Summary of Statement of Red Cavaney, President and CEO, American Petroleum Institute before the House Energy and Commerce Committee

September 7, 2005

- The Gulf Coast is the very heartland of the U.S. oil and natural gas industry. We are not just responding to this disaster. We are living it. Thousands of our husbands and wives, sons and daughters, and friends and neighbors are suffering the hardships of those living in this devastated region.
- Facilities are starting to come back online, and we are grateful to the Administration for access to the Strategic Petroleum Reserve and for waivers to expedite the flow of fuels, particularly to emergency responders.
- The Gulf Coast region includes some 4,000 offshore platforms in federal waters, major refineries, and hundreds of production, transportation and marketing facilities. There is a reason for this geographic concentration in a high-risk weather area. Government policies have largely limited offshore exploration and production to the Central and Western Gulf – and our onshore facilities, including refineries, have been welcomed in communities in the region.
- Unfortunately, offshore oil and natural gas development has been barred elsewhere – including the eastern half of the Gulf and the entire Atlantic and Pacific Coasts. Onshore construction has been held back by government restrictions, permitting delays, and not-in-my-backyard NIMBY sentiments.
- Before Katrina struck, the price of gasoline was rising primarily because U.S. refiners were paying more for crude oil, accounting for more than half the cost of a gallon of gasoline. Federal and state taxes account for 46 cents of the price.
- Our fuels are sold at more than 168,000 retail outlets nationwide – and less than 10 percent of those outlets are actually owned by refiners. The rest are owned by independent small businessmen and women. They are making business judgments every day, as is their right. If anyone breaks the law, prosecution should follow.
- The industry has been repeatedly investigated over many decades by the Federal Trade Commission, other federal law enforcement agencies, and state attorneys-general. None has ever found evidence that our companies have engaged in price gouging or other anti-competitive behavior to drive up fuel prices.
- In attempting to meet the challenges we face, Congress should take actions to alleviate the challenges caused by Hurricane Katrina by helping to diversify the presence of industry facilities, such as LNG terminals. It is also most important to do no harm. Imposing new controls, allocation schemes, or other obstacles will only repeat past policy mistakes and serve to make a bad situation much worse.
- If we all do our part – industry providing supplies and repairs as expeditiously as possible, government facilitating needed approvals, and consumers adjusting their driving habits to consume less fuel – Americans can overcome this challenge as we have others in our nation's history.

Statement of Red Cavaney, President and CEO, American Petroleum Institute, before the House Energy and Commerce Committee

September 7, 2005

I am Red Cavaney, President and CEO of the American Petroleum Institute -- the national trade association for the U.S. oil and natural gas industry, representing all sectors of the industry, including companies that make and market gasoline.

The Gulf Coast is the very heartland of our industry. We are not just responding to this disaster. We are living it. Thousands of our husbands and wives, sons and daughters, and friends and neighbors are suffering the hardships of those living in this devastated region. Fitch Ratings, a leading global ratings agency, reports that Hurricane Katrina has caused the largest insured loss in U.S. history – more than 9/11 and more than any previous natural disaster.

Facilities are starting to come back online, and we are grateful to the Administration for access to the Strategic Petroleum Reserve and for waivers to expedite the flow of fuels, particularly to emergency responders.

The Gulf Coast region includes some 4,000 offshore platforms in federal waters, major refineries, and hundreds of production, transportation and marketing facilities. There is a reason for this geographic concentration in a high-risk weather area. Government policies have largely limited offshore exploration and production to the Central and Western Gulf – and our onshore

facilities, including refineries, have been welcomed in communities in the region. Unfortunately, offshore oil and natural gas development has been barred elsewhere – including the eastern half of the Gulf and the entire Atlantic and Pacific Coasts. Onshore construction has been held back by government restrictions, permitting delays, and not-in-my-backyard NIMBY sentiments.

It is ironic that we talk so much about diversifying the sources of our energy supplies from abroad, yet we have done so little to geographically diversify our oil and natural gas industry here at home.

An area of much recent concern has been the need to bring additional clean-burning natural gas to industries and consumers nationwide. Yet, efforts to increase domestic natural gas production, both in the Rocky Mountain West and offshore, have been stymied – and efforts to build more terminals outside the Gulf region to permit increased imports of LNG have also been largely blocked.

Impact of Hurricane Katrina

While it is still too soon to know the full effects of Hurricane Katrina on production and refinery facilities in and along the Gulf of Mexico, it is clear that the impact of this devastating storm on oil and natural gas operations will be significant and protracted.

I know that I speak for every one of our member companies when I say that our first concern – from the moment it becomes evident that a hurricane is approaching the Gulf – is for the wellbeing and safety of the thousands of men and women from across the country who work on

offshore facilities, on the vessels that serve them, in the refineries, distribution networks, and retail outlets around the Gulf coast.

Equally as important is the welfare and recovery of the communities in the Gulf region. Millions of people in the area are experiencing firsthand the physical and emotional hardship of the death and devastation caused by Katrina, and our hearts and our prayers are with them.

API is working with the American Red Cross to facilitate U.S. oil and natural gas industry efforts to help people throughout the Gulf region. We have informed our companies that the Red Cross has described how they can help relief efforts through corporate contributions and by encouraging customer and employee contributions.

Effects of Hurricane Katrina on Industry Facilities

We are concerned, also, about our facilities in the area. While they are designed to withstand the forces of the most severe storms, extraordinary circumstances do occur. Therefore, one of our industry's top goals is always to ensure minimal impact on the Gulf of Mexico and coastal environments. The industry takes pride in its outstanding record for safety and environmental protection in the Gulf region, and we intend to live up to that record. Let me review the latest information (as of September 4) we have from the Department of Energy (DOE) and the Minerals Management Service (MMS) on the status of our facilities:

Offshore Production Facilities. According to the latest MMS reports, 30 percent of the 819 manned platforms and 29 percent of the 137 rigs are currently operating in the Gulf of Mexico.

Shut-in oil production is at 1,184,747 barrels of oil per day, which is equivalent to 78.9 percent of the daily oil production in the Gulf. Shut-in gas production is 5.779 billion cubic feet per day, which is equivalent to 57.8 percent of the daily gas production in the Gulf.

Refineries. A significant volume of refining capacity in the Gulf Coast and Midwest remains impacted by Katrina. According to DOE, 11 percent of U.S. refinery capacity is shut-in, and refineries representing another 14 percent of U.S. capacity are operating at reduced levels because of a lack of crude supplies. Lack of electricity has also been an issue in restarting refineries. Much progress has been made and Entergy reports that it has restored electricity to all but three refineries in the New Orleans area.

Pipelines. DOE reports that the Colonial and Plantation pipelines, critical for distributing petroleum products from the Gulf Coast to the Southeast and Mid-Atlantic regions, have resumed operations, albeit at reduced rates. Colonial is operating at 66 percent of normal operating capacity. Both gasoline and distillates are currently being transported and delivered. Colonial's capacity is about 2.4 million barrels per day. Plantation announced it would be 100 percent operational by late on September 2. Plantation moves about 620,000 barrels of gasoline, diesel, and jet fuel per day. The Capline pipeline is also now operational at reduced rates, according to DOE. Capline will operate at reduced rates until the Louisiana Offshore Oil Port (LOOP) is fully operational. Capline runs roughly 1.2 million barrels a day of crude oil to the Midwest.

LOOP. LOOP is operational at the Clovelly terminal. Entergy energized a line to Clovelly and the terminal is now capable of operating at approximately 75 percent of capacity. The Fourchon terminal remains shut down.

Katrina Impact on Jet Fuel Supply

The Committee has expressed interest in the impact of Hurricane Katrina on jet fuel supply. It is too soon to assess that impact, but we are hopeful that restoration of refineries and pipelines to at least partial operation will increasingly alleviate whatever supply shortfalls are caused by the hurricane.

The Louisiana Gulf Coast District, the region hit by Katrina, accounts for about 23 percent of U.S. jet fuel production. In 2004, the region's refineries produced 355,000 barrels per day of the national output of 1.547 million barrels per day. The Gulf Coast region as a whole accounts for about half of U.S. jet fuel production, or 779,000 barrels per day in 2004.

The Gulf Coast region ships about two-thirds of what it produces to the East Coast (about 500,000 barrels per day), and more than 80 percent of those shipments are by pipeline. Some jet fuel is also shipped by tanker and barge to the East Coast, mainly to the South Atlantic states. The Gulf Coast region ships approximately another 135,000 barrels per day to the Midwest, mostly by pipeline. The United States also imports about 125,000 barrels per day of jet fuel.

Responding to Hurricane Katrina

In the coming days and weeks, we are committed doing our best to minimize the impact of Hurricane Katrina on the flow of fuels to consumers.

Even before the hurricane's devastating impact, American consumers were concerned over the rising cost of gasoline, diesel and other fuels. Katrina's aftermath, however, underscores the need for all drivers to take seriously common-sense energy conservation recommendations – found on API's website and elsewhere – for reducing the amount of fuel they consume.

We also want to thank President Bush for making available crude oil from the Strategic Petroleum Reserve to address circumstances for which it was intended and appreciate the IEA member nations' contributions as well. We are also grateful that EPA and the Department of Transportation have granted waivers to expedite the flow of fuels, particularly to emergency responders – an action that is very helpful at a time when logistics and distribution of fuels are extremely difficult and critical. The Departments of Energy and Homeland Security have also been helpful in many ways.

We believe Congress can take action to help alleviate the hardships Americans are suffering from Hurricane Katrina. One action involves LNG. I earlier mentioned the importance of siting LNG receiving terminals in areas beyond the Gulf region. This diversification is helpful, and your support in facilitating it would be much appreciated.

These and other positive steps by government can be most helpful in dealing with this catastrophe. We believe it is particularly important for government officials at the federal, state and local levels to urge citizens nationwide to use energy wisely, particularly in terms of not hoarding gasoline and not "topping off" their vehicle tanks. Effective conservation measures are vital in helping meet the fuel needs of U.S. consumers in this difficult situation.

In attempting to meet the challenges we face, it is also most important to do no harm. The worst thing Congress could do in these challenging times would be to repeat the mistakes of some past energy policies by trampling the structures of the free marketplace. Imposing new controls, allocation schemes, or other obstacles will only serve to make a bad situation much worse. (See the attachment, "Hurricane Katrina and U.S. Energy Policy: Do No Harm.")

Why Have Gasoline Prices Risen?

We know that Hurricane Katrina's effects on our industry are having a nationwide impact. We understand how Americans throughout the country are facing skyrocketing prices for gasoline and other fuels. What follows is background on two key components of the price of gasoline: crude oil price and taxes.

Crude Oil Price. Before Hurricane Katrina struck, the price of gasoline was rising primarily because U.S. refiners are paying more for crude oil, the principal cost component of a gallon of gasoline. In fact, the Federal Trade Commission noted this exact point in a report this July: "To understand U.S. gasoline prices over the past three decades, including why gasoline prices rose so high and sharply in 2004 and 2005, we must begin with crude oil. The world price of crude oil

is the most important factor in the price of gasoline. Over the last 20 years, changes in crude oil prices have explained 85 percent of the changes in the price of gasoline in the U.S." The crude oil price is set in the international oil marketplace by the forces of supply and demand for oil worldwide.

Tax Component. While more than half the cost of gasoline is for crude oil, every time a motorist pulls up at the pump, he or she pays 46 cents in federal and state taxes per gallon of gasoline. The remainder is the cost to refine and market the gasoline. The average price of a gallon of regular gasoline reached $2.85 on September 2, according to AAA. When the price of a barrel of crude oil is $67, as it was at the end of last week, a refiner paid about $1.61 per gallon for the crude oil in order to make a single gallon of gasoline. As noted above, taxes average 46 cents per gallon nationwide. The remaining 78 cents per gallon includes the cost of running refineries, transporting the finished gasoline to markets via pipelines and tank trucks, and operating retail outlets. The cost to refine, market and distribute gasoline has been trending downward for many years. The recent price spikes are a direct consequence of disruptions in crude oil and gasoline supplies. (Attached is a chart showing combined federal, state and local gasoline taxes for each state..)

How Fuels Are Marketed. It is important to recognize that our fuels are sold at more than 168,000 retail outlets nationwide – and less than 10 percent of those outlets are actually owned by refiners. The remaining 150,000 outlets are owned by independent small businessmen and women, who are your neighbors. They are making business judgments every day, as is their right. However, if any of us breaks the law, prosecution should follow.

History provides an important guide here. Our industry has been repeatedly investigated over many decades by the Federal Trade Commission, other federal agencies, and state attorneys-general. None has ever found evidence that our companies have engaged in price gouging or other anti-competitive behavior to drive up fuel prices.

The gasoline marketing system has the complexity and flexibility required to meet the varying needs of both companies and consumers. Companies have three basic types of outlet options and may employ any and all in their marketing strategies to maximize efficiencies and compete in the marketplace. First, they can own and operate the retail outlets themselves (company owned and operated outlets). The second option is to franchise the outlet to an independent dealer and directly supply it with gasoline. This option may have three different forms of property ownership: The operator can lease from the refiner, lease from a third party, or own the outlet outright. The third option is to utilize a "jobber," who gains the right to franchise the brand in a particular area. Jobbers can choose to operate some of their outlets with their own employees and franchise other outlets to dealers. The mix of distribution methods varies widely across firms. Different refiners, depending on which type is perceived as most efficient, use different types of outlets.

Supply and Demand in the World Market. Prices are rising because of the forces of supply and demand in the global crude oil market. Supply and demand is in a razor-thin balance in the global market. Small changes in this market have a big impact.

World oil demand reached unprecedented levels in 2004 and continues to grow. Strong economic growth, particularly in China and the United States, is fueling a surge in oil demand. The U.S. Energy Information Administration (EIA) reports that global oil demand in 2004 grew by 3.2 percent – the strongest growth since 1978 – and projects growth to increase by about 2.1 percent this year and next. By comparison, world demand between 1993 and 2003 grew at an average rate of 1.6 percent.

At the same time, world oil spare production capacity -- crude that can be brought online quickly during a supply emergency or during surges in demand -- is at its lowest level in 30 years. Current spare capacity is equal to about 1 percent of world demand. EIA projects spare capacity for 2005 at just over 1.0 million barrels a day. Thus, the world's oil production has lagged, forcing suppliers to struggle to keep up with the strong growth in demand.

The delicate supply/demand balance in the global crude oil market makes this market extremely sensitive to political and economic uncertainty, unusual weather conditions, and other factors. Over the past year, we have seen how the market has reacted to such diverse developments as dollar depreciation, an unusually cold winter, the post-war insurgency in Iraq, hurricanes in the Gulf of Mexico, the continued impact on the Venezuelan sector from the oil workers' strike in 2002-03, uncertainty in the Russian oil patch, ongoing ethnic and civil strife in Nigeria's key oil producing region, recent mass protests targeting Ecuador's oil infrastructure, and decisions by OPEC.

Gasoline Prices Mirror Crude Oil Prices

While consumer concern about high gasoline prices is very understandable, we must recognize that gasoline prices mirror crude oil prices. Crude oil costs make up more than 50 percent of the cost of gasoline. Retail gasoline prices and crude oil prices have historically tracked, rising and falling together. We import more than 60 percent of the crude oil and petroleum products we consume. American refiners pay the world price for crude and distributors pay the world price for imported petroleum products. U.S. oil companies don't set crude oil prices. The world market does. Whether a barrel is produced in Texas or Saudi Arabia, it is sold on the world market, which is comprised of hundreds of thousands of buyers and sellers of crude oil from around the world.

Earnings

There is considerable misunderstanding about the oil and natural gas industry's earnings and how they compare with other industries. The oil and natural gas industry is among the world's largest industries. Its revenues are large, but so are its costs of providing consumers with the energy they need. Included are the costs of finding and producing oil and natural gas and the costs of refining, distributing and marketing it. The energy Americans consume today is brought to them by investments made years or even decades ago. Today's oil and natural gas industry earnings are invested in new technology, new production, and environmental and product quality improvements to meet tomorrow's energy needs.

The industry's earnings are very much in line with other industries and often they are lower. This fact is not well understood, in part, because the reports typically focus on only half the story – the total earnings reported. Earnings reflect the size of an industry, but they're not necessarily a

good reflection of financial performance. Earnings per dollar of sales (measured as net income divided by sales) provide a more relevant and accurate measure of a company's or an industry's health, and also provide a useful way of comparing financial performance between industries, large and small.

For the second quarter of 2005, the oil and natural gas industry earned 7.6 cents for every dollar of sales compared to an average of 7.9 cents for all U.S. industry.[1] Many industries earned better returns in the second quarter than the oil and natural gas industry. For example, banks realized earnings of 19.6 cents on the dollar. Pharmaceuticals reached 18.6 cents, software and services averaged 17 cents, consumer services earned 10.9 cents and insurance saw 10.7 cents for every dollar of sales. Last year, the oil and natural gas industry realized earnings of 7 percent compared to an average of 7.2 percent for all U.S. industry. Over the last five years, the oil and natural gas industry's earnings averaged 5.7 cents compared to an average for all U.S. industry of 5.5 cents for every dollar of sales.

Some are calling for reinstatement of a windfall profits tax as a response to the nation's energy challenges. As the figures I just cited demonstrate, our industry's earnings are hardly a "windfall." Strong earnings enable our industry to remain competitive globally, benefit millions of shareholders – your constituents – and enable the industry to invest in innovative technologies that improve our environment and increase energy production to provide for America's future energy needs. Levying new taxes would likely end up harming consumers. As *The Wall Street Journal* editorialized recently, ("China Does Carternomics," August 19), "A windfall profits tax

[1] Earnings equal profits divided by sales calculated from "Corporate Scorecard," *Business Week*, August 22/29, 2005; and from company financial reports for oil and natural gas figures.

only discourages increases in supply by disincentivizing further production." According to the Congressional Research Service, the windfall profits tax drained $79 billion in industry revenues during the 1980s that could have been used to invest in new oil and natural gas production. In fact, 1.6 billion fewer barrels of oil were produced domestically due to the windfall profits tax – barrels that instead had to be secured from foreign sources.

Perspective: The Role of Oil and Natural Gas

High gasoline prices have caused some to call for us to decrease, if not eliminate, our nation's reliance on oil and natural gas. However, if we are to understand and address the causes of the high prices, we need to recognize the energy realities that our nation faces.

These realities could not be clearer: We live in a global economy, and there is a strong link between energy and economic growth. If we are to continue to grow economically, we must be cost-competitive in our use of energy. We need *all* sources of energy. We do not have the luxury of limiting ourselves to one source to the exclusion of others. Nor can we afford to write off our leading source of energy before we have found a cost-competitive and readily available alternative.

Consider how oil and natural gas enhance our quality of life – fueling growth and jobs in industry and commerce, cooling and warming our homes, and getting us where we need to go. Oil provides about 97 percent of U.S. transportation fuels, which power nearly all of the cars and trucks traveling on our nation's highways. More than 60 million American households are heated

and/or cooled by natural gas. And plastics, medicines, fertilizers, and countless other products that extend and enhance our quality of life are derived from oil and natural gas.

The U.S. Energy Information Administration has projected that fossil fuels will continue to dominate U.S. energy consumption, with oil and natural gas providing nearly two-thirds of that consumption in the year 2025, even though energy efficiency and renewables will grow faster than their historical rates. However, renewables, in particular, start from a very small base; and the major shares provided by oil, natural gas, and coal in 2025 are projected to be nearly identical to those in 2003.

Our nation cannot afford to leave the Age of Oil before a realistic substitute is fully in place. We will leave the Age of Oil, not because we will run out of oil. Yes, someday oil will be replaced, but clearly not until a substitute is found -- a substitute that is proven more reliable, more versatile, and more cost-competitive than oil.

There is a misperception by some about the time and costs involved in any such transition. Consider what would be involved in replacing the dominant role of oil with a substitute like ethanol, hydrogen, or solar power. Most experts agree that finding and transitioning to a substitute for oil will require dramatic advances in technology and massive capital investments – and that such a displacement will take many years to accomplish.

In the early 1970s, many energy policymakers were “sure” that oil and natural gas would soon be exhausted, and government policy was explicitly aimed at “guiding” the market in a smooth

transition away from these fuels to new, more sustainable alternatives. Price controls, allocation schemes, limitations on natural gas, massive subsidies to synthetic fuels, and other measures were funded heavily and implemented.

Unfortunately, the key premises on which these programs were based, namely that oil and gas were nearing exhaustion, and that government "guidance" was desirable to safely transition to new energy sources, are now recognized as having been clearly wrong -- and to have resulted in enormously expensive mistakes.

The leading role that oil and natural gas will continue to play makes it all the more important for our government to adopt policies that do not prevent or delay oil and gas development before substitutes are ready to satisfy consumer needs and to meet the economic investment demands.

In considering future U.S. energy needs, we need also to understand that gasoline-powered automobiles have been the dominant mode of transport for the past century. Regardless of fuel, the automobile – likely to be configured far differently from today – will remain the consumer's choice for personal transport for decades to come. The freedom of mobility and the independence it affords consumers are highly valued.

Moreover, we expect that the dominant transport fuels will remain gasoline and diesel for decades – the minimum amount of time required to fully retire any existing and still growing fleet of automobiles and trucks powered by these fuels and to deploy any replacement fuel source throughout our nation. We cannot afford to prematurely retire a century-old champion.

And, sulfur-free diesel and sulfur-free gasoline could well live on as the preferred sources for fuel cells well into the future.

Gasoline Prices: What Can Be Done?

The solution to high gasoline prices is more supply of crude oil and gasoline and less demand, but there is no simple strategy to make that happen. Now that the long Congressional debate over energy legislation has come to an end, the United States is at a critical turning point in shaping its future energy policy. The legislation signed by the President signals a first step in a much-needed effort to enhance energy security and ensure the reliable delivery of affordable energy to consumers. But much remains to be done.

The problems we face are very real: growing world demand for energy at a time when many oil-producing countries around the world are increasingly limiting or restricting our industry's access to new resources; a lack of national commitment to develop our abundant domestic energy resources and critical infrastructure; and scant attention to energy efficiency. These factors have resulted in a tight supply/demand balance for U.S. consumers, causing recurring price spikes, greater market volatility, and overall strain on the nation's energy production and delivery systems.

Energy demand continues to grow. The Energy Information Administration (EIA) forecast that by 2025, U.S. energy consumption will increase by 35 percent, with petroleum demand up by 39 percent and natural gas up by 34 percent. These demand increases occur despite expected energy efficiency improvements of 33 percent and renewable energy supply increases of 41 percent.

Additional EIA forecasts point out our basic problem: Domestic energy supplies are not keeping up with increased demand; and we are relying more and more heavily on imports to meet our energy needs. EIA projects that U.S. crude oil production will fall by 17 percent by 2025 (assuming no production from ANWR), while crude oil imports will increase by 67 percent, and net petroleum product imports increase by 90 percent. Given these trends, it comes as no surprise that EIA forecasts that our nation's dependency on foreign sources of petroleum will rise from 59 percent today to 68 percent in 2025.

This increase, to the extent that it reflects import costs lower than domestic supply costs, would represent a gain from trade which should be encouraged. However, when we have resources that can be developed at prices competitive to imports, and we choose not to do so, we place a wasteful and unnecessary burden on our own consumers,

In fact, we do have an abundance of competitive domestic oil and gas resources in the U.S. According to the latest published estimates, there are more than 131 billion barrels of oil and more than 1000 TCF of natural gas remaining to be discovered in the US.

However, 78 percent of this oil and 62 percent of this gas are expected to be found beneath federal lands and coastal waters.

Federal restrictions on leasing put significant volumes of these resources off limits, while post-lease restrictions on operations effectively preclude development of both federal and non-federal

resources. The most comprehensive study of the effects of such constraints was the 2003 National Petroleum Council study of natural gas, which included an analysis of federal constraints on U.S. gas supply in two key areas – the Outer Continental Shelf (OCS) and the Rockies. The study found that in key areas of greatest supply potential, federal policy precludes or seriously constrains development. For instance, of the 209 TCF of estimated undiscovered gas in the Rockies, 69 TCF is completely off limits, while another 56 TCF is seriously constrained by federal policy. On the OCS, the entire Atlantic, Pacific, and most of the Eastern Gulf of Mexico are off limits to development. Furthermore, the study found that sustaining these constraints over the next 20 years would cost U.S. consumers more than $300 billion in increased energy costs.

We are aware that opponents of oil and natural gas development still raise environmental concerns. However, we would point out that history provides overwhelming evidence that our industry can find and develop oil and natural gas resources safely and with full protection of the environment, both on land and offshore. For example, according to the U.S. Coast Guard, for the 1980-1999 period, 7.4 billion barrels of oil were produced in federal offshore waters, with less than 0.001 percent spilled. That's a 99.999 percent record for clean operations – a statistic few others can likely match or best, and far less than the volumes of natural seeps that occur on ocean and gulf floors.

Using advanced technology and sound operational practices, our industry has steadily reduced the impact of oil and gas development, both onshore and offshore. The surface presence for exploration and development wells has shrunk significantly. For example, a drilling pad the size

of Capitol Hill is all that is needed to access any oil reserves that might exist in the entire 68.2 square mile District of Columbia. Horizontal and directional drilling now enables our industry to drill multiple underground wells from a single pad, sometimes reaching sites as far away as 10 miles from the drilling pad.

Additionally, the U.S. oil and natural gas industry is among the most heavily regulated industries in our country. Every lease contains a standard stipulation to protect air, water, wildlife and historic and cultural resources, but leases may also include any number of a additional stipulations to further protect resources.

The recently enacted energy legislation takes a positive step by requiring an inventory of OCS oil and natural gas resources. It will not, by itself, result in new energy supplies.

We need to build on the energy legislation by encouraging the flow of more natural gas and oil to the marketplace. And, while we must focus on producing more energy here at home, we do not have the luxury of ignoring the global energy situation. In the world of energy, the U.S. operates in a global marketplace. What others do in that market matters greatly.

For the U.S. to secure energy for our economy, government policies must create a level playing field for U.S. companies to ensure international supply competitiveness. With the net effect of current U.S. policy serving to decrease U.S. oil and gas production and to increase our reliance on imports, this international competitiveness point is vital. In fact, it is a matter of national security.

We can no longer wait 15 years, as we have, to address our nation's energy policy. The energy legislation is a foundation, but it must be built upon. More needs to be done and more quickly, particularly increasing access to offshore resources. We have the ingenuity, the technology, and environmental protections. If enactment of the energy legislation means we have a commitment to continued action, then it will truly be a turning point in reshaping U.S. energy policy.

Refineries

We cannot understand or deal with high gasoline prices if we do not consider the state of refineries in the United States. During the 1990s, the oil industry earned relatively poor rates of return on their investments. This was especially true in the refining sector, which was hard hit with the need for new investment in technology and equipment to produce cleaner burning fuels to meet clean air standards set by the Clean Air Act of 1990. The act had a major impact on the operation of refineries in the U.S. and the return on investment realized at the time.

From 1994 to 2003, the industry spent $47.4 billion to bring refineries into compliance with environmental regulations. That included $15.9 billion in capital costs and $31.4 billion in operations and maintenance costs to comply with regulations covering air, water and waste rules. Moreover, by 2010, the U.S. refining industry will have invested upwards of $20 billion to comply with new clean fuel regulations. This is in addition to the cost of compliance with many dozens of other environmental, health, safety and security regulations. All this investment severely reduces the funds available for discretionary capacity expansion projects.

Technological advancements have helped refineries produce more from existing facilities than they did in the past. In addition, the elimination of subsidies under the government price and allocation controls in 1981 led to the closure of many smaller, less-efficient refineries throughout the 1980s and 1990s. Those refineries left standing did a better job of bringing product to market for less.

This consolidation benefited consumers. We can see this in the decline in the refiner/market margin (measured as the difference between the retail price of gasoline minus taxes and minus the refiner's composite crude oil price). Back in 1980, the cost to refine and market and distribute gasoline averaged about 95 cents per gallon (in inflation-adjusted terms). By 1990, it averaged more than 61 cents per gallon, and, by 2000, it was 52 cents per gallon, which is about where it has averaged over the last five years. Multiplying these reductions by the 330 billion gallons of petroleum products consumed translates into billions of dollars of savings for consumers. We all benefit every day from these improvements and efficiency gains.

The Need to Expand Refinery Capacity

The expansion of refinery capacity must be a national priority. The record-high gasoline prices, while primarily caused by increased crude oil prices and exacerbated by Hurricane Katrina, have underscored the fact that U.S. demand for petroleum products has been growing faster than – and now exceeds – domestic refining capacity. While refiners have increased the efficiency, utilization and capacity of existing refineries, these efforts have not enabled the refining industry to keep up with growing demand. Even with a projected expansion of product imports of 90 percent, the Energy Information Administration (EIA) forecasts a need for 5.5 million barrels a

day of additional refining capacity by 2025 beyond today's 16.9 million barrels a day of capacity, even with higher utilization rates.

The fact is that -- faced with increasingly more challenging fuels regulations -- only major refineries have the resources needed to expand their capacity. Smaller refineries are increasingly unable to afford to expand. Moreover, local opposition and not in my backyard (NIMBY) attitudes persist and prevent new refineries from being constructed. The steady growth in U.S. fuels demand must increasingly be met by foreign product imports. Thus, in addition to blocking or delaying refinery expansion, the extensive federal regulatory burden is contributing to increased reliance on foreign product imports. This is a result that neither serves the best interests of U.S. consumers nor bolsters the U.S. economy and American jobs.

Oil companies recognize the urgent need to expand refining capacity, but they cannot do it alone. Government policies are needed to create a climate conducive to investments to expand refining capacity. The President's innovative proposal earlier this year to build new refineries on closed military bases deserves serious consideration. In addition, many of the steps the federal government could take to help the refinery capacity situation are covered in the December 2004 National Petroleum Council (NPC) study, *Observations on Petroleum Product Supply – A Supplement to the NPC Reports "U.S. Petroleum Product Supply – Inventory Dynamics, 1998" and 'U.S. Petroleum Refining – Assuring the Adequacy and Affordability of Cleaner Fuels, 2000."* For example, that NPC study suggested that the federal government should take steps to streamline the permitting process to ensure the timely review of federal, state and local permits to expand capacity at existing refineries and possibly even build a new refinery.

In addition to the myriad of permitting issues deterring new refining capacity investments, there are financial constraints as well. Attracting capital for new refinery capacity has been difficult with refining rates of return historically averaging well below the average for S&P Industrials. Over the 10-year 1994-2003 period, the return on investment for the refining sector was 6.2 percent or less than half as much as the 13.5 percent for S&P Industrials.

U.S. tax policy has also hindered the refining industry's ability to attract new investment capital. New refinery investments are depreciated over 10 years, while comparable assets in other industries are recovered over five or seven years. The recently enacted energy legislation takes a small, but positive, step in addressing this inequity by allowing 50 percent of those investments to be currently expensed through 2011. However, much more needs to be done to make U.S. refinery investments more economically attractive, and, thus, better able to compete for limited available capital.

Conclusion

The U.S. oil and natural gas industry recognizes the catastrophic impact that Hurricane Katrina has had on millions of Americans and our industry is working with government and others in the private sector to do all we can to alleviate their suffering.

If we all do our part – industry providing supplies and repairs as expeditiously as possible, government facilitating needed approvals, and consumers adjusting their driving habits to consume less fuel – Americans can overcome this challenge as we have others in our nation's history.

Attachment: Hurricane Katrina and U.S. Energy Policy: Do No Harm

Hurricane Katrina has brought devastation to much of the Gulf Coast, interrupting operation of significant parts of the nation's oil and natural gas production facilities, refineries and pipelines. In addressing this catastrophe, energy policymakers should do no harm. They should avoid repeating past energy policy mistakes which could make a bad situation much worse. The following are examples of actions that should be avoided:

- Windfall Profits Tax: This was tried before. Backers of the 1980 tax claimed it would raise revenue and prevent oil companies from benefiting from higher crude oil prices and the removal of price controls. The tax drained $79 billion in industry revenues that could have been used to invest in new oil production—leading to 1.6 billion fewer barrels of oil being produced domestically. The industry uses profits to invest in new technology, new production, and environmental and product quality improvements. The National Petroleum Council projects that producers will have to invest a total of almost $1.2 trillion through 2025 to fund U.S. and Canadian natural gas exploration and production activities. Investments of this magnitude require long-term fiscal stability.

- Price Controls: As seen the 1970s, price controls further reduce product availability as suppliers are unable or unwilling to bring product to market if they cannot recover the cost of doing so. The result is less product available, potential outages, and long lines at service stations.

- Rationing/Product Allocation: Rationing results in too much product being sent to some areas and too little product being sent to other areas. The reason is that rationing ignores the market price signal that producers use to decide which areas are in greatest need of product. The result would be an inefficient distribution of product with some areas of the country having too much motor fuel while shortages develop in other areas.

- Moratorium on Mergers: As noted by the Federal Trade Commission in its August 2004 report, *The Petroleum Industry: Mergers, Structural Change, and Antitrust Enforcement,* merger activity in the U.S. refining sector over the last several years has not adversely affected competition in the sector, and has resulted in greater operational efficiencies in the refining sector and lower costs to consumers. Government policy prohibiting mergers would slow or reverse this positive trend and ultimately result in higher fuel costs to the motoring public.

- Regional Strategic Reserves of Refined Products: While the concept behind the Strategic Petroleum Reserve (SPR) has merit, the same cannot be said of regional strategic reserves of refined products. Holding and managing refined products is much more complex and impractical than holding and managing crude. The large number of boutique fuels (17) would require a diverse number of storage facilities for each chosen location. Additionally, product degradation means that the product in the reserves would have to be continuously rotated. Because of this it is unlikely that there would be sufficient

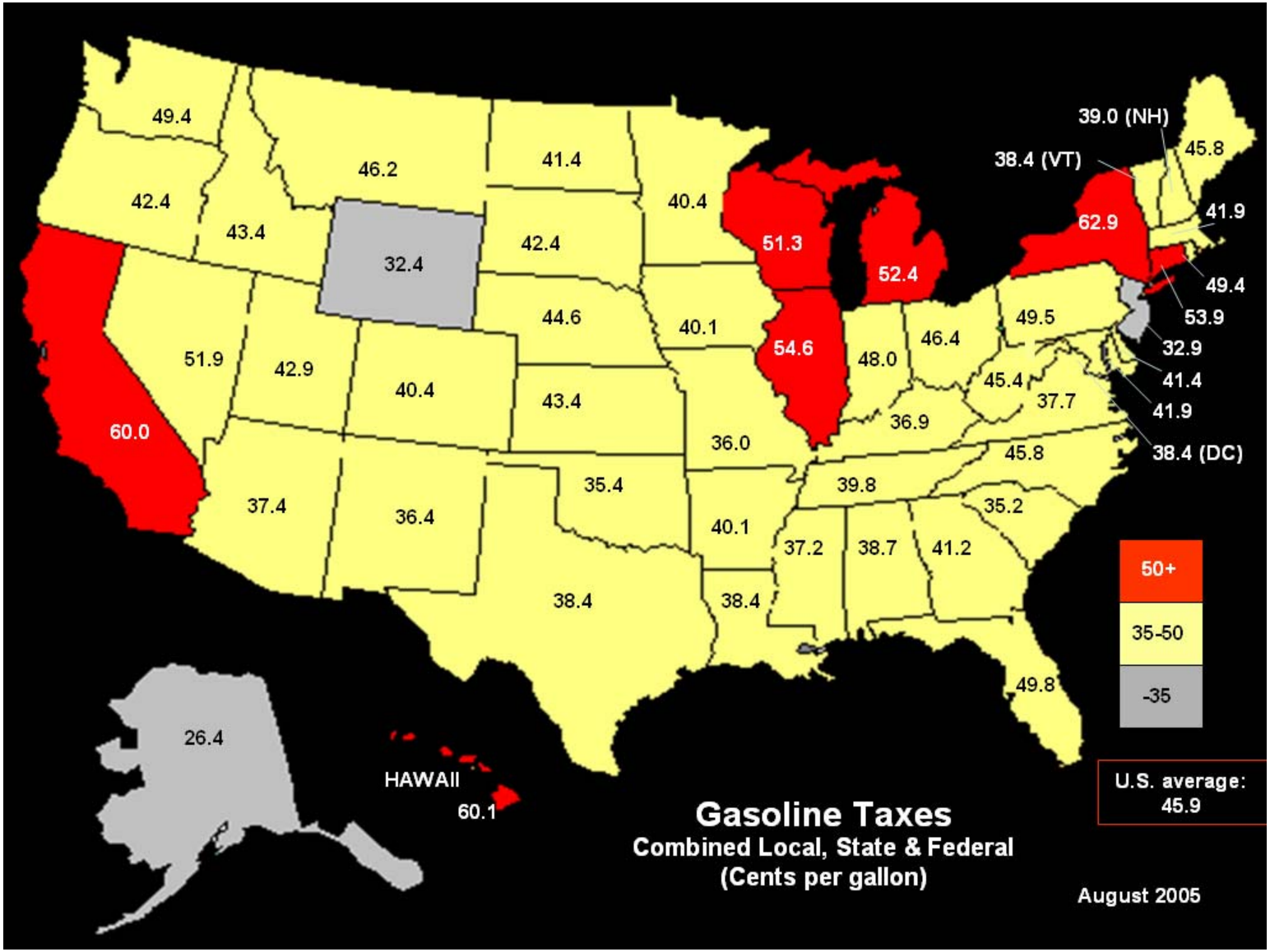
product of the right specification in the right location to be helpful during a supply disruption.[2]

- Mandatory Minimum Inventory Levels: Since fuel producers have considerable incentive to maintain sufficient inventories so as to not forfeit sales, a minimum inventory mandate could result in an inefficient level of inventory being held. Inventory is considered working capital and as such is a cost of doing business. Inefficient levels of inventory arising from mandatory minimum inventory levels would unnecessarily raise the cost of providing fuel to consumers.

- Price Trigger for the SPR: Industry has long supported government holdings of strategic stocks in the SPR, under one condition: that it be used only to replace volumes of oil lost in an emergency, not as an instrument for government price tinkering. The current mechanism allows the President a wide range of discretion to determine what constitutes an emergency. Some argue that this essentially makes the SPR a political instrument, subject to the President's whim. Setting a price trigger, some argue, would leave the trigger decision to the market. However, setting the price for the trigger is no less arbitrary than the existing trigger, and puts the government directly in the role of manipulating price.

- Oil Import Tariff: Oil import tariffs have been proposed, and used, in the past as an instrument of energy policy. The key motive of such an approach stems from a belief that reducing imports is unambiguously beneficial. However, when we look carefully at each of the claimed benefits, we find them all to be dubious at best, not to mention illegal under existing trade agreements with many of our trading partners.

[2] National Petroleum Council, *Observations on Petroleum Product Supply*, December, 2004 p. II-4


49.4
42.4
43.4
46.2
32.4
41.4
42.4
40.4
51.3
52.4
39.0 (NH)
38.4 (VT)
45.8
62.9
41.9
49.4
53.9
32.9
41.4
41.9
38.4 (DC)
49.5
46.4
48.0
45.4
37.7
36.9
45.8
39.8
35.2
44.6
40.1
54.6
51.9
42.9
40.4
43.4
36.0
60.0
37.4
36.4
35.4
40.1
37.2
38.7
41.2
38.4
38.4
49.8
26.4
HAWAII
60.1
50+
35-50
-35
U.S. average:
45.9
Gasoline Taxes
Combined Local, State & Federal
(Cents per gallon)
August 2005