



# U.S. Oil Imports and Production

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for its inquiry into  
U.S. Oil Imports and Domestic Petroleum Production

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This memorandum, submitted for the record of the Committee on Energy and Natural Resource's inquiry into U.S. oil import levels and domestic petroleum production, presents two main themes:

- ◆ The level of U.S. oil imports, while rising, does not present a national security threat and the government should not embark on an expensive and ineffectual effort to reduce their level; and
- ◆ The government should take steps to encourage and augment domestic supplies through allowing access to promising exploration and production prospects, removing regulations that undermine exploration and production efforts in existing areas, and stimulating high-cost production with targeted incentives including royalty holidays and selective tax measures.

## U.S. Oil Import Level and Its Implications

The Foundation has developed its position on oil imports over decades of analysis and debate on the subject. PIRINC testified before the 1994 Department of Commerce inquiry on the issue,<sup>1</sup> and the Foundation recently published an analysis entitled, *U.S. Oil Imports and National Security: Is There Still a Connection?*<sup>2</sup> This memorandum for the Committee summarizes only the main points of our view.

At approximately the same price, a barrel of domestic oil is preferable to a barrel of imported oil, helping the domestic economy and improving our foreign trade balance. This *commercial* aspect of oil imports, however, does not carry over into U.S. *national security*.

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<sup>1</sup> Testimony of John H. Lichtblau, Chairman, at hearings on National Security Investigation of Imports of Crude Oil and Petroleum Products, held by U.S. Department of Commerce, Bureau of Export Administration, New York, NY, June 6, 1994.

<sup>2</sup> *Oil Imports and National Security: Is There Still a Connection?* A speech by John H. Lichtblau to the 16th Annual North American Conference of the U.S. Association for Energy Economics and the International Association for Energy Economics, Dallas, TX, November 7, 1994.

- ◆ *U.S. oil imports are forecast by all observers to grow in the coming years from their 1994 level of about 45%, a combination of continuing production declines and demand increases. The Energy Information Administration estimates that oil imports will account for 51% of oil demand by the year 2000. Lowering our import dependency from these or even higher projected levels, however, does not divorce us from world markets: the oil price, and its reaction to imbalances and exogenous shock, is global.*
- ◆ *Given its reserves position, the Middle East will remain the dominant oil export region for the foreseeable future. The world will therefore remain dependent on the area's supplies, and the countries in the region will remain dependent on export revenues to fuel their economies.*
- ◆ *With the end of the Cold War, the threat of a U.S.-Soviet clash over the Middle East has also ended, but the U.S. emergence as a lone superpower will keep our attention and resources focussed on the region regardless of our oil imports from the Middle East.*
- ◆ *The U.S. is likely to increase its Latin and South American share of imports. But increased dependence on these consistently "secure," Western Hemisphere suppliers does not change our national security.*
- ◆ *The source of our imports is made irrelevant by the all-important global scope and efficiency of the oil market. There is one world oil price, transparently known, and supply and demand quickly correct in response to regional imbalances. Hence, a shortage anywhere leads to a price response everywhere.*
- ◆ *The debate over the link between import dependency and national security is a uniquely American phenomenon. Our industrialized allies have routinely higher dependency ratios than the U.S., starting with Japan at nearly 100%. Even the European Union, with its North Sea production, has an dependency ratio of 60%, with individual countries at 90% and above.*
- ◆ *Additional U.S. production will not make the nation less vulnerable to a supply interruption, since the new volumes, like all other domestic production, will be produced at full capacity. The Strategic Petroleum Reserve, on the other hand, is designed to supply incremental volumes to make up for lost supply. The diligent maintenance and timely use of the SPR is essential.*

Thus, while we do not subscribe to the Department of Commerce's recent finding that "petroleum imports threaten to impair the national security," we do agree with its conclusion that for the U.S. economy as a whole, the positive

impact of the low oil prices throughout the investigation period outweighs the negative impact of these prices on the domestic oil producing industry. Thus, no governmental action should be taken to raise the price of imported oil.

We believe additional measures to promote domestic production, some of which are not mentioned in the Commerce report, should also be enacted. As we pointed out in our testimony for that inquiry, these measures should not be viewed as a response to a national security threat but as national domestic policy measures to provide support to a vital major regional industry.

## Promoting Domestic Production

Many countries worldwide have encouraged exploration and production activity through more attractive contract terms, enhanced access to potential production regions, and new development projects for existing production areas. The host countries pursue these policies in their self-interest -- building their economies, encouraging investment, increasing the tax base. The incremental production volumes from diverse sources also have the secondary salutary effect of reducing the impact of a supply interruption from any one oil export area. U.S. oil companies, contract drillers and service companies are at the forefront of this global effort, encouraged by U.S. commercial initiatives and bilateral and/or multinational accords.

The U.S. has mistakenly not followed a similar course in development of its own resources. The U.S. should take advantage of U.S. company expertise and technology to promote new upstream initiatives domestically:

- ◆ *Allow access* to promising exploration and production areas;
- ◆ *Remove impediments* to exploration and production in existing production provinces;
- ◆ *Implement targeted incentives* for certain high cost production.

In recent years, the star of the U.S. upstream firmament has been the offshore arena. Production in the Lower-48 federal offshore has risen by 16% in the last five years while Lower-48 onshore production has fallen by 16%. New technology has facilitated deepwater projects, allowing development of previously inaccessible resources. In addition, larger companies have sold offshore properties to independents, thus bringing new players to offshore activities. U.S. policy could have a positive effect on both of these trends and spread their benefits to other exploration and production areas.

## **Access to Promising Areas**

For decades, the larger oil companies have focussed their exploration and production efforts on the larger, potentially more rewarding plays such as those found in frontier areas. The frontier areas by definition contain the promise of significant reserves. With improved pre-drilling technology, such as enhanced seismic surveys, and new developments in production technology, these high-risk, high-reward prospects are even more tempting.

The independent producers have traditionally dominated the densely explored mature production plays of the Lower-48 onshore. The risks and rewards are more predictable and therefore, lower. However, some of the new technology (and the computer power to analyze it) is the new levelizer: frontier exploration provinces formerly beyond the resources of the smaller companies have now become feasible for a wider range of companies. (New technology may also allow additional recovery of the 2/3 of onshore reserves now left in the ground as fields play out.) Thus, increased access to promising exploration and production prospects will benefit both large and small companies.

Increased access to frontier exploration areas is in the interest of the nation, the region where it takes place and the industry. It is therefore surprising that the Commerce Department report did not address this critical issue. Enhanced access would provide investment opportunities, add tax revenue at all levels of government, and boost regional development and employment. In fact, the most significant oil discoveries and their development have positive investment and employment effects well beyond the immediate locale providing support.

### **Offshore Activity**

The U.S. offshore, the area with the most exciting new developments and an historical engine of industry and regional activity, is currently subject to limitations on access. Almost all of the Outer Continental Shelf is under leasing moratoria. Only the Western and Southern Gulf of Mexico remain active lease areas, while the North Atlantic, most of the Mid- and South Atlantic, the Straits of Florida, the Eastern Gulf of Mexico, the Pacific Coast off California, Oregon and Washington, and most of the Outer Continental Shelf off Alaska are all closed to leasing. The U.S. is thus precluded from the benefits of increased petroleum supplies from these potentially prolific areas, and the companies which might participate in the effort move their exploration dollars abroad. The shore-based support activities for offshore production have been important economic drivers in Louisiana, especially, as well as other coastal states. With low prices dictating reduced oil industry activity, the regional economies have been hit particularly hard. Increased access would thus carry industry, regional and national benefits.

## ANWR

There is a high probability that ANWR contains North America's largest remaining oil structure. The American Association of Petroleum Geologists speaks of "Prudhoe Bay or Middle East caliber resources." Yet, oil drilling has been prohibited there since passage of federal legislation in 1960 establishing the Arctic National Wildlife Range (changed in 1980 to a much expanded Arctic National Wildlife Refuge). The debate is entirely over Area 1002 in ANWR's coastal plain.

The regional public interest has been made clear: Alaska's populace and leaders have judged that the environmental risks in Area 1002 are far less than the potential economic benefits if commercial quantities are found there.

The national economic interest in drilling for oil in the ANWR coastal plain is also clear: every barrel of oil produced domestically improves our foreign trade deficit and increases domestic investment and employment. Alaskan North Slope production, for instance, helped lower world oil prices and strengthen the U.S. economy throughout the 17 years since production started. In that period, the nearly 11 billion barrels of oil production have reduced U.S. oil imports by an equal amount. This year, Alaskan North Slope oil is still reducing our net import requirements by 17%, or almost \$10 billion, and it will continue to be a major oil supply source for another 10 years at least.

The claimed environmental negatives, neither tangible nor calculable, do not offset these indisputable economic positives. Area 1002 is harsh, bleak and remote. It does not support tourism, camping or other forms of recreation. It is fortunate for the U.S. that its largest remaining unexplored oil deposit is located in such an isolated area without competing activities and uses. Even so, only 2,000 acres would actually be required in Area 1002, or a little more than one-tenth of one percent of ANWR's coastal plain or one-hundredth of one percent of all ANWR. If no oil is found, the "footprints" left by the exploring companies will be quite small since no pipelines, storage tanks, pumps or permanent housing will be built. Thus, in the case of failure, most traces of exploration activities can be erased as the companies leave. This environmental line in the tundra is a statement of ideology, a position that cannot be confirmed by cost/benefit analysis.

## Impediments in Existing Provinces: The OPA Example

A variety of measures impede exploration and production activities in existing provinces. Some of these rules and/or limitations are vestiges of earlier debates and concerns, such as the prohibition on exports of Alaskan North Slope oil. Some started out to protect the environment and went awry. An example of the latter are the onerous but unnecessary financial responsibility provisions

under the Oil Pollution Act of 1990 (OPA), a subject of particular concern to the Committee.

As noted throughout this discussion, offshore areas are nearly alone in showing volume growth in recent years. Yet OPA's financial responsibility requirements on offshore operators are likely to create a spate of negative consequences -- barriers to small companies' participation in offshore projects, premature lease abandonment, reduced royalty payments, regional economic stagnation to name but a few -- while providing no positive benefits. The mismatch of costs and benefits comes from a misunderstanding about the environmental danger of offshore operations in the U.S. Gulf of Mexico.

The framers of the Oil Pollution Act (OPA) applied its "polluter pays" principle by imposing a requirement on potential polluters that they show the financial capability to pay for a spill. This so-called financial responsibility provision requires that the party responsible for any offshore facility such as a production platform or pipeline provide evidence to the Minerals Management Service of \$150 million ready to pay spill costs and damages. The \$150 million level more than quadrupled the prevailing requirement of \$35 million.

The smaller independents, the new players on the offshore scene, are least able to meet this onerous requirement, even if it applies only to the federal OCS. These companies have recently been important participants in lease sales and as well as purchasers of the production properties of large companies. While these properties may be at the bottom end of the large company's portfolio, they may be important acquisitions for the independent. If these smaller companies are unable to operate on the offshore, or their costs are raised significantly in a low price environment, the result will be reduced drilling activity and production. Companies not yet active in the area will face a barrier to entry. Thus, competition will be reduced.

OPA's financial responsibility provision for offshore facilities is off-track for a number of reasons, including the geologic characteristics of the U.S. offshore, the safety standards of U.S. offshore operations, and the spill and clean-up record of the U.S. offshore.

### **Gulf of Mexico Reservoirs Are Unlikely to Support an Unchecked Spill**

Activities on the Gulf of Mexico Outer Continental Shelf account for about 85% of all U.S. offshore crude oil production, and virtually all of offshore drilling. Some 90% of the wells in the Gulf use artificial lift for oil production: downhole pressure is insufficient to bring oil to the surface without additional power. Therefore, cessation of the power source for the pump will stop the flow of oil. Thus, the image that was invoked in Congress during the OPA debate -- that the historic and unique eight-month blow-out



in Mexico in 1979 could happen in the Gulf of Mexico -- is unsupported by the region's reservoir characteristics.

### **U.S. Safety Equipment and Procedures Are Extensive and Automatic**

Offshore operators must emphasize safety in operations and in equipment. Safety drills are required and routine. In fact, many procedures and equipment controls are remote and automated. Downhole safety mechanisms prevent spills even when the surface apparatus has been rendered inoperable. When Hurricane Andrew, a 100-year storm, struck the Gulf of Mexico in 1992, offshore crews were evacuated, platforms were damaged and even destroyed, but oil spills were few in number and negligible in volume.

### **Costs of Clean-Up and Damages Have Never Approached OPA's \$150 Million**

According to Minerals Management Service data, the cost of spill clean-up and damages has never approached the prevailing level of \$35 million, let alone OPA's \$150 million. Furthermore, the financial responsibility provision addresses situations where OPA's liability limits remain intact. OPA sets the limited liability for damages at \$75 million for offshore facilities, leaving clean-up costs uncapped. Clean-up costs under OPA are likely to follow historical trends. Thus, it is unlikely that the cost of a limited liability spill, even under OPA, will be close to the statute's overblown \$150 million.

### **Targeted Incentives for Production**

Targeted incentives for certain high-cost production are good national policy. Properly designed, they will increase exploration activity and production volumes. Tax revenues and royalties will increase for the federal government. Support activities will boost regional economic activity including jobs, investments, and tax collections at all levels of government.

Several members of Congress have recently put forward proposals to provide relief for producers. One such bill would provide royalty relief for production from deepwater on the Outer Continental Shelf, a program which is also part of the Administration's plan for producer relief. The bill is aimed at projects that would be uneconomic without abatement, an all-important qualification. The appropriate incentives will not be designed to pay producers for production they would have undertaken without aid, as tax or royalty relief on such volumes would be a net drain on the Treasury. Any program may have an initial revenue loss, but the efficient (and thus, appropriate) plans will offset those losses with later-year revenue gains as production volumes build.