prices. However, because this vulnerability depends on overall consumption of oil and not the percentage of oil that we import, there is simply no economic security argument to be made in favor of Arctic oil development.

Fourth point, oil development in the Arctic will likely create U.S. jobs as a result of the increase in aggregate demand from the expenditure on oil field development and, some years later, from a reduction in oil imports. A likely increase in jobs nationwide would be around 40,000 to 50,000 jobs. A large percentage of these jobs will be in Alaska. To put that number in perspective, for the past 15 months, the economy has been adding about 140 jobs every month.

Last point, unlike Arctic Refuge oil development, reducing overall petroleum dependence would create jobs and help protect small businesses from damaging oil price volatility. As one example, if

the trend in fuel efficiency improvements that were seen in this country from 1978 to 1988 had continued instead of actually reversing, then the average small business owner would today be experiencing a greater than 50 percent savings on his or her gasoline bill. Improving vehicle efficiency by 3 miles per gallon would reduce oil imports and provide the same addition to U.S. aggregate demand as development of Arctic Refuge oil with the same small positive impact on jobs. It would also provide valuable insurance against sudden oil price increases.

Finally, the National Academy of Sciences has recently concluded that much larger improvements in fuel efficiency than 3 miles per gallon can be achieved with no net cost to consumers since increased up-front vehicle costs would be offset by fuel savings.

Bottom line, over the next 45 years, the U.S. will consume almost 500 barrels of oil. That is half a trillion barrels of oil. The Arctic Refuge is thought to contain about 1 percent of that.

Overall, dependency is a reality that we cannot drill our way out from under. Ultimately, we can only escape dependence on foreign energy sources by reducing our overall economic dependence on oil. Small businesses remain vulnerable to oil price shocks.

Our oil dollars are fueling terrorist activities in the Middle East, and oil combustion is a leading cause of global warning, which in my State and throughout much of the West threatens to wipe out around half of the water flow in our streams and rivers by mid-century with huge impacts on farms and small businesses in rural areas. Development of Arctic Refuge oil fails to address these costs of petroleum dependence for small businesses and offers only very small increases in actual employment.

Thank you for the opportunity to talk today.

[Mr. Goodstein's statement may be found in the appendix.]

Chairman AKIN. Thank you very much.

Well, we have got enough information to start a pretty good debate, I would think, already. I am going to allow us to hear from Congressman Westmoreland. If you would like to start with a question, and you have had a chance to make a statement. I will let you go next, and then I will follow up.

Mr. WESTMORELAND. Thank you, Mr. Chairman.

Mr. Hood—by the way, thank you, Mr. Chairman, for having this hearing.

I have often wondered at the impact that the drilling would have on small business and especially Georgia—and I couldn't figure out how we could work that out to get some business down that way. But you mention in your testimony, it is about 18,000 jobs, I believe, and about $236 million. Exactly where are those jobs going to be created?

Mr. HOOD. From vendors that supply the industry that brings that oil to market in various forms, those northbound, by the way, Congressman, come from actual vendor lists from the period that I mentioned, from the major oil producers on the North Slope of Alaska, where they actually spent those dollars. So that is a pretty hard dollar figure that was spent in the State of Georgia during that period of time. So it is industries and small businesses in your State that provide services and materials that we use on the North Slope of Alaska to bring that oil to market.

Mr. WESTMORELAND. Thank you.

Ms. Wright, I want to thank you. I read your—I guess the history of your company and your dad was—is he still alive?

Ms. WRIGHT. Yes.

Mr. WESTMORELAND. That is a real tribute to the entrepreneurial spirit. I loved the way he named things, so that was a good thing.

Mr. Goodstein, just one comment to you. I don't know, you know, I am not going to doubt your statistics or anything that you have got. I think they are quite different from what the other two people in the panel have. But the one thing I will tell you about being an American is that I will be proud to be burning some American oil and not having to be so dependent on foreign oil. If even just a little bit, at least I will know that it is coming from American soil and that we are doing something. It is a starting point to solve some of our energy problems.

Thank you, Mr. Chairman.

Chairman AKIN. Thank you.

Anybody want to respond or answer? As I said, I like to run things a little more as a discussion. We have a few minutes here.

Mr. GOODSTEIN. I could respond to the issue about the jobs in Georgia. Those jobs that came from the Wharton—the WEFA study. Most of those jobs were not jobs that were direct spending from the oil industry. The WEFA study gets all that three-quarters of a million jobs estimate by asserting that Arctic oil would dramatically reduce the price of world oil which would lead to more rapid economic growth and which would generate jobs throughout the country. That is inconsistent with what serious economists think about the impact of Arctic oil.

Chairman AKIN. We are just getting started. Obviously, some of the testimony wasn't agreeing with each other, so that is interesting to hear how that comes across.

Ms. Bordallo.

Ms. BORDALLO. Thank you, Mr. Chairman.

I enjoyed all the testimonies of our witnesses today, and it is a real insight to some of the statistics that were provided us. I guess we are all on the same line when it comes to job gains. We all have numbers there. They just are in such a wide disparity.

Mr. Hood, you said 750,000, right?

Mr. HOOD. Thirty-five, 735,000.

Ms. BORDALLO. Dr. Goodstein, you said anywhere from 40,000 to 50,000. That is quite a disparity.

Are we sure we are all correct on these statistics? I mean, even if you should take in—besides the—I think you said associated jobs that come with the industry and so forth. But that is still a disparity. Do you have a comment on that?

Mr. GOODSTEIN. Yes. The study that Mr. Hood referenced, the WEFA study, was done in 1991, funded by the American Petroleum Institute. It generates these very large job estimates by asserting that there will be a bigger-than-expected find of oil in the Arctic, but primarily by asserting that that increase in oil will drive world oil prices down a lot, about 5 to 10 times as much as the government estimates in the recent Energy Information Administration study. So that is sort of step one in why those numbers are wrong.

Step two is that it asserts that declines in oil prices generate sort of dramatic increases in economic growth, and that is how you get all these jobs.

I mean, what we are saying here is that, somehow, development of a couple of thousand of acres of Alaska wilderness is going to create enough jobs to employ not only everybody in the State of Alaska but everybody in the State of Delaware.

It is difficult to see how that could happen, unless you tell a story about how it is going to have dramatic increases, impacts on U.S. national growth. But both because there is not going to be any impact on world oil prices that will be noticeable; and, second, these prices, these days, the U.S. economy is very sensitive to declines in oil prices. We need to be focusing on the direct job creation associated with the oil expenditure by the oil industry of a few billions of dollars by oil development.

Ms. BORDALLO. Thank you, Doctor.

Mr. Hood, would you like to comment?

Mr. HOOD. I do have a comment, Mr. Chairman, Ranking Member Bordallo. I am glad today we have made a little bit of history. The fact that we may disagree on jobs numbers from our perspective—

Ms. BORDALLO. But we all agree on jobs.

Mr. HOOD. But we have agreed now, for the first time, I think, that we will only impact 2,000 acres in the coastal plain.

Ms. BORDALLO. Thank you very much.

I have another question for you, Mr. Hood. I assume that your company would have much to gain from ANWR drilling, and I also assume that, as an Alaskan-based businessman, you will make sure that the people of Kaktovik and other villages around the ANWR coastal plain would share in the benefits.

What will you do to help these people develop locally-owned enterprises that will share in the economic benefits of extraction and set these communities on the path to long-term economic sustainability?

Mr. HOOD. First of all, Mr. Chairman and Ranking Member Bordallo, Arctic Power is a broadbased citizens group that, if the Congress opens ANWR, will be out of business. Our job will be finished. We will have accomplished our goal. So there is no advantage in a business sense for Arctic Power, because we are just an advocate on this issue.

One of the things that all of Alaskans have fought for is the inclusion of the Inupiat Eskimos, who are directly affected by this development, to have input on what occurs from an environmental perspective and from their subsistence lifestyle perspective.

You know, they don't have a 7-Eleven or a Safeway store to run to get supplies. They live off that land. They hunt the caribou. They hunt the whale. They fish for the salmon. They harvest the waterfowl eggs.

And if they thought for a minute that that subsistence lifestyle was going to be harmed or damaged and harm their culture in any way, they would not be as supportive as they are, and they are supportive. They are the only people that live inside the boundaries of the Arctic National Wildlife Refuge.

Section 1002 is not a part of the refuge. It is not wilderness. It is an area in that land that was set aside in ANILCA for future exploration and potential development for hydrocarbon resources. That is a misnomer that a lot of people think, that we are going into a wilderness area to drill for oil. That is, in fact, not the case.

The Inupiats, through ANILCA, and the other natives of Alaska, through that legislation, have created corporations, as opposed to the reservation style that Native-born Americans in the lower 48 live under. They have developed native corporations, which are small to medium to large businesses that have benefitted from the oil development on the North Slope of Alaska.

They intend to be a large part of the ANWR development in two ways, in a business sense to enhance their business opportunities, and also to make sure that that land is protected forever. They were the environmental stewards of that land for thousands of years before we all came up and discovered oil.

Ms. BORDALLO. Thank you, Mr. Hood. I will agree with you. When we were up there for the Resources public hearing, Mr. Chairman, one of the witnesses, he said that he had traveled 300 miles on a snowmobile to get to the hearing. I know it is truly a wilderness up there. It is beautiful. I have never, ever experienced such beauty in my life.

Ms. Wright, I agree with you. I think that, whatever we do, however this goes, that as long as we set up strict policy guidelines to protect the people there, we are in good shape.

I have to agree with one of my colleagues here when he says that he feels very comfortable when he knows that drilling is coming from our country, and I feel the same way.

Thank you. Mr. Chairman.

Chairman AKIN. Thank you.

I thought there were some good comments and thoughts of a couple of different perspectives.

The first thing is, I have had a chance to see where the American dollar goes after we buy Middle Eastern oil, because I was in Pakistan, and I heard about the madrasas schools where we are using American oil money to train terrorists, to destabilize Pakistan, or Pakistan has nuclear weapons. I have a son over in the Middle East. I understand that there are some supply-and-demand questions, costs of oil, how it affects jobs, everything, but, ultimately, funneling money into the pockets of terrorists is counterproductive. The greater our dependence on that source of oil is, the less we have flexibility in trying to deal with that. So that is a factor that I have had a chance to actually see where that money is going.

Just a thought. In this committee, you are allowed to have questions and answer, and that is in the answer department.

Changing the subject a little bit here, Karen, just from a technical point of view, my background is in engineering. I wasn't much of an engineer, or they wouldn't have let me in politics. But you said that there was a lot of natural gas in ANWR. Is that something that is also piped, just like the oil would be, or is that something that has to be impressed and shipped, or how is that transported?

Ms. WRIGHT. There are the—this whole country is a grid of natural gas pipelines; 55 percent of the households are heated by natural gas, and that comes through pipelines.

So, yes, it could be put through a pipeline to bring it to Canada, for example, because there are pipelines then coming from Canada to the United States. So that would be—

Chairman AKIN. I think of that like an electrical grid, or isn't there a penalty for the farther you have to move it?

Ms. WRIGHT. No, that is what they use our impressers for, is to keep it.

Chairman AKIN. Move it a long ways is your point of view.

Ms. WRIGHT. Actually, this would be a great thing for us. But I think, you know, everybody keeps concentrating on the oil aspect. I think the natural gas part is really more important, because you cannot transport it very readily in tankers like you can oil.

LNG, which is liquid natural gas, each one of those ships costs about $500 million. Nobody wants a terminal in their backyard. You know, we could put them in California on the various coasts and so on—

Chairman AKIN. Let me interrupt a little bit. LNG is chemically a little different than natural gas, right?

Ms. WRIGHT. No, it is just liquid natural gas that has been cooled.

Chairman AKIN. Super cooled.

Ms. WRIGHT. Super cooled, and then they keep it in liquid form because gas, natural gas, is a gas.

Chairman AKIN. You run it down a pipeline. You compress it, but you don't super cool it?

Ms. WRIGHT. Right, it is cooled.

Chairman AKIN. It is still a gas.

Ms. WRIGHT. It is still a gas, but it is compressed so it moves through a pipeline. Those pipelines are everywhere.

Chairman AKIN. Are there natural gas pipelines already coming through Alaska, or is that all oil?

Ms. WRIGHT. No. There are already natural gas pipelines.

Chairman AKIN. All oil—

Ms. WRIGHT. Yes. May I ask—no, there aren't. It is just oil?

Mr. HOOD. If I might just interject, Mr. Chairman, a couple of points. Number one, existing reserves of natural gas in Alaska is about 35 cubic feet of known reserves today. When you take into consideration what may be mixed with the oil in ANWR and also NPRA, the estimates are that we have about 155 trillion cubic feet, 155 trillion cubic feet of natural gas on the North Slope of Alaska.

Congress, in the last Congress, authorized incentives for the construction of the Trans-Alaska Gas Pipeline, which has paved the way for the State of Alaska to negotiate with the industry on getting that gas pipeline built, which would, as Karen said, connect them under the current proposal to existing pipelines in Canada and distribute gas through existing pipelines in the lower 48 and distribute that gas throughout the country.

So that project is on the table. And we thank the Congress, all of us from Alaska, thank you all for providing those incentives that allowed us to finally, after 30-some odd years to get that project started.

Chairman AKIN. So the project to move natural gas from the North Slope or from Alaska anyway down to the lower States is not complete yet?

Mr. HOOD. No.

Chairman AKIN. But you are building it.

Mr. HOOD. The process that we are in now is the State of Alaska, under Governor Murkowski, is negotiating with the industry to put together a package that is economically beneficial to both the producers and the State of Alaska to allow us to be able to bring that gas—

Chairman AKIN. It is in the planning stages, is what you are saying.

Mr. HOOD. Yes.

Chairman AKIN. So we don't have any real flow currently of natural gas from Alaska to the lower 48?

Mr. HOOD. No. But other than—

Chairman AKIN. Relatively, what, just to try and understand in boxcar numbers, are we talking about, just in terms of the numbers of BTUs? Is there more natural gas or is there more oil on the North Slope, or just our best guess?

Mr. HOOD. I don't have the technical expertise to be able to answer that.

Chairman AKIN. You don't have a feel for that?

Mr. HOOD. With regard to BTUs, no.

Chairman AKIN. Is it your sense there is more natural gas, or there is just more oil in general? Don't you have a feel for that either?

Mr. HOOD. I think you have apples and oranges with regard to the amounts. You have got between 5.6 billion barrels of oil in ANWR to 16 billion barrels—it is different sources of energy. I am not expert enough.

Mr. GOODSTEIN. Could I make a comment on this point?

Chairman AKIN. Sure.

Mr. GOODSTEIN. At the request of a member of Congress, I can't remember who it was, last year, the Energy Information Administration was asked whether developing the Arctic Refuge—because it would open up the natural gas deposits there—would make the construction of a natural gas pipeline more economically feasible. They concluded not, because the exploration that is ongoing in the National Petroleum Reserve and around the Prudhoe Bay areas, which is sufficient to drive that project if that project is going to get driven.

So they concluded that although there is potentially significant natural gas deposits in the refuge, from an economic point of view, they are not going to be developed quickly or soon. They don't have any impact on the pipeline.

Chairman AKIN. What was the reason for why they wouldn't be developed, because there is too much of it down south already?

Mr. GOODSTEIN. Elsewhere on the Arctic coastal plain, there is much more advanced exploration development. So people know where the stuff is and where we are coming from. So at this point, there is not a shortage of natural gas deposits up there. There is plenty of it. The question is just whether or not a pipeline makes sense economically at this point.

Chairman AKIN. Do the other two of you agree on that agree or disagree?

Ms. WRIGHT. I guess I don't know enough about it to do either.

Chairman AKIN. Fine.

Mr. HOOD. Mr. Chairman, the economic viability of the gas is what is being discussed now to determine whether it is economically feasible to build that pipeline.

Chairman AKIN. Right.

Mr. HOOD. Those are the discussions that are ongoing in the State of Alaska.

Chairman AKIN. Hasn't the price of natural gas gone up a lot?

Ms. WRIGHT. Yes.

Mr. HOOD. There is an extreme natural gas shortage in the lower 48.

Chairman AKIN. Would it ever make sense to use natural gas there to create fertilizer in Alaska and then move the fertilizer; has anybody ever thought of that?

Mr. HOOD. That has been discussed. In fact, there are plants in the Kenai Peninsula that do that now with the Cook Inlet gas, not with North Slope gas, because there is no current mechanism to move the North Slope gas even to south-central Alaska, let alone to the lower 48. The gas reserves in Cook Inlet are being rapidly depleted.

Chairman AKIN. I didn't mean to ask all of the fun questions and discussion here.

Mr. WESTMORELAND. I just want to ask one question. When we are talking about liquid natural gas, all the ports for our liquid natural gas are on the East Coast right now. Is that not true?

Ms. WRIGHT. I think there are some in Louisiana, too.

Mr. WESTMORELAND. Yes, there is one in Louisiana, and I think Boston.

Ms. WRIGHT. Right. There aren't too many, and they are kind of unmothballing a couple that had been shut down.

Mr. WESTMORELAND. Right, but right now, a lot of our natural gas is coming from the Middle East, too, I guess.

Ms. WRIGHT. I think more, maybe Venezuela.

Mr. WESTMORELAND. Trinidad.

Mr. HOOD. Mexico.

Mr. WESTMORELAND. But they are converting it and shipping it over here on those tankers that you were talking about.

Ms. WRIGHT. Right.

Mr. WESTMORELAND. I am assuming it is piped from these ports that we have to the West Coast. Is that not correct?

Ms. WRIGHT. Right. Once it gets into the grid on the East Coast or Louisiana, then it goes anywhere in the United States.

Mr. WESTMORELAND. So there is some infrastructure.

Ms. WRIGHT. Yes. The infrastructure to deliver natural gas is 50-years-old and is very, very complex and very good. I mean, like I said, 55 percent of the houses in the country are heated by natural gas. I mean, it is in place. The great thing about gas is that it is clean-burning, you know. It doesn't pollute.

We actually do have a lot of it, if you look at the reserves off the continental shelves and, you know, the Rockies area. There is a tremendous amount. But drilling for it is being held up time and

again by, you know, various and sundry things that—environmental concerns, yes.

Mr. WESTMORELAND. Plus, too, you know, if we could get a more abundant supply of natural gas, it would help us with our power-generating plants where we are using—

Ms. WRIGHT. Exactly. That is kind of something that was a switch. About 50 percent of the electrical generation is coal. Then, I am not sure, maybe 20, 30 percent is the natural gas. There is some fuel switching that goes on; some is nuclear. A lot of the new plants that were built in the last 10 years are gas fired, because it was clean burn, better than coal for that reason.

The problem is, now, with increasing demand for electricity, it is putting a crunch on the supply of gas, and that is cause for the price to go up. Probably in the last 3 years, it has almost tripled, and that probably does make it economically viable then to put a pipeline in. You know, if it is only $2 a million cubic feet, it is not worth it. But when it gets to $6, it is. So right now, actually there is a huge boom going on in my industry, because with $6 gas, it makes it feasible to drill deeper wells, more complicated wells, that kind of thing.

Ms. BORDALLO. Mr. Chairman, I don't have any further questions, but I would like to take this opportunity to thank you, Dr. Goodstein, Ms. Wright and Mr. Hood for your testimonies. I think I have a better insight of this subject matter, and hopefully, we will be able to work something out. Thank, thank you, Mr. Chairman.

Chairman AKIN. I had wanted to come back around a second time. This is sort of just trying to understand what you are saying, doctor. I think what I am hearing you say is that there is so much oil in the Middle East that these guys really can control it as a commodity. Isn't that the bottom line of what you are saying?

So, in other words, if we bring something online, they can make adjustments and still kind of control the market, because they have got such a big chunk of it. Is that part of what you are saying in terms of an economic argument?

Mr. GOODSTEIN. Yes, the issue about energy security is, it somehow makes sense if we drill our own oil, we can control the price. But we won't. I mean, when the price of oil goes up, it is a world oil market. So if there is a supply disruption in the Middle East and oil prices rise to $40 or $50 a barrel, if Middle Eastern oil rises to that price, Alaskan oil will rise to that price. So there is no protection from small businesses by reducing the import share by just a little bit. It really depends on how much oil we use as an economy, not where it comes from.

Chairman AKIN. Everything is subject to the supply-and-demand equation. The more that we have—supplies that we control, it makes us less wagged, you know, by the Middle Eastern prices. I suppose even though your point is that it is not a large percent, because of the huge supply over there. But it does have some influence if we can control some of the prices.

Mr. GOODSTEIN. Well, if the OPEC producers don't respond at all to Alaskan oil coming, the refuge oil coming online, then you would get a drop in oil prices, per barrel drop in oil price, the Energy Information Administration predicts about $0.30 a barrel. That is about a $0.01 price drop.

But more likely, because the OPEC nations will see Arctic oil happening 6 or 7 years before it does, they will just ease off a bit on their development plans, because they don't want to facilitate a glut. That is basically why most economists would say there will be no impact on oil prices.

But I had a comment related to Ms. Bordallo's concerns related to job growth or who will get the jobs in the Arctic, if I could. Historically, Alaska tracks workers during booms, out-of-state workers, who then leave when the economy turns down again. So during pipeline construction in the 1970s, actually, the State population actually grew by 25 percent over a 4-year period. In fact, Alaska's unemployment rate is typically stuck at about plus 2 percentages points above the national rate. Because when jobs pick up, Alaskan people tend to migrate in and migrate out. Actually, even during the 1990s, when the oil industry was in slow decline, about a quarter of the jobs in oil industries were held by out-of-state residents.

So while it is undoubtedly the case that Alaskans will get jobs if the Arctic Refuge development happens, also you would anticipate there would be a big influx of skilled construction workers and that kind of work for folks who will come and go.

In terms of the oil industry itself, in terms of the Alaska State government, around 83 percent of the employees in the oil industry work for the State's largest employers. It is obviously, again, the case that in the urban areas, Anchorage, Matsu Valley, Fairbanks, there would be spillover opportunities for small business.

But the reality is, it is very hard for small businesses to survive on the North Slope. It is a very difficult environment, unless you are pretty heavily capitalized, to be able to do much.

Ms. WRIGHT. Wouldn't it be people though that would be there though to provide food, shelter, all the service organizations would provide jobs for local people, because that isn't going to come in?

Mr. GOODSTEIN. It actually does, though. There are big oil-service companies like Halliburton that are sort of in the business of housing, feeding and entertaining workers.

Ms. WRIGHT. It still, to a certain extent, has to spill over into the community.

Mr. GOODSTEIN. To some degree.

Ms. WRIGHT. Doesn't it stay there, like what you are talking about in the North Slope and so on, there is something that has remained there, right?

Mr. GOODSTEIN. Well, that is because there is still oil development.

Ms. WRIGHT. Yes, that is what I am saying. In the long term, there will be more development than there was initially, because those things will stay there to support the oil development that happens. It isn't going to go away in 5 years, it will be there for 20, 30, 40 years.

Mr. HOOD. Mr. Chairman, a couple of comments with regard to the oil support services industry on the North Slope of Alaska. While companies like Halliburton and other major world conglomerates do operate on the North Slope, most of the oil support services, quite frankly, are Alaskan businesses owned by native corporations.

I speak from personal knowledge, because, in my former life, I ran the Teamsters Union in the State of Alaska, and I represented most of those workers. So it is not the major conglomerates that have operations on North Slope of Alaska. It is, in fact, Alaskan businesses.

Again, with the type of development that we are talking about in ANWR, we are not talking about the great influx of work and activity that we had during the pipeline construction, until such time as we build that natural gas pipeline. But ANWR will be—facilities will have to be constructed and moved into the area. But the degree of work in that regard for the people in the State of Alaska will not be as great or anywhere near as great as it was for the construction of the Trans-Alaska Pipeline, and in fact, more jobs will be created outside of the State than in the State.

Ms. WRIGHT. Can I say something real quick.

Chairman AKIN. Sure, you can. Yes.

Ms. WRIGHT. I was thinking on the way over here today, you know, we have 700 employees. But if you look at our supply chain and our customers, that is probably 20- or 30,000 people who are just involved in our one little business.

And clearly, if this happens, it would affect our business. And it would affect all of our suppliers, and it would affect all of our customers, because we are all suppliers to the oil and gas business.

So, you know, it is not going to be jobs in Alaska, but it is going to be jobs in a whole bunch of States in the United States, the Lower 48, because that is what we do. We manufacture equipment for that industry.

Chairman AKIN. Well, I appreciate the discussion, of course. It is all part of a larger question about the overall direction of the Nation. And one of the things we see in Armed Services and internationally is a tremendous increase in demand for oil, particularly from people like China and other countries that are competing for those resources.

We also see some export of jobs in this country to a certain degree, although we are creating a lot of new jobs, as well. But certainly just from a common-sense point of view, there does seem to be a certain level of additional security if we have a larger percentage of our own natural resources or things that—you know, we are not quite as dependent on the foreign.

But this is an interesting discussion. I believe it will be followed perhaps over in the Senate as they engage in this topic over there.

As you were perhaps aware, the House has passed the drilling in ANWR. I think that a lot of the environmental questions are sufficiently answered, that this seems to, at least, convince the majority of the House, so we will see where things go.

But I appreciate you all coming and your perspectives. And I think each of you has contributed a lot. And thank you so much for being part of it, Dr. Goodstein and Mrs. Wright and Mr. Hood. It is a good perspective from three different directions. Thank you.

Mr. HOOD. Thank you.

Chairman AKIN. This committee is adjourned.

[Whereupon, at 3:12 p.m., the subcommittee was adjourned.]

OPENING STATEMENT
19 MAY 2005

SUBCOMMITTEE CHAIRMAN W. TODD AKIN
SUBCOMMITTEE ON REGULATORY REFORM & OVERSIGHT

"ANWR's Benefit for Small Business"

Good morning. I would like to extend a warm welcome to those of you who have taken time out of your busy schedules to testify before this committee today. We are here to discuss an issue of high importance to the future of our country: oil and gas exploration in the Alaskan National Wildlife Reserve (ANWR). This is a sensitive topic for a variety of people, and one we should consider with diligence and care.

Opponents of this policy decry what they call the "inevitable apocalyptic fall-out to the environment." Yet over the next 20 years, America's oil consumption will continue to rise, even after increases in renewable energy supply and energy efficiencies are factored in. That is why safe and efficient drilling in ANWR is so essential.

Today, our witnesses have been asked to come speak about this issue from an often-overlooked perspective, that of small businesses. The intent of this hearing is to illustrate the benefits that ANWR will have on the small business owner.

There is no doubt that small business owners are leaders in innovation. They pay the majority of our nation's taxes and employ the majority of our nation's workforce. More specifically, according to recent U.S. Bureau of Labor Statistics data, employees of small businesses in the Oil and Gas Extraction Industry average an income of $3,214.16 per month. This wage is higher than any other non-mining industry.

Keeping this in mind, at current trends, U.S. crude oil production is expected to decline by 1.5 million barrels a day by the year 2020. This drop in production translates directly to thousands of lost jobs in an industry that has already lost half a million jobs over the last ten years. Oil exploration in ANWR will revitalize this important industry, creating millions of dollars in opportunities for our small businesses not just in Alaska, but throughout the nation. One of our guests today, Ms. Karen Wright, president and CEO of Ohio's Ariel Corporation, has traveled all this way to explain to us how manufacturing in the Midwest will get a much needed jolt from oil exploration.

The subject of energy exploration in ANWR is not a new one. A segment of Alaska, labeled "1002," was set aside by Congress in the Alaska National Interest Claims Act of 1980 to study the feasibility and potential yield of energy production. Area "1002" would only use 2,000 acres of ANWR's 1.5 million acre coastline and

could yield up to 700,000 jobs. My friend, Congressman Steve King has been very active on this issue and has offered to share some critical insights on the need to proceed with energy exploration as well as how best to go about it from a legislative standpoint. Welcome Steve.

Mr. Jerry Hood is also in attendance today to explain what impact drilling in ANWR will have on the overall development of small businesses domestically, and the opportunities small businessmen have been able to take advantage of, as a result of projects underway at Prudhoe Bay, the nation's largest energy complex.

Professor Eban Goodstein, of Lewis and Clark University, has come here from Portland, Oregon to discuss certain economic ramifications that he feels should be taken into account when discussing this important issue.

Witnesses, I thank you for coming and before we get started, I would just like to greet my colleague, Ranking Member Ms. Madeleine Bordallo of Guam and invite her to say a few words.

Statement of U.S. Rep. Steve King

Subcommittee on Regulatory Reform and Oversight
of the Committee on Small Business
Thursday, May 19, 2005

Thank you, Mr. Chairman, for the opportunity to testify before the House Small Business Committee regarding the economic impact of domestic energy development and those U.S. small business sectors that will directly benefit if we allow drilling in the Arctic National Wildlife Refuge (ANWR). I commend Chairman Akin and Ranking Member Bordallo for your outstanding leadership in holding this hearing to discuss the need for a balanced energy policy in this country.

There is this entire pie of energy sliced into different components. I do not believe that any one component should be sought as our sole answer to the energy crisis. My home state of Iowa is not only a consumer of energy, but a producer of energy. The Fifth District of Iowa is an energy export center, exporting ethanol and biodiesel all across this nation. Energy, first of all, is a factored

cost in everything that we buy. If there is any one item that adds to inflation in all the products that we purchase in this country, it is energy because it takes energy to produce, deliver, pick-up and purchase products. It can be proven scientifically that whenever we move, we are burning energy. If we do not have an effective energy policy, we are paying more for all goods and services in this country than is necessary, making us less competitive in the rest of the world. This is the big picture as to why energy is so important to small businesses and our economy.

As a founding co-chair of the House Ag Energy Users Caucus, I am concerned that the Corn Belt is being held hostage to high gas, diesel and natural gas prices. Farmers utilize diesel and gasoline to operate their equipment and transport their product. Farmers have had to tighten their belts as prices have increased. Therefore, I am in strong support of an energy bill that allows for exploration in the Arctic National Wildlife Reserve (ANWR), which will allow for more domestic supply of oil.

Currently, the U.S. imports more than 60 percent of its oil every year. Only 45 percent -- 19 out of 42 gallons -- of every barrel of oil goes to make gasoline. The rest goes towards producing food, heating homes and making products like medicines, plastics, surgical devices and much more. Oil is a key ingredient in making thousands of products that make our lives easier – and in many cases – help us live better and longer lives.

Opponents of drilling in ANWR make rash statements such as "there is only a six month supply of oil in ANWR so it's not worth it." However, according to the Energy Information Administration, ANWR would produce nearly 1.5 million barrels a day or more, everyday for roughly 30 years. This would replace roughly 30 years of OPEC oil imports, increasing our national security for 30 years. The current energy bill puts in place the motion to construct the refineries that we need so that we can bring the crude oil in and get it refined. It also allows for us to go up to

ANWR and do our drilling up there to bring that crude oil down to the lower 48 states.

I also have been up to ANWR to take a look at the Prudoe Bay area. I talked with the people up around Kaktovik, Alaska, and discovered that the the resident caribou in the drilling area are only in there from mid-May until the end of June. They come in to calve and then they leave about the end of June. That is the time when the permafrost thaws down to about a foot or 18 inches.

Nothing is going to move during that period of time except the caribou. When those young calves get old enough to walk back, they go back over to Canada, out of the area, so nothing would be going on in that region when the caribou were there. It is kind of a caribou maternity ward in that part of Alaska. We have locked up our own lands and failed to invest in our best hope for energy independence.

Resource development and conservation are not mutually exclusive. The United States has the most stringent environmental safeguard to protect tundra, ecosystems and wildlife. New technologies ensure that resource development will occur in an environmentally sensitive manner.

Should the Alaska pipeline run dry because oil in North Slope oil runs out, and it looks like it is heading in that direction, the pipeline needs to stay full almost all the time or erosion may set inside the pipes. If the pipeline turns to rust, it may not be able to be put back up on line so it is important that we keep the Alaska pipeline operating. It is a valuable resource for about 30 years. It has been there a long time; it has served us very well, and has not met its full potential. In that same region is all of the natural gas that is already developed. Unfortunately, we do not have a good way to deliver it to the lower 48 states. This is why we need the pipeline.

Today, as the House of Representative debates the Interior and Environment Appropriations bill, I will be working toward the passage of amendments to open the door to more energy supplies. These amendments are important steps to solving our energy crisis by lifting the moratoria on pre-leasing and leasing activities in certain sections of the outer continental shelf (OCS). I believe it is important to move quickly to allow drilling for oil and natural gas in the U.S., off the continental shelves, in the Rockies and other significant areas of huge known reserves.

Energy supplies and prices are a major economic factor in the United States, and energy markets are volatile and unpredictable. Nothing has caused more concern for agriculture than the price of natural gas. Natural gas is the primary feedstock for anhydrous ammonia and other fertilizers and accounts for 90 percent of the cost of making nitrogen fertilizer. The surge in natural gas prices over the last 4 years has been a key reason why nitrogen fertilizer costs have jumped by nearly 50 percent at the farm level. This rise

in prices has contributed to the growing reliance on imported fertilizer.

If you are concerned about our national security, our growing dependence on foreign oil, our trade deficit and U.S. jobs, you should support oil exploration here at home, in ANWR. I look forward to the testimony of our other witnesses today and hope they can shed some light on some solutions we can work towards to help alleviate this situation for small businesses and farmers. Again, Mr. Chairman, thank you for making it possible for these issues surrounding ANWR to be heard.

Testimony of Gerald Hood, Arctic Power, D.C. Coordinator

Mr. Chairman, Ranking Member Bordallo and members of the Committee, I appreciate the opportunity to testify this afternoon on ANWR's benefits for small business. I have spent considerable time educating members of Congress and the public about the importance of responsible ANWR development. I previously served as the energy advisor to James P. Hoffa, President of the International Brotherhood of Teamsters and I am currently the D.C. Coordinator for Arctic Power, an Alaska based non-profit, bi-partisan, grassroots organization whose sole purpose is to see ANWR open. I could inundate this committee with information about the numerous benefits America will see from opening ANWR, but for our discussion today, I'd like to focus on ANWR's impact on small businesses.

America's 23 million small businesses employ over 50% of the nation's private workforce, generate more than half of the nation's gross domestic product, and are the principal source of new jobs in the U.S. economy, according to the U.S. Small Business Administration.[1] These small businesses must have a stable, reliable, and affordable source of energy to fuel their continued success and contribution to the U.S. economy.

The surge in oil and gas prices has tremendously impacted America's small businesses. As Senator Stevens recently reported on the floor of the United States Senate, for every one cent increase at the pump, we lose $1 billion in consumer spending. A recent poll conducted by the International Profit Association's Small Business Research Board found that over 66% of small businesses are feeling the impact of rising fuel costs. "Small business owners and managers are caught in an environment where costs are escalating and margins are being squeezed," said Gregg Steinberg, President of International Profit Associates.[2]

This situation is forcing these business owners to decide between passing the increased costs on to their customers, absorbing them, or cutting jobs. Kenny Crenshaw, owner of a small lawn care company in Memphis, Tennessee recently told MSNBC that the spike in oil and gas prices has "put pressure on everyone to raise prices for everything. If there's a 20% price increase and 10% of our customers leave us, we will have to lay someone off."[3]

The United States' is vulnerable. Declining domestic production coupled with increasing dependence on foreign sources of oil, especially from hostile regions of the world, is leaving Americans and American businesses defenseless against higher fuel prices, and

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[1] http://www.sba.gov/aboutsba/sbastats.html

[2] http://www.ipasbrb.com/fuel-costs.htm

[3] http://www.businessweek.com/smallbiz/content/apr2005/sb20050428_3395.htm

threatening Americans' jobs and the U.S. economy. Small business owners are feeling the brunt of this as their costs go up while consumer spending goes down. Increasing domestic oil production through responsible ANWR development is one component of a common sense approach to addressing this growing problem.

Although economists vary in opinion on the degree to which ANWR development will affect the price of oil, it is more than reasonable to assert that increasing domestic production will ease our energy crisis and the burden it's placed on small businesses. The mean estimate of recoverable oil from ANWR is 10.4 billion barrels, none of which under proposed legislation, will be exported. According to statistics from the Energy Information Administration, ANWR's 10.4 billion barrels is more than twice the proven reserves in all of Texas and nearly half of the Total US proven reserves of 22 billion. Moreover, a recent report from the EIA concluded that ANWR could increase domestic oil production by 20% by the year 2025.[4]

New technology will allow us to produce ANWR's 10.4 billion barrels of oil (USGS mean estimate) from just 2000 acres of the 19.6 million acre refuge. That's just one tenth of one percent of the entire refuge. While minimizing environmental impact, responsible development in ANWR will create hundreds of thousands of jobs for Americans in every state in the nation, and generate billions of dollars in revenue.

A jobs study conducted by the Wharton Econometrics Institute at the University of Pennsylvania concluded that ANWR development would create 735,000 nationwide. It also forecast where those jobs would be created, and calculated, for example that 14,100 new jobs would be created in Missouri, 15,500 in Indiana, 18,000 in Georgia, 60,000 in Texas, and 48,000 in New York.[5]

This study has been criticized as being optimistic as it assumed a price of $40 per barrel of oil. However, based on today's oil prices of over $50 per barrel, the study's findings are more relevant today than ever. Moreover, it should be noted that the study was conducted under the assumptions of 1990's recovery technology. Since that time, advances in Arctic technology have reduced the cost of producing a barrel of oil and increased the amount of oil that can be technically and economically recoverable. Given these facts, the study's conclusion that ANWR development would create 735,000 jobs is not only relevant, it's likely conservative.

In addition, it has been estimated that between 1977-1994 the oil industry spent roughly $60 billion throughout the United States on the products and services required to bring the oil to market from 1977-1994. It is logical to conclude that thousands of small businesses across the country benefited from this consumer spending. For example, Mr.

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[4] http://www.eia.doe.gov/pub/oil_gas/petroleum/analysis_publications/arctic_national_wildlife_refuge/html/figure4.html

Chairman, roughly $203 million have been spent in Missouri, over $15 billion in Texas, $1.5 billion in New York, and $236 million in Georgia.[6]

Mr. Chairman, oil fuels America's small businesses and small business, in turn, fuel our economy and employ over half of the country's private workforce. Everything must be done to ensure their growth and stability. Increases in the price of oil are directly affecting the bottom line of small businesses. ANWR oil development will not only enhance our energy security and affordability, it will create jobs for Americans and yield America's small businesses billions of dollars in consumer spending.

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[5] http://www.anwr.org/STATES/state.htm

Testimony of Karen Wright
Before the Regulatory Reform and Oversight Subcommittee
Of
The House Committee on Small Business
May 19, 2005

Thank you

My company, which employs about 700 people and is located in a small town in central Ohio, manufactures natural gas compressors, capital goods used for production of natural gas throughout the world. We are the largest manufacturer of reciprocating gas compressors in the world and are a private family business—started by my father, in our basement, in 1966. I'm second generation and am grooming my four sons to eventually succeed me in the business. As such I have a perspective on family business, manufacturing, the oil and gas industry and motherhood (not apple pie).

That being said, I've been involved in this business for 26 years.... and, so.... I believe I can say with some certainty.... that we are some of the most patriotic people in America. While oil is a global commodity, natural gas is regional. 96% of the natural gas used in North America comes from North America.... via our hard work. LNG, even if all the blockades to increased delivery were removed, would not account for even 10% of the total demand until at least 2010 .... That means it's up to us to supply all the gas used in heating homes and generating electricity, for agricultural and industrial feedstock, for steel production, and very importantly, to produce the military equipment needed to maintain our strength as the peace-keeper of the world. It's up to us to meet the increased demands of a growing, vibrant economy...in short, it really is up to us to make sure that America doesn't run out.

And yet, we don't get much thanks. We're on a roller coaster we don't control.... where the price and the profit margins jump from one extreme to the other. The public perception is that we care not one bit for the environment while we're at it. Actually.... —if the media is representative of what the average American thinks of our industry....oil and gas and manufacturing are dirty, rotten, dishonest and insensitive . The public doesn't know that hundreds of thousands of people are employed in the oil and gas industry... right here in America... and these jobs can not be exported offshore. The public doesn't realize that the strength of the American economy rests on our shoulders. First energy...then manufacturing. The two go hand in hand. The public doesn't realize that American manufacturing alone...if it were a country...would be the fifth largest economy in the world. Over 14 million people are employed in manufacturing, with about 40 million people directly affected if you count their families—that's about 14 percent of the population. Manufacturing contributes about 11% to the GDP. Clearly though, without us...., the energy industry.... and the manufacturing it supports...., there wouldn't be a service economy. Because, there would be no one to provide service to.

The public doesn't know that we have long since realized we live here too.... and we are concerned about the integrity of the environment.... – technology has caught up with conscience...and it's possible for us to produce sufficient clean-burning natural gas supplies, without damaging the environment. The technology available today allows us to act in good conscience; we should I believe, be like the Boy Scouts.... – we should leave it like we found it....or better!

This applies to ANWR. It is the most important factor. We should only develop ANWR if we believe we can do it with the utmost concern for the integrity of the environment.

I will come back to this in a few minutes...please allow me to digress for a moment to give you some insight into the natural gas industry and the manufacturing which directly supports it, in America.

This industry is extremely cyclical. We are on a roller coaster... Our sales dropped 40% from 2001 to 2002, stayed flat in 2003, rocketed up 40% in 2004 and this year another 40%. I suppose that would be nice if it were tax revenues, but it is a serious challenge to manage a business through these kinds of extremes.

Our experience mirrors the oil and gas industry.

But, even when the price of natural gas drops through the floor, we keep on. Hope springs eternal in this industry. It reminds me of the bumper sticker I've seen in Houston: Please Lord, Give us one more oil boom. We promise not to screw it up this time! We'd like to think we've learned from our mistakes. But I guess it's just the nature of the oil and gas industry.... it's what I call the yee-haw effect.... – it's what makes us special. You might want to know what's the yee haw effect? It works like this...

Things are bad, the price is low, the rigs are moth-balled. Then the economy starts to grow. The demand increases. The supply tightens. The price goes up. The one guy who has been in all along, increases his drilling. He starts making some money. Other guys notice and they get their rigs fired up. They make some money. Pretty soon, the rest of the guys take notice and say....and they just can't help it....YEE HAW, BOYS, I'm gittin'in" .... And the cycle starts all over again. Right now we're at peak yee-haw production.... You know, there will be a little

valley sometime in the next year or so.... But.... what would happen if the next time a couple of guys kick off the new cycle and the rest of us decided to sit it out? As Bush 41 said "we'd be in deep do-do."

My point is this: Energy is the base of the economy – especially affordable energy. Energy independence is the best defense against terrorism.... Affordable energy is also one of the primary sources of our economic strength. The risk taking behavior of our industry...., the yee-haw effect....—which keeps us producing gas and oil to benefit all Americans...., keeps us as the leader of the world...., and makes us masters of our own destiny.

Our hard work results in a prosperous America. A prosperous America depends on affordable natural gas supplies, and right along with that, affordable oil. Clearly we are not going to recover oil independence, but reducing our dependence on foreign oil will help to control both the supply and more importantly the price—and thus the affordability of oil. Typically there is gas associated with oil and if you remember, the natural gas used in North America is almost entirely produced in North America. ANWR is part of a bigger picture. Even if the drilling of ANWR is ultimately rejected we will still need to move quickly to allow drilling for natural gas in America, off the continental shelves, in the Rockies and other significant areas of huge known reserves. Why? We are essentially independent from the global market as regards natural gas and strength of the nation's economy depends on our immediate recognition of that fact. There is no recourse. That's why.

Manufacturing, that's 40 million Americans, or 13% of the GDP, plus many millions more in service industries directly related to Manufacturing, depends on the natural gas industry to:

1. Produce clean burning, affordable natural gas for all Americans.

2. Act as stewards of the environment, keep it intact, enhance it.

3. Provide the base of our economy on which rests the strength of our nation, jobs for millions of Americans and our leadership of the world.

We need an energy policy that lets us provide the gas and oil America needs, an energy policy which is a bridge to the future, when alternative energy sources have been developed.... an energy policy that recognizes the oil and gas industry can be good stewards of the environment and an energy policy that maintains.... – NO.... – GROWS America's strength.

I'm confident that those of us in the Yee-Haw.... industry can do it if you just give us <u>one</u> <u>more chance</u>.

Thanks you,

Testimony of

Eban S. Goodstein*

Professor of Economics
Lewis & Clark College
Portland, Oregon

Before the
US House of Representatives
Small Business Committee

May 19th, 2005

Department of Economics, Lewis & Clark College, Portland, OR 97219.
5030768-7626. eban@lclark.edu.

Thank you for the opportunity to testify before you today. My name is Eban Goodstein, and I am a Professor of Economics at Lewis and Clark College in Portland Oregon, where I chair the Environmental Studies Program. I hold a B.A. in Geology from Williams College, and Ph.D. in Economics from the University of Michigan. I am also a member scholar with the Center for Progressive Reform. My expertise is in environmental and natural resource economics, with one sub-specialty being the employment and competitiveness effects of environmental policy. I am the author of a college textbook, *Economics and the Environment*, (John Wiley and Sons: 2004) now in its fourth edition, as well as *The Trade-off Myth: Fact and Fiction about Jobs and the Environment*. (Island Press: 1999), and in addition, over 30 peer-reviewed articles and reports.

Small businesses are particularly vulnerable to oil price volatility—both because a doubling of petroleum prices like we have seen this past year directly impacts their bottom-line, but also because of the macroeconomic slowdown that large oil price increases typically impose. In my testimony today, I want to emphasize one point on which economists agree: this vulnerability does not have anything to do with our dependence on oil imports, but is instead a function of our overall economic dependence on oil—whether imported or domestic. This is true even in the case of a severe supply disruption from the middle east or elsewhere, because the domestic price of oil is inextricably linked to the international price of oil. Given this economic fact, Arctic Refuge development will do nothing to reduce the exposure of small business to high and volatile world oil prices, and it will not create many jobs outside of Alaska. Instead, small business would be better served by policies that reduce the oil intensity of the economy—win-win solutions that would improve energy security for businesses, create jobs and save consumers money to spend on domestic goods and services.

I would like to make five points:

- Oil from the Arctic Refuge will have, even under optimistic scenarios, only a very small impact on world oil prices.

- The US economy is much less oil intensive than it was in the 1970's and is as a result, much less sensitive to oil price shocks. The economy is also more sensitive to price increases than it is to decreases. Any small reduction in world oil prices from Refuge oil will thus have no noticeable impact on national economic growth and related job creation. With little to no impact on prices leading to no impact on growth, small businesses will simply be unaffected by macroeconomic effects of Arctic Refuge oil development.

- The US economy remains vulnerable to large, sudden increases in world oil prices. However, because this vulnerability depends on the overall consumption of oil, and *not the percentage of oil imported*, there is no economic security argument to be made in favor of Arctic Refuge oil development. Oil security can only be enhanced by reducing overall dependence on petroleum use.

- Oil development in the Arctic may create net US jobs as a result of the increase in aggregate demand from the expenditure of several billion dollars on oil field development, and peaking about twelve years following initial production (2025 if development begins soon), a reduction in import expenditures. My preferred estimated range for the likely increase in jobs nationwide from Arctic development would be around 40,000-50,000; a large percentage of these jobs will be in Alaska.

- Unlike Arctic refuge oil development, reducing overall petroleum dependence would create jobs *and* help protect small businesses from oil price volatility. Improving vehicle efficiency by about 3 miles per gallon would reduce imports and provide the same addition to US aggregate demand ($8 billion) as development of Arctic refuge oil-- with the same (small) positive impact on jobs much sooner. Moreover, since better gas mileage reduces overall petroleum dependence, it also provides valuable insurance against sudden oil price increases. Finally, the National Academy of Sciences has recently concluded that much larger improvements in fuel efficiency can be achieved with no net cost to consumers, since increased up-front vehicle costs are offset by fuel savings. Thus, improvements in fuel efficiency provide an opportunity to create more jobs, protect small business from oil price shocks, and save consumers money.

The bottom line: Over the next 45 years the US will consume almost 500 billion barrels of oil; the Arctic Refuge is thought to contain about 1% of that.[1] Foreign oil dependence is a reality that we cannot drill our way out from under. Ultimately, we can only escape dependence on foreign energy sources by reducing our *overall* economic dependence on oil. Petroleum dependence imposes major costs on the US economy about which small businesses need to be concerned. We remain vulnerable to oil price shocks; our oil dollars are fueling terrorist activities in the Middle East; and oil combustion is a leading cause of global warming—which in my state, and throughout much of the west, threatens to wipe out around half of the water flow in our streams and rivers by mid-century—with huge impacts on small businesses and farms in rural areas. However, development of Arctic Refuge oil fails to address the costs of petroleum dependence for small business, and offers only very small increases in national employment.

1. Very small impacts on world oil price from Arctic Refuge Oil

According to the Energy Information Administration ".. the impact of on world oil prices [from Arctic Refuge development) is not expected to be significant. With respect to the world oil price impact, ANWR coastal oil production in 2025 is projected to constitute between 0.5 and 1.3 percent of total world oil consumption. It is expected that the price impact of ANWR coastal plain production *might* (emphasis added) reduce world oil

[1] US consumption estimate developed by Richard Fineberg as follows: Domestic consumption from Annual Energy Outlook 2005, Table 11 (Reference Case). EIA's estimate of domestic oil consumption through 2025 was extended to 2050 using the average annual increase projected by the EIA between 2020 and 2025 (1.2 percent).

prices by as much as 30 to 50 cents per barrel, relative to the a projected 2025 world oil price of $27 per barrel (2002 dollars)... Assuming that world oil markets continue to work as they do today the OPEC could countermand any potential price impact of ANWR coastal plain production by reducing its exports in an equal amount"[2]

Rephrased, the EIA is saying that *if* the oil market was a competitive one, than an increase in supply of 1.3% would lead to a drop in price of $.50. However, the evidence clearly shows that the world oil market is not competitive; instead OPEC's supply behavior is that of an imperfect output sharing cartel.[3] The driving competitive force relating to price is the presence of excess production capacity. Thus, given the long lead time, OPEC should be expected to respond easily to an increase in Alaskan capacity, reflected in a very gradual slowdown in the growth of OPEC's production capability, to avoid any overcapacity generated by Arctic oil.[4] As a consequence, it is unlikely that Arctic development will lead to any noticeable reduction in world oil prices.

2. No impacts on growth and related nation-wide job creation from Arctic Refuge Oil

The decade of the 1970s provided economists with an interesting laboratory to estimate the sensitivity of the US economy to oil prices. Studies from this era suggested that a 1% increase in oil prices lead to a .02-.06 percent decline in GDP. However, the opposite relation—a drop in oil prices leading to economic growth—was much harder to see in the data.

Since the 1970s, the US economy has become much less petroleum intensive: petroleum expenditures as a share of GDP have dropped from 4-6% to less than 2%. Indeed, as Figure 1 illustrates, since 1990 there has been no obvious link between the direction of oil prices and the direction of the economy. In 8 of the last 14 years, oil prices and the economy have moved in the same direction: rising (falling) prices accompanying increasing (decreasing) growth rates. Most noticeable is that, in spite of price increases of several dollars of $4 per barrel from 2000-2002, the economy rebounded solidly out of the 2000 recession. It was not until the dramatic price increases of the last year—a near doubling (not shown)—that analysts have begun to pin negative macro effects on rising oil prices. Bottom line: in 2005 the US economy appears to be quite insensitive to small changes in oil prices.[5]

Even if we assume that OPEC fails to respond fully to Arctic development, and so a $.30 per barrel decrease in oil prices does materialize, given the decreased sensitivity of the economy to oil price shocks, and the fact that the economy does not appear to respond to price decreases as much as increases, the national impact of the price decline on the

[2] EIA (2004: 7)
[3] Parry and Darmstadter (2003: 6)
[4] Cleveland and Kaufmann (2003: 487)
[5] Brown and Yucel (2002); Parry and Darmstadter (2003). The latter authors present a figure similar to Figure 1 in the text below.

economy would be on the order of .0002 of GDP: $2 billion. Thus there will be no measurable impact on jobs as a result of accelerated economic growth.

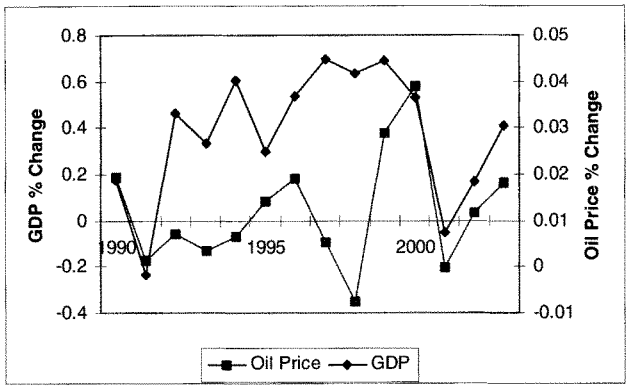

Figure 1. Annual Trends in Oil Price and GDP are Uncorrelated (Source: EIA and CEA)

By contrast, the well-known WEFA (1990) analysis projects a dramatic acceleration in economic growth from Arctic Refuge oil, leading to job increases on the order of three quarters of a million. This would indeed be quite a feat of economic alchemy: if 2,000 acres of Alaska wilderness could somehow provide a job to every worker in the states of Delaware and North Dakota combined. The flaws of this analysis are also well known:

"In a truly extraordinary feat of macro-economic modeling, WEFA (1990), writing for the American Petroleum Institute, manages to predict a net employment gain of 750,000 jobs *via* ANWR development in a "high resource" case (deemed only a 5% probability by the US Geological Survey). This translates into roughly *178,000 jobs for each billion in expenditures*, as against the economy-wide average of 14,000.

...the alleged employment affect is not being driven by an increase in aggregate demand discussed in the text above, but rather is flowing from ANWR's "expected" impact on world oil prices. The idea behind the WEFA study can be summarized as follows:

(1) ANWR-supplied oil will drive down world oil prices significantly.
(2) As a result, US GNP will be larger in the long run.
(3) Finally, WEFA assumes that higher long-run GNP levels will generate lower unemployment levels.

Step (1) is the weakest point in the argument. First, the WEFA number of 750,000 net jobs is based on a hypothetical oil strike deemed highly unlikely by government scientists. The more likely mean ANWR oil field is an even tinier portion of world, and indeed national reserves. Second, in the WEFA study, a .9% increase in world oil supply from ANWR (the

field's theoretical maximum) translated into a 4.5% decrease in world oil prices. This is an implied demand elasticity of .2, less than one-third the value of generally accepted estimates. Third, WEFA assumes that OPEC will not react to an increase in US production, and subsequent price decrease, by curtailing its own. Finally, the report adopts unreasonably high price forecasts for oil."[6]

The problems with step (2) are discussed above in this section, especially the lack of evidence relating declines in oil prices to faster economic growth. Regarding point 3, it is important to recognize that accelerations in the rate of economic growth will only be accommodated by the Federal Reserve in times of low inflation. (More on this point in part 4 below).

3. No energy security benefits from Arctic Refuge Oil

It is sometime argued that reducing US dependence on imported oil would increase our economic security from volatility in oil prices. However, this is not true. Since oil prices are set in world markets, when oil prices rise due to supply disruptions, all prices rise: both for imported and domestic oil. Thus, vulnerability to supply shocks depends on overall petroleum dependence, not the level or percentage of imports.[7] The US economy was actually more vulnerable to large increases in oil prices in the early 1970s when our import share was less than 45% than it is today with an import share of 60%. The reason is that petroleum cost as a share of GDP has declined from 4-6% to less than 2%.

As the last year has indicated, the US economy does remain vulnerable to very large, sustained price increases. However, reducing the share of imports by 2 or 3 percentage points will do nothing to reduce this vulnerability.

4. Net job gains from Arctic Refuge Oil will be relatively small

Development of oil from the Arctic Refuge will generate net job gains to the US economy from two sources. For the five year period of development, the industry expects to spend around $6 billion per year. Once production begins, US oil production will displace imported oil leading to a reduction in the trade deficit, climbing to a maximum of $8 billion about 12 years after production is initiated (2025 if development begins soon). Both sets of expenditures will lead to a boost in US aggregate demand.

Increases in aggregate demand lead to increases in US employment if they ultimately increase US GDP. However, there are at least two reasons why a given increase in aggregate demand does not always boost GDP by an equal amount.

First, when the economy is at less than full employment, increases in aggregate demand translate into increases in real GDP; however, when the economy is close to full employment, the Federal Reserve will respond to any acceleration in economic growth by raising interest rates as it did throughout much of the 1990's. So, if for example, Arctic

[6] Goodstein (1999: 111)
[7] Parry and Darmstadter (2003: 17)

oil is developed in say, 2010, and national unemployment rates happen then to be at 4-5%, the Fed would use the interest rate brake to keep any net increase in employment from occurring as oil field development proceeded.

Second, leakages to imports or capital exports may also dampen the effect of an initial increase in domestic spending. For example: if oil companies invest in fields in Alaska, they may reduce investment in, say, Ecuador. To the extent that oil service companies from Texas operate in both markets, the increased business in Alaska might be partially or totally offset by reductions elsewhere. Or, retained earnings reaped by oil companies once production begins may well be invested in overseas projects.

One-billion dollars in increased GDP translates into approximately 13,000 jobs. Given the fact that the increases in aggregate demand arising from oil field development, and much later, reductions in the trade deficit, are unlikely to fully translate into increases in GDP, my preferred estimate for net job increases from Arctic Refuge oil would be between 40,000-50,000 nationwide. Obviously, a significant share of these jobs-- oil industry, supporting service industry, and state government employment resulting from higher tax revenues-- will be in Alaska.

Finally, to put these numbers in perspective, in April the economy gained 274,000 jobs; for the previous 15 months, the economy was adding about 140,00 jobs every 30 days.[8] Job gains from Arctic Refuge development would be significant in Alaska, but unnoticeable in the rest of the country.

5. Small business better-served by improvements in vehicle efficiency standards

Small businesses are particularly vulnerable to oil price volatility—both because a doubling of petroleum prices like we have seem this past year directly impacts their bottom-line, but also because of the macroeconomic slowdown that large oil price increases typically impose. As noted, however, Arctic refuge development provides no protection from sudden increases in world oil prices. By contrast, improvements in vehicle fuel efficiency do. If the trend in fuel efficiency improvements that were seen in this country from 1978-1988 had continued (instead of actually reversing) then the average small business owner would—this year-- be experiencing a greater than 50% savings on his or her gasoline bill.

Those savings for businesses and consumers would mean less spending on imports and more on domestic goods and services—and would also today be creating jobs.

The same job gains from Arctic Refuge oil development that will be seen in the peak production years around 2025, could be had much more quickly by raising vehicle fuel efficiency standards by around 3 mpg. This would lead to a near term reduction of oil

[8] US Bureau of Labor Statistics.

imports of around $8 billion, and thus give the same boost to aggregate demand as would Arctic Refuge oil production.[9]

The National Academy of Sciences recently concluded that, using known technologies, fuel economy could be raised by much more than 3 mpg (thus yielding much larger employment gains from trade deficit reduction) at no net cost to consumers. SUV mileage, for example, could be improved by 25 to 40%, with the increase up-front vehicle costs more than being offset by the (discounted) fuel savings. Moreover, the Academy agreed that these improvements could be achieved with no compromise in safety or performance. Taking into account as well the external benefits from both reduced greenhouse gas emissions and increased oil security, the committee recommended that "the federal government [take action] to ensure fuel economy levels beyond those expected to result from market forces alone."[10]

Thus, compared to Arctic Refuge development, improved fuel efficiency standards provide a triple win for small business: larger gains in national job growth; significant protection from oil price shocks, and consumers with more money in their pocket to spend on domestic goods and services.

Conclusion

Small businesses need protection from high and volatile oil prices: however, economic logic clearly shows that since oil prices are set in a world market, US business vulnerability depends on the overall US dependence on oil, not on the percentage of imports. Thus Arctic Refuge development simply will not solve this problem. The only way to improve energy security is to reduce the petroleum dependence of our economy—whether imported or domestic. Policies such as improved vehicle efficiency standards would achieve this goal, and by reducing the trade deficit, create more jobs faster than would Arctic Refuge oil development.

Thank you for your attention.

[9] Markey (2005) cites the 3 mpg figure as providing an offset of Refuge oil after 10 years. Lovins and Lovins (2001) argue that a fleet-wide improvement of only 0.4% would offset the Refuge's oil over a thirty year time-frame.
[10] National Academy (2002).

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Useful Supplemental Information

	Low <95%	**Medium**	**High <5%**	
Technically Recoverable	5.7 bbls	10.4 bbls	16.0 bbls	
Peak Production 2025	.6 mbd	.9 mbd	1.6 mbd	
Reduction in expenditures on Foreign Oil	$6 b	$8 b	$15 b	

Source: EIA (2004)

2017: production at 1 mbd; 2023: 1.3 mbd; 2028 below 1 mbd.
2020: OPEC = 62.4 mbd of world demand at 122.4 mbd.