

STATEMENT OF JAMES SCHLESINGER
BEFORE THE
COMMITTEE ON FOREIGN RELATIONS
UNITED STATES SENATE
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Mr. Chairman, Members of the Committee:

I thank the Committee for this opportunity to discuss the quest for energy security, the implications of our heavy dependence on imported oil, the rise in oil prices, and their manifold political and economic repercussions for our nation. In so many ways, the use of oil as our primary energy source turns out to be a two-edged sword. Given that dependence, the ramifications are too numerous to discuss in detail. Given the necessary limitations on time, I must be selective. Therefore, I shall touch only upon several salient points.

1. Mr. Chairman, the problem of energy security is of relatively recent origin. When mankind depended upon windmills, oxen, horses, etc., energy security was not a strategic problem. Instead, as a strategic problem it is a development of modern times—and reflects most crucially the turn to fossil fuels as increasingly the source of energy. The Industrial Revolution in the 19th century, strongly reinforced by the rapid growth of oil-dependent transportation in the 20th, unavoidably posed the question of security of supply. Imperial Germany took over Lorraine with its coal fields after the Franco-Prussian War—to insure its energy security. When Britain, pushed by Churchill, converted its Navy to oil early in the 20th century, it sought a secure supply of oil under its own control in the Persian Gulf—which incidentally increased its concern for the security of the Suez Canal. For the United States, where the production of oil had started and for long was primarily located, the question of security of supply did not arise until

the 1960's and 1970's. Since then, we have regularly talked about—and sought by various measures—to achieve greater energy security. Such measures, limited as they were, have generally proved unsatisfactory. The nation's dependence on imported hydrocarbons has continued to surge.

Mr. Chairman, until such time as new technologies, barely on the horizon, can wean us from our dependence on oil and gas, we shall continue to be plagued by energy insecurity. We shall not end dependence on imported oil nor, what is the hope of some, end dependence on the volatile Middle East—with all the political and economic consequences that flow from that reality. That is not to say that various measures and inventions will not, from time to time, shave our growing dependence, but we will not end it. Instead of energy security, we shall have to acknowledge and to live with various degrees of insecurity.

To be sure, we have certain short-term problems to which I shall presently turn. More importantly, we face a fundamental, longer-term problem. In the decades ahead, we do not know precisely when, we shall reach a point, a plateau or peak, beyond which we shall be unable further to increase production of conventional oil worldwide. We need to understand that problem now and to begin to prepare for that transition.

The underlying problem is that for more than three decades, our production has outrun new discoveries. Most of our giant fields were found forty years ago and more. Even today, the bulk of our production comes from these old—and aging—giant fields. More recent discoveries tend to be small with high decline rates—and are soon exhausted. Since the issue is crucial—and is not widely understood—I have prepared a chart which lays bare the problem.

(Discussion of the chart.)

Mr. Chairman, the upshot is, quite simply, that, as the years roll by, the entire world will face a prospectively growing problem of energy supply. Moreover, we shall inevitably see a growing dependency on the volatile Middle East. We shall have to learn to live with degrees of insecurity—rather than the elusive security we have long sought. To be sure, some insecurity will be mitigated by the Strategic Petroleum Reserve, and other emergency measures. That will provide some protection against (short-term) supply disruptions, but it will not provide protection against the fundamental long-term problem.

2. In addition to the long-term problem of the prospective limit on conventional oil production, we have a number of short-term or cyclical problems that have contributed to the current stringency and current high prices. Spare production capacity has essentially disappeared. This reflects the volatility of oil prices, which has led to a low rate of investment in new capacity, as well as an unexpected surge of demand, particularly from China and the United States. For many years, we have had excess capacity in refining. That, too, has largely disappeared, and we lack capacity to refine the heavy, sour crudes that remain available. Here in the United States, the problem has been amplified by the battering of Gulf infrastructure by Hurricanes Katrina and Rita. We also have an added, self-inflicted problem of some 17 boutique blends of gasoline, mandated by state authorities.

The insurgency in Iraq has prevented the increase in production, even to the pre-war level, that many expected. Long-term sanctions against Iraq, Iran, and Libya, both U.S. and international, have reduced their contribution to world supply. This has taken

place against inelastic domestic production of natural gas. There are, in addition, problems of electric power generation and transmission. The point about all of these is these are not inherent problems. In principal, they would all yield to additional investment. Yet, we must bear in mind that investment activity depends upon price signals, and that there is a long period of gestation before additional investment activity brings supply to market. Some of these problems may, however, be ameliorated by changes in law or in regulation.

By about 2010, we should see a significant increase in oil production as a result of investment activity now under way. There is a danger that any easing of the price of crude oil will, once again, dispel the recognition that there is a finite limit to conventional oil. In no way do the prospective investment decisions solve the long-term, fundamental problem of oil supply.

3. Let me turn now to the political and economic ramifications. Again, let me underscore that energy actions tend to be a two-edged sword. To some extent, the recent higher prices for oil reflect some of our own prior policies and actions. For example, the sanctions imposed upon various rogue nations, by reducing world supply, have resulted in higher prices. Operation Iraqi Freedom, followed by the insurgency, has caused unrest in the Middle East. The consequence has been somewhat lower production and a significant risk premium that, again, has raised the price of oil.

The effect of higher oil prices has been significantly higher incomes for producers. A much higher level of income has meant that a range of nations, including Russia, Iran, Venezuela, as well as Gulf Arab nations have had their economic problems substantially eased. As a result, they have become less amenable to American policy

initiatives. Perhaps more importantly, the flow of funds into the Middle East inevitably has added to the monies that can be transferred to terrorists. As long as the motivation is there and controls remain inadequate, that means that the terrorists will continue to be adequately or amply funded. To the extent that we begin to run into supply limitations and to the extent that we all grow more dependent on the Middle East, this problem of spillover funding benefits for terrorists is not going to go away.

4. There are, of course, additional problems of an economic nature. We all understand that higher oil prices can depress spending on other goods and services—and thereby cause slower growth rates and possibly a worldwide recession. The reverse side of rising receipts for producers is, of course, rising out-payments by consumer nations. This can readily augment structural imbalances. This year, the American balance-of-payments deficit looks to be almost three-quarters of a trillion dollars. That is not small change. Of the well over \$700 billion of that deficit, some \$300 billion comes from oil and gas. It is recognized that the U.S. balance-of-payments deficit represents the locomotive that drives much of the world's economies. In performing this service—for which we get little thanks—the United States is steadily adding to its financial obligations to others. How long this process can continue is uncertain, but high oil prices add to the dilemma.

Finally, Mr. Chairman, I must point to another problem. The United States is today the preponderant military power in the world. Still, our military establishment is heavily dependent upon oil. At a minimum, the rising oil price poses a budgetary problem for the Department of Defense at a time that our national budget is increasingly strained. Moreover, in the longer run, as we face the prospect of a plateau in which we

are no longer able worldwide to increase the production of oil against presumably still rising demand, the question is whether the Department of Defense will still be able to obtain the supply of oil products necessary for maintaining our military preponderance. In that prospective world, the Department of Defense will face all sorts of pressures at home and abroad to curtail its use of petroleum products, thereby endangering its overall military effectiveness.

In closing, Mr. Chairman, I trust that I have fulfilled the request in your letter of invitation to analyze “the complexity of U.S. reliance on imported energy sources, particularly oil, and the difficulties the U.S. faces in mediating detrimental effects of this dependency.” Even in the short run, actions that we take may substantially increase the resources and reduce the economic and political pressures on states that are hostile to us. In the longer run, unless we take serious steps to prepare for the day that we can no longer increase production of conventional oil, we are faced with the possibility of a major economic shock—and the political unrest that would ensue. The United States has just over four percent of the world’s population and uses roughly twenty-five percent of the world’s oil production. In a sense, this statistic in itself is misleading, because the United States produces roughly twenty to twenty-five percent of the gross world product. Nonetheless, that statistic does underscore our potential vulnerability in an era that we may no longer be able to produce additional conventional crude oil worldwide.

Thank you very much, Mr. Chairman. I shall be happy to answer any questions that you or the Members of the Committee may have.u8