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**Statement before the Joint Hearing of the  
Senate Energy and Natural Resource Committee and the  
Senate Commerce, Science and Transportation Committee**

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**Introduction**

Thank you, Chairmen Domenici and Stevens, Senators Bingaman and Inouye, and Committee Members. My name is Dave O'Reilly, and I am Chairman and CEO of Chevron Corporation. I am here today representing Chevron employees as well as the shareholders who have put their trust and confidence in our company.

I welcome this opportunity to talk about working together more effectively to enhance our country's energy security and deliver reliable supplies of energy at a reasonable cost to all Americans. There are few industries more central to the vitality of the United States, or that touch more American households, than the oil and gas industry. Chevron takes this responsibility very seriously and I hope the information that I will share with you today will help you better understand the challenges we face – and the value that our industry provides to American consumers and the American economy.

Chevron is a global energy company whose roots go back 126 years to the Pacific Refining Co. in California. We are the second-largest oil and gas company based in the United States, with approximately 53,000 employees worldwide and a presence in more than 180 countries around the world. We are involved in virtually every aspect of the energy industry – from crude oil and natural gas exploration and production to the refining, marketing and transportation of petroleum products. We also have interests in petrochemicals and power generation assets and are working to develop and commercialize future energy technologies.

Let me start by providing some context. We are here today to talk about energy prices, which came to the forefront following Hurricanes Katrina, Rita and Wilma. These hurricanes were devastating to the entire Gulf Coast region, including the oil and gas industry. They disrupted oil and gas production in the Gulf of Mexico, the network of pipelines in the region and many refining operations. I personally visited our operations in the aftermath of the storms. It is difficult to appreciate the devastation created by the hurricanes until you stand on the ground in south Louisiana and Mississippi. We were fortunate that no employees of Chevron lost their lives during the hurricanes, but many hundreds of our employees lost their homes and prized possessions. Despite this huge personal loss and tremendous family disruptions, those very same employees have been working around the clock to resume normal operations as quickly as possible to get supplies to market (Attachment A, Chevron's response). I could not be prouder of their heroic performance in the face of almost unimaginable adversity.

The hurricanes had a clearly recognized dramatic impact on the domestic energy supply infrastructure. The storms temporarily shut in almost one-third of U.S. oil and gas production and one-fourth of U.S. refining capacity. This resulted in higher prices and volatility. Price volatility at the retail pump was also driven by localized panic buying of gasoline supplies, which led to temporary shortages. Every oil and gas company in the region had difficulty resupplying the market in those first days following the storms because power outages had shut down pipeline infrastructure, crippling the ability to move supplies into impacted areas. The temporary supply shortages had ripple effects elsewhere in the United States, and in the European and Asian markets, reflecting the interdependence of global energy markets. As distribution and production began to normalize in the weeks that followed, the market began to reflect that in moderating prices (Attachment B, regular gasoline prices). However, although most of the refining capacity has been restored, as of last week approximately one million barrels per day of crude oil and five billion cubic feet per day of natural gas remained shut in while repairs to facilities severely damaged by the storms are being made. I can assure you that my company continues to do everything we can to resume normal operations on the Gulf Coast as rapidly as possible.

However, the larger and more important issue we need to address is that we have been operating in a tighter supply situation for some time now, brought about by fundamental changes in the energy equation. Growing global demand for energy, particularly from China and India but also in the United States, has resulted in decreased spare capacity in global crude oil supplies and the global refining system. Oil production in mature areas, particularly in Europe and North America, has been declining. New developments are occurring, but in challenging and capital-intensive locations, such as the deepwater, the Arctic, and oil sands in Canada and extra heavy oil in Venezuela. Meanwhile, OPEC production has been increased, but is now approaching its current capacity to deliver.

Fundamentally, today's energy prices are a reflection of the current interplay between supply and demand, as well as complex regulatory and geopolitical forces. The hurricanes magnified this underlying trend and showed how vulnerable supplies are to disruptions. These impacts were felt not only in the United States, where the hurricanes occurred, but in energy markets around the world. The tightness of supply, and global energy interdependence, are issues that I have been discussing for the past year-and-a-half with a variety of our stakeholders. I have been urging fresh new policy prescriptions in response (Attachment C, select speeches).

The aftermath of the hurricanes also highlighted challenges that are specific to the U.S. energy market – the concentration of oil and gas production in the Gulf of Mexico, the lack of spare refining capacity in the U.S. refining network (Attachment D, spare refining capacity) and the complexity of transporting numerous blends of gasoline from one part of the country to another under the current system of fuel specifications. The temporary waivers of those specifications by the Environmental Protection Agency (EPA), and numerous states, were some of the most effective actions government took following the hurricanes. This played a constructive role in alleviating regional gasoline shortages, and provided a glimpse of how regulatory reform can make markets work more efficiently.

Chevron is investing aggressively in the development of new energy supplies for American businesses and consumers and will continue to do so. We believe that the increased awareness of energy issues facing the United States provides a good framework for a discussion of steps that the industry and government can take together to create a climate for enhanced investment that promotes economic and environmentally sound production of energy supplies.

### **How Did We Get Here?**

The energy situation in the United States today reflects a number of factors, most notably the increasing demand for transportation fuels and natural gas. But it also reflects the increasing complexity of the regulatory and permitting processes governing the industry. Numerous laws and regulations passed during the last 35 years have affected the petroleum industry. The early 1970s witnessed the passage of significant environmental legislation, the creation of the EPA, and a growing public resistance to development, i.e. “not in my backyard” (NIMBY). These were well-intentioned initiatives that created significant benefits for the environment. But over time, even as the oil and gas industry made great advances in its environmental stewardship capabilities, these pieces of legislation promulgated hundreds of federal, state and local collateral regulations – many of which have had the consequence of limiting energy production.

The balance between regulatory benefits and economic benefits in our industry has been lost and it is time to look at ways we can restore that equilibrium.

Moratoria, for instance, have closed off access to vast areas of our offshore exploration. In the 1980s, increasing public opposition to leasing led to Congressional pressure for annual moratoria in specific areas. By 1990, individual moratoria were so numerous that President H.W. Bush declared a blanket moratorium that applied to virtually the entire United States’ coastline, except for a few locations. In 1998, President Clinton extended the ban for an additional 10 years to 2012. Federal offshore drilling is currently only allowed in Mississippi, Alabama, Louisiana, Texas and parts of Alaska.

At the same time, regulatory hurdles have hindered onshore oil and gas development. The Bureau of Land Management (BLM) manages about one-eighth of U.S. land. Projects on federally-managed lands supply about 34 percent of total U.S. natural gas and 35 percent of total U.S. oil production. The majority of this land is in the western states, including Alaska. The Federal Land Policy and Management Act of 1976 (FLPMA) is the guiding legislation for BLM's management of public lands and mineral estates - the purpose being to balance a variety of competing land uses including cattle grazing, recreational use, resource development and environmental protection. Existing environmental regulations and BLM processes for oil and gas regulations make obtaining leases and permits to produce difficult. The Arctic National Wildlife Refuge (ANWR) is another area currently "off-limits" and the debate on whether to open it up for drilling has been going on for many years. As a result of government policies, responsible oil and gas development has been channeled away from Alaska, the Rocky Mountains, and offshore regions toward the more accessible areas along the Alabama, Mississippi, Louisiana and Texas coasts. For these same reasons, investment has been channeled outside the United States as well.

The refining sector too has undergone many changes as it has responded to a need to become more efficient and to comply with environmental laws. No refineries have been built since 1976 and their number has dwindled substantially, from 325 in 1981 to 148 today. Despite that drop, the overall capacity of the U.S. refining system has been steadily increasing since 1994. Current capacity stands at around 17 million barrels per day, up from 14.5 million in 1994. Refineries today are extremely efficient, operating at almost maximum capacity – nearly 95 percent. But a variety of factors make it challenging to expand current refining infrastructure:

- Historically low economic returns in the refining business.
- Timing and cumulative impact of environmental rules resulting in high costs for building new equipment.

- Delays in obtaining permits and NIMBY challenges.
- Multiple regulatory requirements to make a variety of cleaner burning gasolines, which has resulted in a proliferation of boutique fuels.
- Regulatory uncertainty regarding alternative fuels.

Together, limited access to domestic supplies and constrained refining capacity in the United States have created a situation in which the United States has become increasingly dependent on imports of all forms of petroleum. Today, the United States imports 58 percent of its crude oil requirements and 15 percent of its natural gas – compared to 42 percent of its crude oil, and eight percent of its natural gas in 1990. Imports of gasoline, jet fuel and diesel have risen from 12 percent of consumption in 1990 to 22 percent today.

At the same time, the American Petroleum Institute estimates that there are more than 131 billion barrels of oil (enough to produce gasoline for 73 million cars and fuel oil for 30 million homes for 60 years) and more than 1,027 trillion cubic feet of natural gas (enough to heat 125 million homes for 120 years) remaining to be discovered in the United States. Much of the area where this exploration and subsequent production could occur is currently off-limits.

### **What Chevron is Doing to Meet America's Energy Needs**

Now, let me turn to what Chevron is doing to increase energy production. Where we can, we are investing aggressively all across the energy value chain. Since 2002, Chevron has invested \$32 billion in capital expenditures worldwide – compared with \$31.6 billion in earnings for the same period. In other words, we invested more than we earned.

This year alone, Chevron's capital investment program is estimated to exceed \$10 billion worldwide. This is a 20 percent increase over our spending last year.

Highlights of our current and planned investments in the United States include:

- The \$3.5 billion Tahiti project, one of the Gulf of Mexico's largest deepwater discoveries. We have begun construction of the floating production facility to be installed there. When complete, the facility will have a capacity of 125,000 barrels per day of oil and 70 million cubic feet per day of natural gas. It is scheduled to begin production in 2008.
- A \$900 million project to develop the Blind Faith Field in the deepwater Gulf of Mexico. This field is expected to provide 30,000 barrels of oil per day and 30 million cubic feet of natural gas per day. It is scheduled to begin production in 2008.
- Continuing evaluation work on several deepwater Gulf of Mexico discoveries (e.g., Great White, Tonga, Sturgis, Tubular Bells), which have the potential to become significant investment opportunities in the future, with direct benefits for U.S. consumers.
- Stepping up to the technical challenges presented by deepwater operations in the Gulf of Mexico. In November of 2003, Transocean and Chevron announced what was at the time a new world water-depth drilling record for a well in 10,011 feet of water in the Gulf of Mexico. Also, our successful Tahiti well test completed in September 2004 in 4100 feet of water and at 25,812 feet subsea was the deepest successful well test in the history of the Gulf of Mexico.

- Proceeding with significant investments in our U.S. refineries. Since 2001, including 2005 estimates, we will have invested over \$1.5 billion in our U.S. refineries to meet various clean fuels requirements, comply with environmental regulations, maintain safe and reliable operations and increase capacity. Of that, about \$900 million was invested in our two California refineries (El Segundo and Richmond) and almost \$500 million in our Mississippi refinery (Pascagoula).
- Recent investments in our El Segundo refinery will enable us to increase gasoline production by about 10 percent. We also have begun the permitting process at our Richmond refinery to improve utilization. We expect these projects to increase our gasoline production by about seven percent at this refinery. Likewise, we have announced a significant investment for expansion at our Pascagoula refinery that will also enable increased gasoline production.
- Building Liquefied Natural Gas (LNG) projects in countries in the Atlantic and Pacific “basins”, which will result in needed additional natural gas supplies for the U.S. market. To accommodate these new supplies, Chevron is pursuing a portfolio of options for LNG import terminals in North America. For example, in Mississippi we have an application with Federal Energy Regulatory Commission (FERC) to own, construct and operate an LNG import terminal near our Pascagoula refinery.
- In addition, we have committed for terminal capacity of 700 million cubic feet per day at the Sabine Pass LNG import facility currently being built in Cameron Parish, Louisiana. This is a terminal use agreement for the next 20 years.

While U.S. spending is significant, nearly 65 percent of our capital and exploratory expenditures have been directed towards investment opportunities outside the United States. As with any well-run company in any industry, our investments have gone to areas where there is opportunity to invest and earn reasonable, long-term returns for the risks taken.

But, it is inaccurate to think that investments in energy projects outside the United States do not benefit U.S. consumers. They do. Since oil is a globally-traded commodity, any investment anywhere in the world that adds to supplies tends to benefit all consumers, including those in the United States. And, while natural gas is not yet a globally-traded commodity, industry investments are rapidly moving us in that direction. Likewise, investments in global refinery capacity are generating additional supplies of petroleum products which benefit U.S. markets.

Outside the United States Chevron is investing significantly in exploration and development projects in, for example: Nigeria (oil and natural gas); Kazakhstan (oil); Angola (oil and natural gas); Australia (natural gas); Indonesia (oil and natural gas); Thailand (natural gas); Venezuela (oil and natural gas); the United Kingdom (oil and natural gas); Canada (oil); and gas-to-liquids (GTL) facilities in Nigeria, which will use natural gas to develop ultra-clean diesel fuels that will be available for world markets.

Chevron is expanding its natural gas business, which is very capital-intensive. Unless natural gas is consumed near where it is produced (and then pipelined to market), the gas must be liquefied, shipped, re-gasified, and then transported via pipeline to consumers. We have three very large projects in this category – in Angola, Nigeria and Australia – that we are working on to bring natural gas resources found outside the United States to American markets.

In our search for natural gas in the United States, we have identified many promising areas currently off-limits to development. For example, in the late 1980's, we made a significant discovery of natural gas in the Eastern Gulf of Mexico called Destin Dome, approximately 25 miles off the coast of Florida. At the time, it was estimated that Destin Dome held enough natural gas to supply one million American households for 30 years.

Chevron and its partners could not get permits to develop the field because of opposition in Florida and a maze of regulatory and administrative barriers at the federal level. After a long, expensive and frustrating effort to move forward, we relinquished the leases as part of a settlement reached with the government in 2002.

So, what actions are we taking now to supply natural gas to this market? We are co-leading a project to produce and liquefy natural gas in Angola, ship it across the Atlantic Ocean to a regasification facility in the U.S. Gulf Coast, and transport it via pipeline to the market. The customers will be those same customers in Florida and the Southeast who could have been supplied by natural gas just miles off the shore of Florida.

This is clearly not an efficient and economic use of resources for the United States, or the rest of the world for that matter. Yet it is the direct result of our historical energy policies.

Similarly, U.S. energy policies have required significant investments in refining and marketing operations in order to meet environmental and new fuel specifications. From a U.S. energy policy perspective, the focus has been on environmental and fuels investments, not on investments that add to production capacity.

Over the past decade, we have made substantial investments in projects to meet fuel specification and environmental objectives. We have invested in reformulated fuels for the California market and to prepare for additional blending of ethanol. We have

invested to meet changing gasoline sulfur specifications, and new ultra-low sulfur diesel specifications to meet the requirements of new diesel engines.

Even then, meeting these requirements has not always been easy or without risk. For example, the state of Georgia and the EPA delayed implementing new fuel specifications for the city of Atlanta after our Pascagoula refinery had already invested in facilities to meet the new requirements. As another example, it took us nearly 12 months just to get the local permit to build an ethanol blending tank at our Richmond refinery in California to meet a combination of federal and state fuel requirements.

Chevron has also invested to increase the efficiency, reliability and capacity of our refining operations in the United States. In some instances, when we have debottlenecked and have added to capacity, we have had to pay severe penalties to do so. Because of the lack of clarity surrounding permitting rules, our company, along with most other majors in the industry, has had to reach settlements with the EPA over whether such routine maintenance, repair and replacement activities trigger the New Source Review permitting requirements.

In addition to the investments I have just outlined, Chevron has spent more than \$1 billion since 2000 on the next generation of energy by focusing on the pragmatic development of renewable and alternative energy sources, and the creation of more efficient ways of using the energy we already have.

Since 1992, Chevron has taken steps that have reduced companywide energy use per unit of output by 24 percent. This is the result of having strong energy efficiency strategies, and business units that develop, share and adopt energy best practices across the corporation.

Chevron has also made a successful business of developing energy efficiency solutions for the external market. Our subsidiary, Chevron Energy Solutions, is a \$200 million business that has developed energy efficiency and renewable projects for large-scale

facilities operated by the U.S. Postal Service, the Department of Defense, hospitals and public schools.

Chevron is the world's largest producer of geothermal energy and we are investing sensibly but aggressively in the development of alternative fuel sources. In 2004, the U.S. Department of Energy selected Chevron to lead a consortium that will demonstrate hydrogen infrastructure and fuel-cell vehicles. Over a five-year period, the consortium will build up to six hydrogen energy service stations with fueling facilities for small fleets of fuel-cell vehicles and capacity to generate high-quality electrical power from stationary fuel cells.

Chevron is 50 percent owner of Cobasys, a manufacturer of environmentally friendly advanced batteries for applications such as hybrid electric vehicles and stationery power applications. We have made significant investments in this venture, including the construction of a factory, to help meet the growing demand for batteries in these applications. Cobasys has received battery pack purchase orders from customers for upcoming hybrid electric vehicle production programs.

Chevron has one of the largest solar photovoltaic installations in the United States, a 500 kw solar array, at our Bakersfield, California production location.

### **The Role of the U.S. Government**

Even with the investments we are making now, more is required to meet future demand for energy.

We acknowledge the work of the Congress in passing the Energy Policy Act of 2005, a start toward securing America's energy future. We believe, however, that there are additional steps that must be taken by Congress and the Administration:

- First, impediments to access for exploration should be removed. This would include ANWR, areas in the Rocky Mountain region, and Continental shelves.
- Second, the permitting process for LNG facilities, refineries, and other energy infrastructure should continue to be streamlined. There should be a coordinated, integrated and expeditious review. There should be a clearly defined and simple process with specific deadlines. One agency should be designated as accountable for meeting overall guidelines. Overlapping authority and conflicting or redundant processes should be eliminated. Also, the federal government should help educate state and local government, as well as the public, about the need for these facilities.
- Third, there is a need to rationalize the proliferation of boutique gasolines. The recently passed legislation by the House of Representatives contains provisions that would limit the number of boutique fuels. Rationalizing the current slate of boutique fuels is critical to improving the current supply situation by bringing fuel specifications into alignment with the regional manufacturing, supply and distribution systems. Additionally, granting EPA authority to temporarily waive and pre-empt state fuel requirements in situations like we just experienced will result in quicker response to such emergencies.
- Fourth, as with the U.S. Department of Energy's leadership and support of hydrogen projects, the federal government should continue to support joint ventures with private enterprise to advance technology and develop alternative energy supplies.
- Fifth, Congress and the Administration should continue to support development of clean coal and nuclear power as important sources of additional energy supplies.

- Sixth, the government should recognize the growing interdependence of energy markets and work actively with other countries to provide additional secure sources of energy and to ensure a level investment playing field across national boundaries.

### **The Road Ahead**

Clearly, we face a significant challenge. But I would suggest that when it comes to energy policy, we should acknowledge the new equation we face and work together to develop new solutions.

Today, energy markets are globally interdependent. As a nation, we import an increasing percentage of our energy from abroad. Clearly, in the wake of this year's hurricanes, the importance of our ability to get energy supplies from abroad was critical to our recovery. In moving forward, we should recognize this interdependence as we pursue energy policies.

Historical divisions are irrelevant in the energy equation we now face. When a single hurricane can knock out nearly 10 percent of our nation's gasoline supplies, it is clear that a new approach to dealing with energy issues is needed. This is no time for a divisive, business-as-usual energy debate. The time for pragmatic and unified action is here.

The good news is that energy goals advanced by well-meaning advocates on both the supply and production side, as well as the conservation and alternative-energy side, do not have to be at odds. We saw some evidence of this when the long-awaited 2005 energy bill was signed into law by the President earlier this summer. It was a start. But the hurricanes have shown that in many respects it did not go far enough.

We need to shift the framework of the national energy dialogue to acknowledge that improving America's access to oil and natural gas, investing in new energy sources such as hydrogen fuel cells and renewables, and developing clean coal and nuclear power sources are, in fact, complementary goals that can help create affordable, reliable energy supplies. The American public has shown in the past that when they know the facts, they will cast aside partisanship in favor of pragmatic solutions. Given the state of the country's current energy situation – constrained supplies and volatile prices – Americans deserve that kind of discussion.

So let's begin now to reframe the debate. Here are three ideas that can help guide a new national dialogue:

First, we need to begin viewing energy as an asset to be optimized, not a liability to be managed. We need to let go of the old paradigm that energy development and environmental stewardship cannot co-exist. If we use the assets we have more effectively, while also seeking to diversify our energy supply, our nation will be well on its way toward greater energy security.

Second, we need to rationalize the complex thicket of regulations and permitting requirements that is acting as a bottleneck to the efficient development and operation of energy infrastructure, particularly in the refining sector.

Third, we need to broaden the goal of energy efficiency beyond individual actions such as turning down the thermostat, as effective as they can be. The next generation of energy efficiency, which will be driven by human ingenuity and technology, must target enterprise solutions such as "smart" buildings, hybrid vehicles and the development of ultra-clean diesel fuels from natural gas. The federal government can play a constructive role in enabling increased investment in energy efficiency, as it did earlier this year by renewing the Energy Savings Performance Contracting Program, which enables

businesses to make their facilities more efficient and then recoup the capital investment with the money saved from lower energy use.

We can do all these things. Having seen our employees respond to the hurricanes, I know Chevron is up to the challenge of helping to meet our future energy needs. America is equally up to that challenge. But it will require crossing hardened political and ideological lines toward a new national consensus on energy policy.

The interrelationship of such a policy with our national security, trade, economic, and environmental policies will have to be clearly recognized, and the necessary balances examined, debated and resolved with the understanding and support of the American public. This will require significant skill and leadership from our government.

For too long, Americans have been led to believe they can enjoy low oil and gasoline prices with less exploration and refining. The hurricanes have shown that this equation is not sustainable. As we move forward, let's not default to quick fixes, partisan solutions, or unrealistic goals. Let's be clear-headed and pragmatic. A bi-partisan, public-private commitment to these goals will help protect America from the next energy crisis, and safeguard America's quality of life.

Thank you.