

Testimony of William F. Martin, Chairman, Washington Policy & Analysis

Good morning. My name is William Martin. I am delighted to be here today to testify on the reauthorization of the Iran and Libya Sanctions Act of 1996.

I am an energy economist by training. I am the chairman of the Council on Foreign Relations Energy Security Group and the chairman of Washington Policy & Analysis, Inc., an international energy consulting firm. I served as Deputy Secretary of Energy and Executive Secretary of the National Security Council under President Reagan.

The purpose of my testimony today is to share with you the results of a recent study conducted by my firm. It investigated the impact of sanctions on current and future energy markets and the ensuing effects on the American and world economies. This study is consistent with the Administration's National Energy Policy recommendation that President Bush "direct the Secretaries of State, Treasury and Commerce to launch a comprehensive review of U.S. sanctions policy."

While a comprehensive review requires inquiries into national security, economic, energy and foreign policy issues, WPA focused on how sanctions affect energy supply, demand and pricing. Its inquiry addressed four key areas:

1. What is the state of the global oil market? How well can the world respond to rising demand or to supply disruptions?
2. What effects do maintaining sanctions against Iran, Iraq and Libya have on energy prices? What effect do rising prices have on the world and U.S. economies?
3. How do unilateral U.S. sanctions against Iran and Libya affect their energy sectors?
4. How would lifting unilateral sanctions against Iran and Libya and modifying multilateral sanctions against Iraq affect the global energy balance and prices? Do sanctions unintentionally provide Iran, Iraq and Libya with higher revenues than what they would earn in the absence of sanctions?

Findings and Recommendations

In our study, WPA used its global energy model to develop a base case scenario for the future world oil market. It then created a second case to model how changes in sanctions policies towards Iran, Iraq and Libya could affect the market. This comparative analysis led to the following findings.

What is the state of the global oil market? How well can the world respond to rising demand or to supply disruptions?

The global oil supply is a cause for concern. After decades of whittling away at surplus production capacity to the point where it has almost vanished, energy markets are so tightly balanced that they threaten global economic growth. If there were even a short-lived disruption of energy supplies, the oil market would have less flexibility to respond than in earlier decades for several reasons:

- Oil demand continues to grow steadily globally. Overall, demand in developing, non-OECD countries is growing at a rate that is 75% faster than in OECD countries; in the world's most populous nations China and India demand is growing at a rate that is 400% faster.
- Many of the countries in which demand is growing the fastest neither participate in International Energy Agency (IEA) agreements nor hold strategic stocks.
- Average commercial stock levels are low due to just-in-time inventory management practices.
- OPEC surplus capacity has dwindled from 11 million barrels per day (mbd) in the mid-1980s (equal to 18% of global demand) to about 3 mbd in 2001 (equal to 4% of global demand).
- The world's oil producers, including both private companies and state-controlled entities, are close to fully utilizing the production capability they have to meet current global oil demand; OPEC capacity utilization is now pushing toward the 95% level.
- New production capacity is growing at slower than historical rates in Saudi Arabia and Kuwait, which control about 65% of the world's spare capacity, due to more conservative policies and domestic issues.

Given these conditions, the world now faces the tightest balance between readily accessible supply and global oil demand that it has experienced in many decades. As seen below, WPA expects global demand to grow by 1-2 mbd per day over the next several years, despite assumptions of a near-term economic slowdown and modest 2.5% global average growth over the 2001-2008 study period. On the supply side, WPA assumes aggressive growth in OPEC and non-OPEC production growth when compared to growth rates over the last decade a 20% increase in OPEC's production growth rate and a 55% increase in non-OPEC supply growth by 2004.

(Refer to Annex A.)

Source: WPA estimates.

Nevertheless, WPA forecasts shortfalls, even with steady increases in global oil production under stable conditions and in the absence of any major disruptive events. WPA recognizes that no actual shortfall exists; in reality, the market always balances. However, the growing notional

gap suggests a greater likelihood of price increases because oil prices are set at the margin of supply and demand; even a small surplus or deficit can cause wide price swings. Thus, the already fragile world and American economies remain vulnerable to oil prices rising from today's high levels.

The diminished OPEC supply cushion also has troubling implications for the ability of oil-consuming countries to weather major oil supply disruptions, which have occurred roughly every five to seven years since the 1970s. For the reasons discussed earlier, commercial stock release, surge capacity and the International Energy Agency system the three key instruments the world relies on to respond to crises could be less effective than they have been previously.

What effects do maintaining sanctions against Iran, Iraq and Libya have on energy prices? What effect do rising prices have on the world and U.S. economies?

U.S. sanctions against Iran and Libya are intended to hinder investment in their energy sectors, but the sanctions do not affect oil exports. Multilateral United Nations sanctions against Iraq do limit exports and oil sector development. Recently proposed "smart sanctions" against Iraq aim to limit the acquisition of dual-use technologies. If implemented, they would permit increased Iraqi oil exports. However, this additional amount is not sufficient to dramatically alter the outlook for oil prices.

An environment in which sanctions are maintained could see steady upward pressure on oil prices because they would rise as the notional gap mentioned earlier expands. Historical evidence demonstrates that oil prices are set at the margin of supply and demand; even a small surplus or deficit can cause wide oil price swings. According to the WPA Global Energy Model, oil prices could rise to as much as \$33 a barrel by 2003 and to nearly \$40 per barrel by 2008 (prices in 2000 dollars).

WPA also evaluated a variety of alternative energy scenarios involving conditions in the world oil market in 2003 and the effects of plausible potential oil shocks. WPA concludes that supply shocks could drive per barrel prices from \$33 to nearly \$40, or even higher in the more severe scenarios. (Refer to Annex C.)

These price spikes would occur even if present response mechanisms were fully utilized. In general, the more severe the shock scenario, the greater the degree of oil market instability and the larger the magnitude of the price spike.

The International Monetary Fund (IMF) quantified the link between oil price increases and economic growth in a December, 2000 research paper. It estimated that every \$5 increase in the price of crude oil skims an average of 0.27% per year from the real global economic growth rate for three consecutive years after the initial price spike occurs. The effects are more pronounced for the United States, which would experience a 0.37% average annual GDP decline during the same period, according to the IMF. Therefore, WPA expects that U.S. GDP will be at least 1%, or roughly \$100 billion, lower in 2004 than it would be without a notional supply gap. The economic effect would be even more pronounced if there were unanticipated disruptions in oil markets.

Sustained high petroleum prices take their toll on every sector of the U.S. economy. Any significant change in the crude oil price drives large retail price movements within the gasoline and home heating oil markets, although refining and distribution issues also affect product prices. If crude oil prices rise \$10 a barrel to \$35 in 2004, the typical American household will spend an extra \$400 annually to fuel their cars; heating oil consumers will pay \$50 a month more throughout the winter to keep their homes warm; distribution of goods and services will cost railroads and trucking companies an additional \$10 billion each year; and collectively, American farmers will spend \$1 billion more to fuel their tractors during the planting and harvesting seasons.

How do unilateral U.S. sanctions against Iran and Libya affect their energy sectors?

How effective U.S. sanctions against Iran and Libya have been in achieving their national security objectives is the subject of much debate. Some analysts argue that foreign oil firms are ready to disregard American sanctions and aggressively move forward with plans to exploit some of the largest fields in Iran and Libya. Many of these companies have the technological ability to quickly expand production capacity without U.S. participation. In fact, Iran has signed contracts worth more than \$10 billion with foreign oil firms over the past five years.

The situation is not that simple, however. U.S. sanctions and Executive Orders prohibit American investment and hinder non-U.S. companies' activities by creating political uncertainty surrounding Washington's response to violations. Furthermore, the SEC recently declared that it considers investments in sanctioned countries to represent significant material risk for investors. The SEC requires foreign businesses raising funds in U.S. capital markets to publicly disclose their dealings with the sanctioned countries and file the information electronically, making these companies more vulnerable to scrutiny.

However, for the purposes of this study, WPA does not purport to take a position on the merits or effectiveness of U.S. sanctions policy. The only intent is to evaluate how future enforcement of sanctions could impact the ability to bring adequate oil supplies to market and alleviate higher energy prices over the short to long term.

Based on these considerations, WPA assumes only modest increases in oil production from Iran and Iraq 400,000 barrels per day by 2004 aided by investment from international oil companies, even if sanctions are maintained. WPA expects Libyan production to remain at current levels. By factoring these expectations into the Global Energy model, WPA projects that much greater production levels are needed to relieve the tight oil market situation and thus lower prices.

Over the past 18 months, high oil prices have bolstered international oil firms' balance sheets, enabling the expansion of exploration and production activities worldwide. Although capital investment is occurring, the most promising and lowest-cost properties remain in countries under U.S. sanctions. Libya and Iran were the two nations considered most attractive for new venture activity in a survey of 85 international oil firms by UK-based Robertson Research; Iraq came in eighth. Not surprisingly, Iraq, Iran and Libya have the second, third and sixth largest remaining reserves, according to U.S. Geological Survey figures.

Yet rather than immediately reinvesting portions of their profits in exploration plays that carry more geologic risk, or in acreage that will result in high production costs, major U.S. oil firms are

buying back their stock. They have announced some \$10 billion in stock repurchases in the past year, clearly signaling that share buybacks are currently one of the best uses for available cash. If sanctions are lifted, however, Iran and Libya could offer American petroleum companies the opportunity to invest in some of the world's most prolific, and easily accessible, reserves. Such investment opportunities would perhaps present lucrative alternatives to stock buybacks and bring more supply to the market.

How would lifting unilateral sanctions against Iran and Libya and modifying multilateral sanctions against Iraq affect the global energy balance and prices? Do sanctions unintentionally provide Iran, Iraq and Libya with higher revenues than what they would earn in the absence of sanctions?

U.S. sanctions were imposed against Iran and Libya in 1996 when oil markets were in surplus and featured relatively low oil prices. In addition, preparations were being made to reintroduce significant volumes of Iraqi oil into an amply supplied market under the United Nations' Oil-for-Aid Program. Iraq's production quickly ramped up by more than 2 mbd from late 1996 to mid-1998. The oil market has tightened substantially since then as global demand growth has outpaced new supplies and driven oil prices higher.

If U.S. unilateral sanctions are removed and U.N. multilateral sanctions are modified, WPA projects that oil output from Iran, Iraq and Libya combined could increase 3 mbd by 2004; as much as 5 mbd of new supply could be forthcoming from these three countries by 2008. Over the longer term, such supply expansions are large enough to potentially reduce oil prices by some \$12 a barrel in 2004 and by roughly \$16 a barrel in 2008, as illustrated below.

Source: Energy Information Administration and WPA estimates.

Furthermore, the supply expansion that is likely to result from both lifting sanctions against Iran and Libya and modifying sanctions against Iraq goes a long way toward closing the notional gap

between supply and demand. The additional supply would also provide a cushion to help ease the effects of potential future oil shocks later in this decade, as shown in the table below.

(Refer to Annex B.)

WPA estimates.

Ironically, WPA's analysis reveals that U.S. sanctions may unintentionally provide the targeted nations with greater oil revenues than what they would earn in the absence of sanctions. In fact, lifting sanctions could reduce the collective revenues accrued by Iran, Iraq and Libya - even as their production rises - because prices will drop precipitously in a well-supplied market. The subsequent price declines would actually cut their oil revenues by billions of dollars annually.

For example, in the table below, WPA predicts a \$35 a barrel oil price in 2004 if sanctions are maintained and a \$23 a barrel oil price if sanctions are removed. With sanctions, WPA estimates Iran would produce 3.8 mbd of oil and generate \$133 million a day in revenues ($3.8 \text{ mbd} \times \$35 = \133 million). Without sanctions, WPA projects that Iranian production could reach 5.0 mbd by 2004 and revenues would fall to \$115 million a day due to the lower oil price ($5 \text{ mbd} \times \$23 = \115 million).

Source: WPA estimates.

The figures work similarly for Iraq; WPA predicts slightly higher revenues for Libya due to the increased production. Yet collective daily revenues in 2004 would decline slightly over \$27 million from \$287 million with sanctions to about \$260 million without sanctions; annual 2004 revenues would be nearly 10 billion lower (\$27.1 million x 365 days = \$9.89 billion). If sanctions were lifted, Iran, Iraq and Libya's collective oil revenues for the 2002-2008 period would be almost \$63 billion lower.

Lifting sanctions would have both short and long-term effects. The announcement of sanctions removal could lead to a small, near-term reduction in oil prices. It would positively signal the oil futures market to erase any premium it holds due to concerns over a lack of future oil supplies, which WPA believes could be approximately \$0.50-\$1 a barrel.

If sanctions are lifted, it is reasonable to expect changes in the dynamics of OPEC production restraint and quota allocations within a year or two. As more oil firms ink deals with the formerly

sanctioned countries, Saudi Arabia and Kuwait may seek production quota increases to preemptively position themselves to boost their market shares before more Iranian, Iraqi and Libyan oil comes on stream. Such intra-OPEC competition would likely push crude oil prices down by several dollars per barrel. Most energy economists agree that a competitive environment among OPEC members strongly diminishes the cartel's ability to exercise supply restraint and therefore dilutes their influence on oil prices.

Over the medium to long term, crude prices will gradually trend downward as global oil supplies expand with the lifting of sanctions. As lower crude costs for refiners move through the distribution system to retail outlets, prices for consumer products, including gasoline and home heating oil, will experience comparable declines. Lower oil prices should translate into average retail prices at the gasoline pump in the area of \$1.00-\$1.50 a gallon compared to a \$2.00-\$2.50 a gallon range that could occur if sanctions are maintained.

In conclusion, the National Energy Policy recommendation that President Bush have the Secretaries of State, Treasury and Commerce initiate a comprehensive review of U.S. sanctions policy is extremely timely and well advised. The tightness and inflexibility of the world oil market make it both unprepared for the looming supply shortfalls that WPA forecasts and especially vulnerable to major supply shocks.

To combat these distressing conditions, WPA suggests that the unilateral sanctions on Iran and Libya, which were imposed when the world oil market was in surplus, be reviewed with greater sensitivity to global energy needs. Replacing the unilateral sanctions and modifying the United Nations sanctions on Iraq would provide 3 mbd of additional supply by 2004 and as much as 5 mbd of additional supply by 2008. These amounts would relieve increasing upward pressure on oil prices and create a modest supply cushion to help alleviate price spikes during any unforeseen oil supply disruptions.

It is also likely that Iran, Iraq and Libya would earn less from oil sales in the absence of sanctions than what they would receive in the presence of ongoing sanctions. For example, WPA's analysis indicates that their collective revenues would be almost \$10 billion lower in 2004 without sanctions than what they would realize with sanctions. This surprising, counterintuitive finding, combined with the upward pressure on oil prices to which sanctions contribute, argues strongly for a reappraisal of sanctions and the consideration of alternative approaches to achieve the nation's energy and national security goals.

Thank you for inviting me to speak here today. I look forward to answering any questions that you may have.

ANNEX A

ANNEX B

ANNEX C