

STATEMENT OF

GEORGE L. PERSON, JR.

DIRECTOR

OFFICE OF AFRICAN AND MIDDLE EASTERN AFFAIRS  
OFFICE OF POLICY AND INTERNATIONAL AFFAIRS

U.S. DEPARTMENT OF ENERGY

BEFORE THE

SUBCOMMITTEE ON NEAR EASTERN AND SOUTH ASIAN  
AFFAIRS  
COMMITTEE ON FOREIGN RELATIONS

U.S. SENATE

“US FOREIGN POLICY, PETROLEUM AND THE MIDDLE EAST”

OCTOBER 20, 2005

**MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:**

I am honored to appear before you this afternoon to talk about the important role that petroleum plays in our economy and our foreign policy, particularly as it relates to the Middle East.

Energy is the lifeblood of our national economic well being, with oil currently playing the dominant role. Oil is an actively traded global commodity, with its price set in a global marketplace. Given the nature of the modern market, a significant disruption in oil supplies anywhere will quickly have global economic impacts. As a result, the United States could experience rising oil prices as a result of a major oil supply disruption regardless of whether or not the disrupted source is one of our direct suppliers.

Oil currently accounts for approximately 40 percent of total U.S. energy consumption. As our economy grows, our demand for oil will grow. Demand is expected to rise from an annual average of 20.5 million barrels per day (bpd) in 2005 to near 26 million bpd in 2020. At the same time, forecasts indicate U.S. domestic oil production is expected to fall from 5.42 million bpd in 2004 to 5.21 million bpd in 2020. Increasingly, the United States will rely on foreign sources to meet its oil needs. In 2005, approximately 59 percent of the oil we use in America is expected to come from foreign sources. The most recent Energy Information Administration (EIA) forecast suggests that our dependence on imports could grow to 65 percent by 2020.

Put simply, the United States imports oil because we consume more oil than we can produce domestically. Today, the US. accounts for about a quarter of total world oil consumption. Virtually every forecast of U.S. oil for the next 10-20 years shows trends of flat to declining domestic supply and increasing oil product demand. This will result in an increasing dependence on imports.

So far in 2005, the United States has had net imports of approximately 12.1 million barrels per day of petroleum (this includes crude oil and refined products). More than one-fourth of the imports came from our North America Free Trade Agreement or NAFTA partners, Canada and Mexico. An additional 700,000 barrels per day came from North Sea producers. In 2005, Organization of Petroleum Exporting Countries or OPEC producers have accounted for 42 percent of U.S. gross oil imports, with Saudi Arabia and Venezuela ranked as the third and fourth-largest foreign oil suppliers, respectively.

<b>Major Sources of U.S. Petroleum Imports, 2005*</b> (all volumes in million barrels per day)			
	<b>Total Oil Imports</b>	<b>Crude Oil Imports</b>	<b>Petroleum Product Imports</b>
<b>Canada</b>	2.121	1.608	.513
<b>Mexico</b>	1.648	1.558	.09
<b>Saudi Arabia</b>	1.597	1.522	.075
<b>Venezuela</b>	1.59	1.329	.261
<b>Nigeria</b>	1.131	1.041	.09
<b>Iraq</b>	.558	.558	0.00
<b>Algeria</b>	.467	.214	.253
<b>Russia</b>	.452	.264	.189
<b>Angola</b>	.406	.399	.007
<b>United Kingdom</b>	.376	.232	.144
<b>U.S. Virgin Islands</b>	.326	0.00	.326
<b>Ecuador</b>	.287	.278	.009
<b>Norway</b>	.242	.133	.109
<b>Kuwait</b>	.206	.198	.008
<b>Other</b>	2.012	.898	1.114
<b>Total Imports</b>	13.419	10.232	3.188

*\* Table includes all countries from which the U.S. imported more than 200,000 barrels per day in 2005. Totals may not add due to independent rounding.*

The Middle East (including North Africa) accounts for approximately 71 percent of the world's proven, conventional oil reserves. Saudi Arabia alone holds close to one quarter of the world's proven reserves, with each of the other four major producers arrayed around the Persian Gulf – Iran, Iraq, Kuwait, and the United Arab Emirates (UAE) – each accounting for 8%-10% of global reserves (See Figure 1). In addition to having the heaviest concentration of oil reserves in the world, Middle Eastern producers also have the lowest production costs in the world.

### **Current State of the World Oil Market**

Crude oil prices have risen fairly steadily since early 2003, prices having been propelled higher by a combination of OPEC production policy, soaring global oil demand, geopolitical risks in key producing regions, limited surplus oil production capacity, and tightness in global refining capacity (See Figure 2). With supply already tight, Hurricanes Katrina and Rita have had a pronounced impact on U.S. oil supply since late August, with nearly 60 million barrels of crude oil production and approximately 100 million barrels of refined products having been lost to date.

The market continues to cope with questions on Gulf of Mexico supply losses and indications of falling demand. After dropping for a number of days to reach a low closing price of \$61.36 on October 6, the price of crude oil rose slightly and is currently hovering around \$64 a barrel on the New York Mercantile Exchange. The Energy Information Administration's most recent forecast (October 12) calls for oil prices (West Texas Intermediate or WTI) to average \$64.42 a barrel in fourth quarter 2005 and \$64.50 a barrel in 2006. Oil hit a new high of \$70.85 a barrel on August 30<sup>th</sup>.

There has recently been an indication that rising oil prices have begun to impact demand. Since the hurricanes, crude oil and product prices have both fallen as the market tries to determine the extent of the slowdown in demand. In its most recent forecast, the Energy Information Administration lowered its assessment of 2005 global oil demand by half million bpd, now projecting average world demand growth of 1.2 million bpd this year.

Unexpectedly high demand beginning in 2004 took the oil market by surprise. Having had a relatively healthy cushion of surplus oil production capacity for a number of years, the market has recently had to get used to a narrow cushion of one million bpd or so, with virtually all of that located in Saudi Arabia (See Figure 3). Saudi surplus capacity consists mostly heavy, sour crude oil, the type of crude oil most difficult to refine into the highly valued light products such as gasoline and diesel fuel.

### **Guiding Principles**

Our growing reliance on imported oil was a driving force behind the development of the President's National Energy Policy (NEP) in 2001 and our efforts in support of the Energy Policy Act of 2005 signed into law by President Bush on August 8, 2005. The NEP recognized that increased reliance on imported oil could have adverse implications for our national security and our economic well being, and proposed several policy actions aimed at reducing our dependence on foreign sources of oil through increased energy efficiency and increased domestic production, including through the Arctic National Wildlife Refuge or ANWR.

In implementing our energy policy, we have been guided by several fundamental principles:

- **Free Market:** We are guided by the belief that issues of supply, demand, and price are best settled by the free market.
- **Diversity of Supply:** To meet our long-range energy needs, we must expand and diversify our sources of energy, especially oil and natural gas, and through the research, development, and deployment (RD&D) of alternative energy sources.
- **Energy Diplomacy:** Ongoing, quiet dialogue has proven to be the best vehicle for our interaction with producing countries, enabling us to frankly exchange views on oil market developments and to promote a greater understanding of key issues.
- **Energy Efficiency and Conservation:** Two of the most expeditious ways to enhance current supply are to become more efficient in how we use energy and to encourage energy conservation.

- **Domestic Production:** One of most immediate ways we can reduce reliance on foreign oil is to increase our reliance on domestic producers – the United States needs to produce more oil and gas, as well as take advantage of other energy resources, including renewables and nuclear.
- **Energy Security:** Given our dependence on imported oil, it is essential that we provide strong insurance against the possibility that the flow of international oil could be interrupted.

I will touch briefly on those principles that are particularly pertinent to today's discussion.

**Diversity of Supply:**

The development of additional energy sources has become increasingly critical as recent events such as Hurricanes Rita and Katrina have demonstrated the delicate balance that characterizes the U.S. energy market. The current market tightness is heightened as oil demand continues to grow, so access to additional energy sources is critical to both global and U.S. energy security. The Energy Policy Act of 2005 reaffirms the importance of building and strengthening international alliances to advance foreign policy objectives, including national and global energy security and economic growth. The DOE is strengthening our energy security by identifying and working to develop energy opportunities around the world. The DOE encourages cooperative trade arrangements to develop new resources, as well as maintains and establishes dialogue with major consumers, such as the Group of Eight (G8) countries, China and India, to reduce oil demand growth; monitor market developments; and respond to supply disruptions.

Through initiatives such as the North American Energy Working Group (NAEWG) involving the U.S., Mexico, and Canada we work with our immediate neighbors to enhance reliability by facilitating critical infrastructure protection, better integrating our energy systems. NAEWG convenes regularly to discuss issues such as critical infrastructure, energy efficiency, natural gas and electricity. DOE staff recently met with Canadian government and industry officials to discuss the potential for Canada to increase natural gas supplies to the U.S. this winter.

During the summer of 2005, the DOE organized a Colombia Oil and Gas Investment roundtable and conference to assist in attracting U.S. investment in the Colombian hydrocarbons sector. These events not only supported President Bush's commitment to President Alvaro Uribe, but also promoted energy supply diversification.

The DOE has also continued to cultivate relationships with more distant, non-Middle East suppliers such as the resource-rich Caspian States. The U.S.-Kazakhstan Energy Partnership met as recently as September 2005 to further advance bilateral energy cooperation on energy security, oil and gas, electric power, nuclear energy, and alternative energy technologies. Similar partnerships exist with Russia and Azerbaijan, and the DOE also works with Turkey to facilitate energy transportation through infrastructure development in the region.

The DOE's efforts to diversify energy sources cover every region of the world, and this summer the U.S.-Indonesia Energy Policy Dialogue met in Jakarta to advance oil and gas, electric power, and coal sector cooperation. The DOE is actively supporting the objectives expressed in the White House joint statement issued during the state visit of President Yudhoyono in May 2005, wherein the Governments of the U.S. and Indonesia pledged to deliver a progress report on energy investment and regulatory issues under the Energy Policy Dialogue to Presidents Bush and Yudhoyono.

Additionally, the DOE has been meeting with American oil companies involved in oil and gas production operations in the Gulf of Guinea. Nigeria's importance as the fifth largest oil supplier to the U.S. has made recent unrest in the oil-rich Niger Delta an energy security concern, and we will address these developments at the bilateral energy consultations scheduled with Nigerian officials in November 2005 in Washington, DC. Other issues to be discussed include the recent oil bid licensing round, planned increases of Nigerian oil production, gas flaring elimination, and construction contractor needs, including international competition for rigs and services. The DOE is also working to strengthen our bilateral relations with other African oil producers in the Gulf of Guinea and Angola. We continue to promote good governance and greater transparency in Equatorial Guinea, Sao Tome and Principe, Cameroon (and Chad via their pipeline) and Gabon. Angola currently provides four percent of our imports. That number could double in the next five years.

Even DOE activities with nations of the Middle East are focused on diversification of energy sources both in terms of sources and types of fuel. Recent meetings with Libyan officials focused on development of oil, liquefied natural gas (LNG), and hydrogen. As per the increased focus on LNG in the Energy Policy Act of 2005, the DOE is working to develop relationships with LNG suppliers while the Federal Energy Regulatory Commission (FERC) streamlines the approval process for LNG infrastructure.

In addition to pursuing relationships with non-Middle East energy suppliers, it is important to acknowledge the significant efforts by the DOE to diversify energy supply through alternative energy sources. Development of renewable generating capacity in the U.S. can greatly relieve pressures on markets for conventional energy sources over time, and supporting similar measures in other countries can mitigate global demand growth for traditional fuels. In the transportation sector, development of alternative fuels such as hydrogen and ethanol could curb the world's growing appetite for oil while reducing greenhouse gas emissions. In the power sector, enhanced use of nuclear and renewable electricity generation and clean coal-fired power plants could reduce greenhouse gas emissions as well as demand for natural gas. Several offices within the DOE and the national laboratories cooperate to research and develop domestic alternative energy applications and form domestic and international partnerships for the advancement of such technologies.

Multilaterally, including through organizations such as the International Energy Agency (IEA), Nuclear Energy Agency, and Asian Pacific Economic Cooperation (APEC) and initiatives such as the Hemispheric Energy Initiative and African Energy Ministerial, we are successfully leveraging financial and technical resources to pursue common energy

goals, including energy diversification. The IEA was founded specifically to help member countries reduce dependence on imported oil through the development of alternative sources as well as through improved energy efficiency. Through more than thirty IEA Implementing Agreements, member and non-member governments pool resources for the research, development and deployment of non-fossil energy technologies. Some of these programs include the IEA Clean Coal Centre, the Energy Conservation in Buildings and Community Systems Program, the Advanced Motor Fuels program, and the IEA Bio-energy organization. The U.S. is also spearheading or participating in international initiatives such as the International Partnership for the Hydrogen Economy (IPHE), the Carbon Sequestration Leadership Forum (CSLF), the international engagement of GEN-IV nuclear power plant design, the Clean Energy Technology Exports (CETE) initiative, the International Thermonuclear Experimental Reactor (ITER) consortium, and the FreedomCAR and Fuel Partnership.

### **Energy Diplomacy:**

In both times of crisis and times of quiet, active energy diplomacy has remained a key ingredient in our efforts to deal with fluctuations in the energy markets. We work on a regular basis with our allies in Europe and Asia, and through international organizations like the International Energy Agency, to share information, to coordinate our energy policies, and to discuss advances in energy technology. We continue our efforts with producing and consuming nations, and developing countries to improve oil market data for more efficient markets.

We have strong bilateral relationships with various oil producers throughout the Middle East and North Africa. For instance, Saudi Oil Minister Naimi and the Secretary of Energy co-chair an annual forum (most recently this past May) on oil security sponsored by the Center for Strategic and International Studies and we have regular energy bilateral consultations at the working level with our counterparts in the Saudi oil ministry. The DOE also participated in this year's US-Saudi Trade Mission, which sent Saudi representatives to several U.S. cities to meet with industry officials to encourage investment in Saudi Arabia.

Qatar is another important bilateral partner -- we held working-level bilateral meetings with Qatari energy officials this past May, and we often meet with Qatari officials or with U.S. industry representatives invested in Qatar regarding natural gas development. We are actively engaged with the Iraqi oil ministry, seeking ways that we can be of assistance in the Ministry's efforts to revitalize the Iraqi oil industry. The U.S. Department of Energy has a good relationship with our counterparts in Kuwait as well, and the Kuwaiti Ministry of Oil has recently asked DOE to renew our annual bilateral dialogue.

In North Africa, we have moved quickly to take advantage of renewed relations with Libya, helping ease the re-entry of U.S. oil companies after being absent for so long. Our relationship with Algeria is particularly strong, and we continue to cooperate with the Algerian Ministry of Energy on solar technology, liquefied natural gas and regional energy development. DOE also has extensive interactions with Morocco on renewable

energy through our technical assistance and advisory role in the creation of the regional renewable energy center in Marrakech. Morocco played an important role in co-hosting the last U.S.-African Energy Ministerial in 2002 and continues to be a valuable partner on regional energy issues. With Egypt, we have developed a firm relationship in recent years based on trade policy and science and technology, and Egypt has recently become active in the CSLF and earlier this year exported LNG for the first time.

Our energy diplomacy extends to a multilateral level as well. For instance, the International Energy Forum (IEF) has become a key fixture over the past several years in fostering relations between consumers and producers. Next month, Secretary Bodman will attend the inauguration of the IEF Secretariat in Riyadh. The IEF Secretariat was proposed by Saudi King Abdullah at the IEF meeting in Riyadh in November 2000, and Saudi Arabia has played a key role in its formation. We hope to play an increasingly active role in the Secretariat as it continues to develop its role and mission. We are encouraged by the progress, while recognizing that the U.S. could play a more active role in the coming years.

Of particular importance, the IEF Secretariat will direct the Joint Oil Data Initiative or JODI, which is an effort involving nearly 100 countries to create a more transparent, efficient world oil market by providing better information to market participants. The next IEF biennial meeting will take place in April in Doha, Qatar, bringing together ministerial-level officials from 60-70 global energy producers and consumers. The meeting will focus on developing a common view on energy security and methods of enhancing investment in oil production.

Notably, at the last IEF held in May 2004 in Amsterdam, the first Business Forum was held between ministers and chief executive officers of major international and national oil companies. We believe that the Business Forum reinforces the important role of the private sector in terms of providing the necessary capital and expertise that will facilitate expanded oil and gas productive capacities to meet the growing global energy demand.

With a view of promoting greater access, we want to encourage government around the world to create a favorable investment climate that will facilitate increased oil and gas exploration and production to meet global energy demand and to advance economic imperatives for those producing countries. As the role for natural gas increases in the energy equation for the U.S. and other countries, LNG and gas-to-liquid technologies may eventually help to globalize regional gas markets. There are significant opportunities and obvious some challenges in terms of energy supply diversification and security.

### **Energy Security:**

As we strive to enhance supply around the world and become more efficient in how we use energy at home, it is still essential that we be able to take quick action to assure supply in the event of an emergency. Our relationship with the International Energy Agency, which grew out of the Arab Oil Embargo of 1973, is now over 30 years old. The IEA now has 26 member nations, all committed to holding oil reserves and to taking common action to address the ill effects of oil supply disruptions. The strength and



promise of the IEA was demonstrated only last month, as the IEA acted quickly to supplement supply in the follow-up to hurricane Katrina and its impact on U.S. Gulf oil production and refining.

On September 2, IEA members implemented a response action in the amount of 2 million bpd for a period of 30 days. Given the loss of refined products due to the storm, IEA members were asked to emphasize the drawdown of petroleum products where possible. There's little doubt that the IEA action contributed to the recent record level of gasoline imports into the United States.

### **Energy Efficiency and Conservation:**

Energy efficiency and conservation are important tools, which we are utilizing to help reduce U.S. dependence on oil and gas. Through various domestic and international programs and mechanisms, the U.S. is actively working to promote greater efficiencies throughout the energy value chain and especially in the transportation and end-user sectors.

For example, we are promoting higher energy efficiency standards for new buildings and energy efficiency ratings for homes. The Energy Policy Act of 2005 strengthens this effort by providing new tax incentives for a number of solar and energy efficiency measures in residences. It provides tax deductions for highly efficient commercial and residential buildings. It also promotes installation of residential and commercial fuel cell systems.

The Federal Government is also taking a role in promoting energy conservation within the government. On September 26, the White House directed the heads of executive departments and agencies to take appropriate actions to conserve fuel and electricity through promotion of carpooling, telecommuting, and use of public transportation. Federal agencies also were directed to take action to conserve natural gas and electricity during periods of peak consumption by shifting energy-intensive activities to non-peak periods wherever possible and by procuring and using efficient Energy STAR-rated energy intensive appliances and products.

On October 3, Secretary Bodman kicked off a comprehensive national campaign to highlight how American families, businesses and the Federal Government can save energy in response to rising winter energy costs. Entitled "Easy Ways to Save Energy," the effort provides consumers, industry and Federal agencies with a variety of energy saving ideas, which if done properly, can yield significant savings.

With a view of a global energy market and economy, through bilateral and multilateral arrangements, including ministerial dialogues, we work with various partners, including China and India and countries in this hemisphere and other regions to promote energy efficiency and conservation and effective natural resource management to help reduce energy demand and to enhance global energy security. We recognize and will be pursuing other energy saving measures, which we believe will directly or indirectly impact the U.S. energy security equation.

**Conclusion:**

While recognizing promising discoveries and production in other regions, in a hydrocarbon-based economy, the Middle East is and will remain a strategically vital region with respect to national and global energy security. Yes, the U.S. and other countries could reduce foreign oil dependence. However, true energy independence in an increasingly global energy market appears to be difficult to achieve in our hydrocarbon-based world.

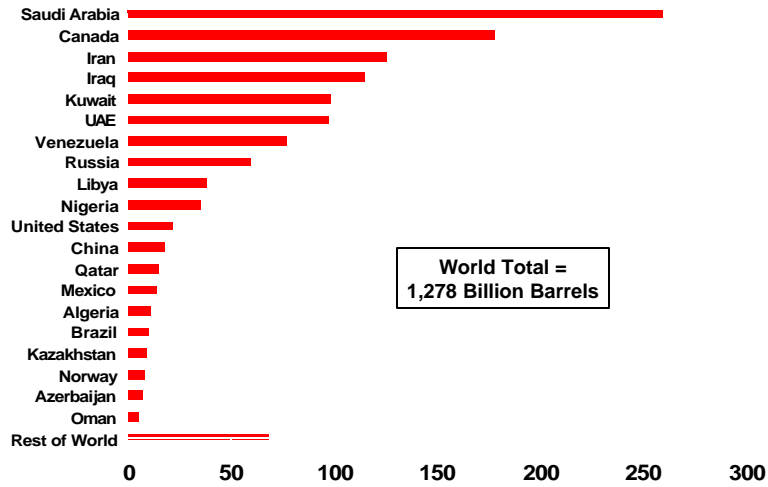
Therefore, we will continue to forge stronger alliances around the world, including in the Middle East, and to strengthen cooperation based on shared goals and interests. We will continue to promote energy security through diversification of supply and sources, through long-term R&D in alternative energy technologies, and through greater energy efficiency and conservation.

Both looking and working towards a long-term future, one with increased energy options and stronger alliances, the possibilities are very promising.

Thank you.

**FIGURE 1**

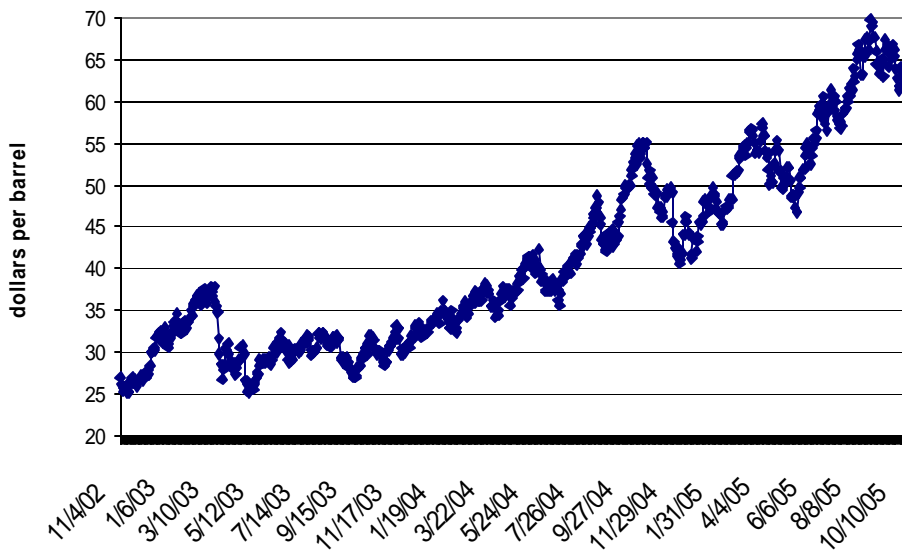
**World Oil Reserves by Country, as of January 1, 2005  
(billion barrels)**



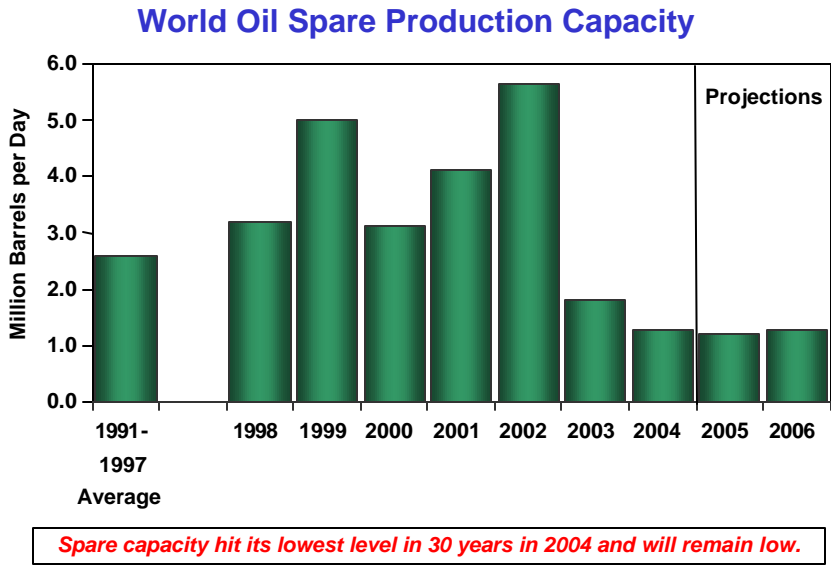
*Oil & Gas Journal*, "Worldwide Look at Reserves and Production," Vol. 102, No. 47 (December 20, 2004).

**FIGURE 2**

**NYMEX Crude Oil Closing Prices**



**FIGURE 3**



*Short-Term Energy Outlook, June 2005*