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The U.S.-Saudi Partnership in the Changing Energy World

Energy Dialogue

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The Center for Strategic and International Studies

Participants:

His Excellency Ali Al-Naimi

Minister of Petroleum and Mineral Resources, Kingdom of Saudi Arabia

The Honorable Samuel Bodman

Secretary of Energy, U.S. Department of Energy

Moderator:

The Honorable James R. Schlesinger

CSIS Trustee and Senior Adviser, Lehman Brothers

James Schlesinger: Thank you, Frank Verrastro.

All of you that are assembled here, welcome to this CSIS conference. Welcome to the Ronald Reagan Center. If you had trouble finding this facility in this building, remember that it was Ronald Reagan who said, "Government is not the solution, government is the problem." [Laughter].

Right now we are about to put to the test Ronald Reagan's proposition that the magic of the marketplace will solve our energy problems and we will have two speakers that will deal with these issues from the standpoint of government policy.

As you all know, energy prices have been going up and down, mostly up of late. The question is, is this a reflection of inadequate investment because of low prices in an earlier period? Inadequate investment in infrastructure? Or are we reaching a peak in production? Both of our speakers I believe will deal in one way or another with those issues.

Our first speaker is the Minister of Energy for Saudi Arabia, Mr. Ali Al-Naimi who has returned to CSIS for I believe the third time. We welcome him back. This is an extraordinary story. For those of you familiar with Horatio Alger, you will recognize the liniments of this story. The Minister went to work for Aramco when he was 12 years of age, and he slowly worked his way to the top, becoming Chief Executive Officer of Saudi Aramco and is now Minister of Energy. Mr. Minister? [Applause].

Ali Al-Naimi: Thank you, Mr. Schlesinger. Thank you very much for those kind words. Secretary Bodman, ladies and gentlemen, good morning.

First of all I would like to thank the Center for Strategic and International Studies for organizing this timely conference. I would also like to express my gratitude to the sponsors, Chevron and Saudi Aramco for making this event possible.

It's wonderful to be back in Washington, D.C., especially this year, the 60th anniversary of the meeting between King Abdul Aziz al-Saud and President Franklin Roosevelt aboard the USS Quincy. That historic summit solidified the relationship between our two great countries. While this meeting is often seen as the beginning of a special relationship, the close ties between our two countries actually go back to 1933 when King Abdul Aziz granted a concession to Standard Oil of California, now Chevron, to explore for oil in the Kingdom.

In the intervening 70-plus years, our two countries have worked together on all levels for regional and international peace and prosperity. The relationship, particularly in the fields of trade and investment, have expanded and diversified since the early days.

I am particularly pleased to participate once again in this annual conference and to appear with my counterpart from the United States: The Honorable Secretary of Energy Samuel Bodman. We had a productive meeting yesterday. I am sure it was the first of many to come. He truly has had distinguished career in the financial sector and in the U.S. government. I must also add that we speak the same language, secondly. He brings an intelligence and energy to the job that will be an asset in the search for solutions to the energy challenges facing the U.S. and the world at large.

I believe this conference is timely, as recent events have caused some to question our energy future. The talk of scarcity and economic dislocation should not distract us from our task. Globalization offers the promise of raising the living standard of the world's people. Greater prosperity will require reliable and reasonably priced energy. We in the energy supply business face the challenge of producing the large quantities of new energy required to fuel the aspirations of the world's people. I believe we are up to the challenge. This is not to imply that we won't face difficulties. The world's relative dependence on liquid hydrocarbons is unlikely to change much over the next 30 years. This means that the oil industry must be prepared to develop and bring to market significant new production capacity in the coming years.

The world's people not only want more energy, but they are demanding environmentally friendly energy. While the oil industry shares the desire for a clean environment, our task is complicated by increasing regulatory complexity. Multiple jurisdictions, the absence of coordination and the lack of a consensus have spawned a multitude of product specifications, which in turn, have divided natural geographical markets into submarkets. This has tended to reduce flexibility in the system creating situations where isolated regional supply/demand imbalances become magnified,

affecting world price levels. Public opposition to the siting of refineries, power plants, pipelines, terminals and other facilities complicates the industry's ability to deliver products necessary to fuel the economy.

Finally, the period of low oil prices from the mid-1980s through the end of the 1990s caused investors to turn to other sectors that offered the prospect of better returns. The popular belief was that the long-term sustainable oil price was in the \$10-\$15 range, a price that proved to be unattractive to ensure sufficient inflows of capital into the energy sector. The result is an energy supply infrastructure that is inadequate to meet the demands of the future.

Oil markets have undergone many changes over the past 20 years. Today, oil is bought and sold in a market that is truly global in scope, with a much greater number and diversity of participants than at any time in history. Oil is a fungible commodity and supply disruptions anywhere in the world will impact all consumers regardless of the sources of their own imports. Likewise, developments in any consuming country throughout the world affect all producers.

From the mid-1980s to the turn of the century, the oil industry operated in an environment of surplus upstream and downstream capacity. Overcapacity kept prices low, contributing to complacency about the adequacy of existing capacity and infrastructure to meet future requirements. The previous era of overcapacity has ended. Spare production capacity outside of Saudi Arabia is now basically minimal, and upgrading capacity at refineries worldwide is out-of-step with crude quality at the margin. This has created a perception of a tight market and has contributed to upward price pressure. I believe, however, that additions both to production and refinery capacity worldwide over the next several years should help to ease the current anxiety.

I want to assure you here today that Saudi Arabia's reserves are plentiful, and we stand ready to increase output as the market dictates. For the past 60 years we have built a reputation of reliability second to none. Looking to the future, our mission is to remain the world's most reliable supplier of petroleum.

As producers, we have seen the deleterious effects of low prices on capacity. We know that prices must provide an adequate return to the industry if supply is to keep pace with demand. We also know that if prices do not provide this incentive, it is not in the long-run interests of consumers.

But we are also keenly aware that when prices become too high, the world's economy is negatively affected, and when the world economy slows, we as producers suffer. Therefore, I can assure you that very high or unstable prices are not in the interest of producers.

The conventional wisdom is that the interests of producers and consumers are diametrically opposed and the opportunities for consensus are limited. I reject this notion. Producers and consumers share a common interest in stable markets, and developments over the past several years serve as a reminder of the dangers of becoming complacent about energy supply and its reliability. It is essential that markets offer adequate incentives to the oil industry while at the same time protecting the world economy. Ensuring the availability and reliability of sufficient supplies of energy to fuel the future growth of the world's economy requires more than simply increasing crude oil production capacity. We also must address other important issues that impact the ability of the oil industry to deliver the products consumers demand.

Meeting the challenges of our shared energy future requires a multi-dimensional approach involving actions by both consumers and producers. The elements of such an approach require us to:

First, increase global crude oil production capacity. Saudi Arabia is already taking aggressive steps to ensure a greater flow of oil into markets.

Second, address downstream bottlenecks that reduce industry flexibility or constrain its ability to deliver products that consumers demand.

Third, upgrade our aging energy infrastructure to meet the demands of the future.

Fourth, improve efficiency and conservation to ensure that we maximize the contribution from our energy resources.

Fifth, increase cooperation among producers and consumers to improve transparency, thereby enhancing prospects for market stability and predictability. We have already made progress in this area with the establishment of the International Energy Forum Secretariat based in Riyadh and the Joint Oil Data Initiative which aims to improve information on oil supply and demand, particularly in developing countries.

Sixth, expand human capital in the energy industry by recruiting and training the best and the brightest. Saudi Aramco, our national oil company, has a long and admirable history of training and developing its people, which places it in an especially good position to meet the challenges of tomorrow.

Finally, promote and implement new technologies. I am quite bullish on technology as the key to our energy future. My optimism springs from a confidence that technological innovation will allow us to find and extract more oil around the world while holding down costs. Technology will help us to improve the efficiency of our energy use, thus extending the useful life of our resources. It will also help us to accomplish this while offering greater protection to the environment. Ultimately, it will provide us with a stable transition to an eventual non-hydrocarbon-based economy, whenever that might occur.

Let me assure you that Saudi Arabia is responding to the challenges we face in today's oil market. Building on our long track record as the world's preeminent reliable supplier of energy, Saudi Arabia is in the forefront of efforts to stabilize markets and alleviate constraints. Our efforts include: meeting our customers' current needs by offering additional crude supplies as needed; expanding our production capacity to meet future demand and maintain spare capacity; building new refineries; expanding and upgrading our existing refineries at home and abroad; upgrading our tanker fleet; and investing in new technology across the spectrum of our business.

While Saudi Arabia is undertaking a massive program to meet the world's energy requirements, achieving stable oil prices and balanced markets requires a global effort. As producers and consumers, we face a variety of hurdles. I want to emphasize that the problem is not a lack of resources. Remaining world oil reserves are abundant. Rather, the current impediments include, for example: the proliferation of product specifications, a myriad of regulations, infrastructure bottlenecks, and a lack of accurate and timely data needed to improve market transparency.

Saudi Arabia is working internationally to help address these issues and to improve transparency and cooperation among consumers and producers. I think dialogue, like the one we are having today, represents an important step on the road to

a brighter energy future. I look forward to working with Secretary Bodman to achieve our shared interests.

In closing, I would like to emphasize that we hold the keys to mastering our energy future. To be successful we must learn from the past, while being prepared to depart from past practices when required. We must embrace new ideas and approaches, taking bold steps when necessary.

I would like to leave you with some words of wisdom from the past as we look to the future: Abraham Lincoln, the 16th President of the United States, once said, "The dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty, and we must rise with the occasion. As our case is new, so we must think anew and act anew." Thank you ladies and gentlemen. [Applause].

James Schlesinger: Thank you, Mr. Minister, for an eloquent statement.

Our next speaker, as you know, is Mr. Al-Naimi's counterpart in the United States, the relatively new Secretary of Energy, already somewhat battered, I believe. Sam Bodman comes to the job after being the Deputy Secretary of Commerce and subsequently the Deputy Secretary of the Treasury. He is a very rare, new Energy Secretary in that he actually had experience in the energy industry prior to coming to the department, and he is unique in that he has had experience in dealing with oil and gas in the private sector before coming to the department. Sam? [Applause].

Samuel Bodman: Thank you, sir. Thank you, Jim. Thank you for moderating this discussion. I'm personally quite honored to be introduced by the first Secretary of Energy. As many of you know, there is a tradition in the departments of the government that the portraits of former Secretaries are hung in places of honor, and I pass by Secretary Schlesinger's portrait each day as I walk into my office. I want you to know that he still looks pretty much the same after all this time. [Laughter]. So it's an honor for me to be here.

I also want to thank CSIS for hosting this event, Saudi Aramco and Chevron for their financial support, and express my gratitude to my friend, Minister Al-Naimi, for traveling to Washington to participate.

I'm extremely pleased to join my Saudi counterpart to discuss ways that we can work together to improve communication and enhance our bilateral, commercial and strategic relationship. I think you can judge from his remarks why I find it such a pleasure to work with him and why I am so optimistic that we will see our way through the current problems that confront us all.

As the world's largest exporter of oil and the world's largest oil consumer respectively, our two countries have a special relationship. Indeed, as the title of this session indicates, we are, in at least certain respects, partners. But the subject that concerns us today really transcends our two nations -- the energy situation we currently face represents a major global challenge which will require, of course, a global solution.

We all know that continued robust growth in the global economy depends on secure, affordable supplies of energy. Over the last several years we have seen unprecedented increases in worldwide oil demand. Demand went up by over 2.5 million barrels per day just during the year 2004, a massive change. And numerous trends indicate that this thirst for petroleum will continue to grow, particularly in the burgeoning economies of Asia.

This means that both developed and developing nations must take part in finding ways to address our shared challenges, just as oil producing and consuming nations must work together to ensure reliable supplies of affordably priced energy.

As demand is rising, oil production capacity seems to have had increasing difficulty keeping up. It is no secret that most of the world's spare oil capacity is concentrated in one country, in Saudi Arabia. We recognize the Kingdom's leadership in maintaining spare capacity, which can be used to offset unexpected disruptions in the marketplace, and we acknowledge Saudi Arabia's role as a moderating force in the global oil trade.

Yet the world oil market has also suffered from terrorist attacks, attacks on installations around the world, as well as labor strife and political turmoil in several producer nations. All of which has pushed the price of oil to very high levels. This was the component of the job that my friend, Jim Schlesinger, didn't explain to me completely when I first took on this assignment. But when I'm asked about it I try to remind people that global economic growth, which is driving oil demand, is in many senses a very good thing.

Nevertheless, these high prices are now affecting petroleum consumers across the board, from individual owners of automobiles to airlines to the plastics and chemical industries. The tight market is also revealing, perhaps more urgently than ever, the need to expand the global oil and gas infrastructure at all levels.

Given the \$50 per barrel price of oil, one would think that private investors as well as nations holding untapped oil reserves would be leaping at the chance to cash in on the high prices and accelerate oil development, oil production. Some of that, a lot of it in fact, is happening. But we're also seeing, I think, how the volatility and uncertainty of the market may be making suppliers and potential investors skittish. It is sometimes said that because our oil refineries are operating at full capacity, the question of increasing crude oil supply is moot. That point in fact has some truth to it, although I don't believe it captures the entire picture.

What I think is most pertinent is that the strain on our refining capacity means that we can no longer afford to put off necessary technological and infrastructure improvements in this country.

Saudi Arabia is also interested in expanding its domestic infrastructure. I was very impressed to hear the Kingdom's plans to invest sizeable amounts of money and to substantially increase its production in the relatively near term, over the next three or four years. They have made a major commitment that is already underway.

As each of us seeks to implement the appropriate climate for attracting investment, I am also pleased to see that Saudi and U.S. negotiators have made great progress over the last several weeks toward reaching a bilateral agreement on WTO accession. We both look forward to a successful conclusion of that process.

Of course the United States and Saudi Arabia are not only partners in commerce, but we're also strategic allies in the war on terrorism. As President Bush and Crown Prince Abdullah noted in their joint statement in Crawford just last month, we are joined in our close cooperation to combat terrorism and to choke off resources intended for terrorists and their support networks. They went on to say that "We honor the memory of the victims of terrorism and those who have lost their lives fighting terrorists and

pledge to work together until terrorism no longer threatens our nations and the entire world."

The war on terror reminds us that the world can be a very dangerous place. Events happen that are beyond our control and things sometimes move in ways that we neither want nor expect, so I would hope that our American audience will recall that while discussions such as this are extremely valuable, it remains a fact that oil is bought and sold in a global market which is subject to fluctuations, uncertainty, and sometimes price spikes. And of course we know that oil is not an unlimited resource. That is why, now more than ever, I hope the American people will see the importance of implementing a comprehensive agenda for enhancing our long-term energy security.

Our President recognized our looming energy challenges early in his first term and commissioned a National Energy Plan to address these challenges. The Department of Energy has been hard at work implementing much of that very ambitious agenda.

In the transportation sector, for instance, we are expanding the use of ethanol, biofuels and other alternative fuel sources. This year alone we're proposing to spend over \$200 million on research into alternative fuels, including ethanol. We have also proposed \$1.2 billion for the development of hydrogen fuel cell vehicles. And the President has asked for tax credits for consumers who purchase hybrid gas-electric vehicles.

Our administration is pursuing the transformative power of technology to achieve a more diversified energy sector. In particular, we are encouraging the greater use of fuels that do not emit greenhouse gasses, such as nuclear and renewable energy sources. And we are expanding our efforts to improve energy efficiency as well as accelerating research and development into new, environmentally friendly energy sources.

We didn't get into the current situation overnight and we certainly are not going to fix it overnight, but in my judgment we won't fix it at all unless we act decisively and intelligently today. This administration, in my opinion, has already accomplished a good deal, but we need to do even more. That requires first and foremost getting Congress to send a comprehensive energy bill to the President's desk this summer, which is what he has asked them to do, has asked them repeatedly.

I don't think my friend, Minister Al-Naimi, will object to my taking a moment to touch on these issues, because as this dialogue demonstrates, each of us has a keen interest in the health of both of our energy sectors.

On that note, let me conclude by saying that I am glad to have had this opportunity to reaffirm the importance of our bilateral relationship. Among our other efforts, the United States strongly supports the work of the International Energy Forum based in Riyadh, and particularly the Joint Oil Data Initiative which seeks to bring greater transparency and integrity to hydrocarbon data.

I also look forward to maintain an open line of communication with you, Mr. Minister, and I hope that we can establish frequent ministerial-level contacts, as well as ongoing technical and policy discussions between our agencies. Working together I believe that we can make the ties between our nations even stronger. Our department remains steadfastly determined to see relations flourish between our governments, our

commercial and business institutions, and our people. Thank you very much.
[Applause].

James Schlesinger: Thank you, Mr. Secretary.

Let us deal with a central problem from the standpoint of policy and from the standpoint of the consuming public: Current market conditions. Oil is at \$50 a barrel. This is the first so-called crisis that has not been driven by a political interruption of supply, as opposed to let us say 1973 or 1958, 1967, the Suez Crisis and the like. This crisis, if it is a crisis, has been driven not by a reduction in supply but by steadily growing demand pressing against limited supply.

As was indicated a moment ago, demand has surged worldwide by 2.5 million barrels a day in the last year. There is little spare capacity. The Kingdom of Saudi Arabia, as the Minister has indicated, is investing in expanding its own capacity to 12.5 million barrels a day by the year 2009, which is four years away. And then there is an expectation of a further expansion to 15 million barrels with a date somewhere around 2020.

2.5 million barrels a day of expanding demand up against Saudi Arabia's contribution and relatively little contribution from elsewhere except Iraq. What do you see about the future availability as demand continues to expand? We are no longer in the period of the '50s and '60s in which supply doubled each decade. We are now looking at very small increments in supply. Gentlemen? Mr. Minister, would you like to start?

Ali Al-Naimi: I believe this is a very crucial and important issue as to who is capable of increasing production capacity. Certainly the reserves worldwide are there, and I can name a few. We know Saudi Arabia is already embarked on a major program. Not only in the upstream but also in the downstream refining and so forth. These are all needed.

But if you look around, where are the reserves? There are a number of countries that can increase their capacities. Certainly the Arab Gulf states have huge reserves. They can expand capacity. The Caspian area can expand. Russia can. West Africa can. Gulf of Mexico can. There are a number of places that can, and have the potential to increase production capacity. It's a question of investment. If there was confidence that the price was going to be anywhere between the 30 to 40, 30 to 50, this range, I believe capital is there and investments will happen. I believe that we are going to be able to meet the requirement of the market. It's just a question of investment. There is absolutely no lack of resources worldwide.

Samuel Bodman: As Secretary Schlesinger knows, I spent much of my life in Boston before I came here to the government four years ago. I remember a book that was written by Professor Kantor at the Harvard Business School. It was called Teaching Elephants to Dance. We are faced with an industry, a worldwide oil industry that simply has major challenges in responding to the kind of change that has been brought about by the exact situation that the moderator has described.

This is in fact the first time we have seen demand moving at a pace that it is starting to challenge the capacity of the world to supply, be that either the availability of oil, refining capacity, whatever the reasons. We have seen such a change in the price of oil, it is my judgment -- in fact we will see investment increasing. We will see activity.

We've already seen it in Saudi Arabia. We will see it as we discuss other parts of the world, many of which the Minister has just alluded to.

So there will be a response. The question is how rapidly can we respond? This is an industry that lost many of its best people during the decade of the '80s, that has not been faced with the need to respond quickly, as rapidly as both the opportunity and the pressures are being felt by the industry today. You'll hear, I'm sure, from the industry members here later on in the day. But I'm confident that we will see a response.

In the mean time, I think that from a standpoint of this country, the work on improving efficiency which is underway, improving, for example, the availability and stimulating the availability of clean diesel technology in new automobiles, which will in fact substantially improve the gasoline mileage by maybe up to a third -- these will start being available in our marketplace a year out. There is increasing receptivity to hybrid vehicles, we've seen that. So I think we're going to see a response that will also slow the growth of the demand for energy to some degree. It doesn't mean it's going to reverse, but I think the second derivative will be negative and we'll see a moderation in the rate of increase.

James Schlesinger: Thank you. Can we dwell for a moment on a subject that the Minister alluded to, whether or not we are approaching a peak in terms of oil production, whether that peak is near at hand, or further off? We do note that most of the large fields, the super-giant fields, the elephants, they were discovered in the more distant past. Very few large fields have been discovered in recent decades and the reality remains that much of our current usage, much of our current production comes from those older fields discovered many decades ago. Would you comment on the possible approach to production's peak, Mr. Minister and Mr. Secretary?

Ali Al-Naimi: As I have said in my remarks, talking about Saudi Arabia, I can assure you that we haven't peaked. If we peak, we would not be going to 12.5 and we would not be visualizing a 15 million barrel per day production capacity. So the question in Saudi Arabia is not an issue of are we peaking today.

It is true that the big oilfields have been discovered in the '50s and the '60s, but they are still huge fields. This idea of peaking, it will be better if we consider a plateauing field or plateauing production, because every one in the oil business understands that if you have resources you can put them to work to maintain your production as long as you have reserves. Recoverable reserves. And so in Saudi Arabia we can maintain a 12.5 or a 15 million for the next 30 to 50 years. So I don't really subscribe, thirdly, as far as Saudi Arabia is concerned, that the world has peaked, I don't subscribe to that at all.

James Schlesinger: Mr. Secretary?

Samuel Bodman: I am humbled by the efforts of a lot of people who are a lot smarter than I am to forecast oil prices and availability. I tend to support what the Minister said. There is a good deal of oil available in the world. One of the challenges is, as he listed, the potential locations of that oil. Much of it is in governments that are wrestling with their own internal policies as to how such resources can and should be developed. There is a great political turmoil in many of these countries, labor problems, there are all kinds of issues that are challenging, that I think will be overcome because of the high prices that we're seeing today. This will stimulate it and will cause these resources to be developed.

The question is time. I think, I've heard it said by one of our oil executives who I have great regard for, that it's a seven to ten year process before these reserves can be brought to the market. It takes that kind of time when we don't have resources that are available, either in a country like Saudi Arabia where they can respond and have already responded, or like the United States which is used to responding. Other countries are not used to that kind of pace and are having their own challenges. So I think the resources are there. One of the advantages I think that one sees in prices as painful as these higher prices are, certainly on American consumers, and as potentially damaging as they are to the economy, one of the advantages is I hope that it will stimulate our citizens to be more caring about how we use energy. I think we're seeing some signs of that. And that we use better and more efficient techniques to build our homes, build our buildings, lots of things that this department has been working on for many years, dating back to Mr. Schlesinger's days in the department. A lot of that is being put to use and is being stimulated by the environment in which we find ourselves, and that's a positive thing.

James Schlesinger: Thank you. It may be reassuring in part that we do not face a peak, which implies a sudden decline, and that we are looking forward to a plateau, but that does imply a continuation of the growth of demand against a limited well supply which does not hold much prospect for declining prices over time. Would you care to comment on that, Mr. Minister or Mr. Secretary?

Samuel Bodman: Let me go first, if I may. I'll have a go at that one. I get asked frequently by the press to make a forecast on energy prices, and I always point out that I spent many years in the investment business in Boston and I learned a long time ago not to make forecasts on prices. That is not a useful way to spend your time. We obviously have a free market that is determining price. Supply and demand will determine where we are.

I am of the view that, as I said, on the one hand what we have now has already and will continue to stimulate new sources, new supply. It will also tend to dampen demand, and we've seen that as well, and how those two forces play out against one another will ultimately determine what the price is, and all I can do is to try to enhance both, that is to say restraint, to see to it that we have the development and availability of vehicles that will use less gasoline in the future. I think we're on our way to doing that. And that we are trying to stimulate both in working with our friends in Saudi Arabia and other countries as well as here, with new supplies here in this country, we're trying to stimulate additional supply, all the while working along on nuclear and importing LNG and the renewable, other kinds of renewable energy sources that will at one point in time in the future take on increasing roles in our economy.

James Schlesinger: To what extent do you gentlemen attribute the high and volatile oil price to the fear factor arising from the instabilities in Iraq and elsewhere and the role of speculation?

Ali Al-Naimi: There is no question that in the many reasons for price, it's better to enumerate the reasons. There is no question that there is demand. This is a price that is driven by demand but that's not the whole answer.

If you look at inventories today, they are all high. OECD inventories are high. Tanks in the U.S. are full. There is extra million and a half barrels in Saudi Arabia to put. Yes, they are heavy and medium, but they are still good oil. The problem is you can't

refine it, there are not enough refineries. So that is another factor. Instability, terror, strikes, physical events like hurricanes and so forth have something to do with price, and we will be coming to the hurricane season very soon.

And for a while, I guess still valid, investors have found they can make money in commodities rather than in financial instruments or in equities, and as long as the interest rates are low, they will probably continue to do so and that's why you have institutional investors have actually upped the future price curve. It's gone up. I don't want to sound blaming the hedge funds. They play a role. They come in. They short the market, they long the market. If they short it the price goes down. If they long it, the price goes up. But I think these are the small vibrations. The big cycles are caused by events, either catastrophic events, a producing country drops out or a war is started or a hurricane halts production somewhere. So the fear factor is one of many, but it's not the main thing. It's not what took it to \$50.

Samuel Bodman: I would answer that in a little different way. And that is that I do have occasion to speak to the leadership of U.S. energy companies with some frequency, and when you ask them that question for what's, given supply and demand today, what should be the price of oil in a perfect world, I must say you get -- First you have to make a judgment, are they being forthright with me. To the extent that they're being forthright with me, one gets a number that has a very high variance. Numbers vary between \$20 and \$40 a barrel. I don't hear \$50, but I hear \$40 from some folks, and it's the judgments that these corporations are making as to what a barrel of oil is worth, and that of course is a highly kept, should be and is I'm sure, a highly kept secret within the company as to just how they operate. So there is some, if you will, if you count the fear, if you will, as something that accounts for the difference between current market and those price levels, I would say that in part that difference is due to the fear factor.

In part it's due to the fact it's going to take the industry some time to respond, and as I was saying before we're going to be a few years to get the industry to respond, and they will do that, and I think we'll see a mitigation of prices, and probably that range \$20 to \$40 is probably not a bad range and I wouldn't want to be more explicit than that.

James Schlesinger: The Minister has been far too polite to refer to the looniness of American policy. We have 18 states with different specs for gasoline and each of those states has summer specs and winter specs so that the oil industry or the refining part of the oil industry is obliged to carry just for those 18 states, 36 different specifications of oil.

Mr. Minister, if you would like to comment on the looniness of American policy -- [Laughter] -- or Mr. Secretary, can the federal government and the Department of Energy do something in these circumstances to reduce the number of specs that the industry faces and that might help to alleviate domestic gasoline and other product prices?

Samuel Bodman: Let me intercept that and then I'll have the Minister comment on some of the idiosyncrasies of our system.

We continue to look at that. We've looked at it frankly as a part of the Energy Bill, should we impose more federal regulation on that. Frankly, at least at this point, I think there has been concern that when one starts to meddle in markets, in so-called free markets, that the possibility of unintended results are significant.

I certainly cannot and will not defend a system that has 30-plus specifications and the challenges that that puts to the refiners of the United States, so there is, your criticism, I might use a different description of it than looniness, but your description of it is not something that I disagree with, and at least at this point in time we are reluctant to impose federal regulations on these matters and will continue to work with the states, hoping to encourage them to reverse some of these positions that they have taken.

Ali Al-Naimi: The only comment I would have on the so-called boutique gasoline outlets is if the country needs 36 different types of gasoline and the refiners are not ready to build the necessary refineries to meet those 36 different specifications because the margins in the refining business, at least not now, but in the past, have been very low, then the result will be high prices. It's as simple as that.

James Schlesinger: Idiosyncrasies is preferable to looniness? [Laughter].

Samuel Bodman: You've got to remember you've got an MIT man talking to a Harvard man, so -- [Laughter].

James Schlesinger: Okay. Well, I think we're going to give our panelists an opportunity to answer some questions from the audience. The first set, I guess, would be to the Minister. Here is a questioner who cuts to the chase and doesn't bother about larger philosophical problems: How much crude oil are you currently producing and how much spare capacity do you currently have? How much is light, sweet capacity?

I'll couple that with another question. Are you concerned about fourth quarter demand? Will OPEC need to increase output to meet expected demand? Is there adequate global refining capacity available to meet this demand?

Ali Al-Naimi: I think I know where these questions are coming from. I hear them every time I'm in OPEC and I hear them when I'm outside the hole. Anyway, let me try to answer them. We are producing today around 9.5 million barrels per day. The reason we are not producing the 1.5 million spare we have is just there is no demand for it and there is no refining capacity to handle it. Period. We are willing to produce the 11. We make more money selling 11 rather than 9.5. That's the answer on how much we are producing.

As far as, if I understand the question, what is the sweet crude? Our ability to supply purely sweet crude is very limited. It's around 200,000 barrels per day. But if the question is how much are we producing of light crude, light sour crude, two different degrees, it's about 76 percent of our state is light crude. Did I get all the questions?

James Schlesinger: Let me hang in there with a question. He also says is there adequate global refining capacity available to meet this demand.

Ali Al-Naimi: For the fourth quarter, there is no question that production will be increased. One of the reasons inventories are built today is to anticipate the fourth quarter demand. Whether there is sufficient refineries to handle the extra demand, my faith in the industry is when it's challenged it is resourceful, and I believe, I mean we can say there is not enough refineries but within the existing refinery system the ability to handle what is coming certainly fourth quarter is there.

James Schlesinger: Let me press you a little bit on that, Mr. Minister, about the sustainability of an 11 million barrel a day production, the extra 1.5 million barrels of spare capacity. In 1979 at the time that the Shah fell, Saudi Arabia responded by putting two million barrels a day extra on the market. It got up to 10.5 million barrels a day and

it couldn't quite sustain it. Could you sustain today the 11 million barrels a day of production?

Ali Al-Naimi: We have all the surface facilities to sustain 11 million. We can respond immediately with 1.5 million. In order to sustain 11 all that's needed is to have additional rigs and that is easy to do. You can immediately convert so-called work-over rigs to developmental rigs and sustain it for as long as needed.

James Schlesinger: Thank you. Mr. Secretary, let me give you a pair of questions. A bigger issue is perhaps volatility. If oil prices increasingly fluctuate, say between \$20 and \$60 or \$70 a barrel, then investment capital will retreat. Will the government stay on the sidelines also, focusing only on R&D? And I think that pairs with the following question. Increasingly the energy resources and reserves are in the hands of governments, national oil companies, where competitive private companies may not be involved. Those, incidentally, are the most promising low-cost areas. Please comment on the implications. I think both those questions go together.

Samuel Bodman: Thank you.

James Schlesinger: And Mr. Minister, you might want to comment on that last.

Samuel Bodman: The first question in terms of volatility. We are doing our best to deal with both the supply and the demand side, in as expeditious a way as we can, and I do not foresee our entering into, in other ways, the free market that would determine oil prices. I don't think that's our role. With respect to the other national oil companies and oil potential supplies in other parts of the world, that's part of our job at the Energy Department.

I will be leaving Sunday on a trip that will take me to Moscow, to Kiev and Baku, and I will be meeting there with the Presidents of a number of countries in that region, and part of that role is to try to stimulate additional supply, as the Minister's already suggested, from that part of the world. So this is part of what we do.

All of these countries have had challenges in varying degrees about attracting capital because they have at times legal environments that vary with time and are not constant, and if you don't have a constant set of rules for investors to understand and play by, it will tend to scare capital away, and it has done so in some countries. Part of the reason for this trip is to try to deliver that message.

Some years ago I used to earn my living making some of these judgments, and so I think I can appreciate the judgments that our companies are making, and all I can do is encourage, cajole, jawbone, if you will, and try to improve the environment in which these countries operate, specifically with respect to the legal framework. There are other aspects to attracting capital, intellectual property and the like, but here it's largely a legal framework and we'll be working on that.

James Schlesinger: May I suggest, Mr. Secretary, that this may not come as comfort to you, but your job is getting harder. In that at \$50 a barrel, other countries are less eager to bring in outside capital than they were at \$20 a barrel. Iran may be the best example on geopolitical grounds, in that we are trying at the moment to dissuade them from moving in certain directions in the nuclear area, and the susceptibility to pressure from the European partners of the United States at \$50 a barrel seems to have diminished. And that would be true for countries like Russia which is at \$50 a barrel, seems to want to keep resources under domestic political control.

Samuel Bodman: This is part of the difficulty of the job which you failed to inform me about before I took the job. [Laughter].

And I would just say that I think you're directionally correct. On the other hand, whatever the price, and certainly oil has been, natural gas also, have been commodities that have had very volatile price changes over the last several years, last several decades really. If you're not producing it and getting the money out of it and putting it to work for your people in one form or another, you're missing an opportunity.

Whatever the price I believe these countries would be better off, in my judgment, by finding ways to attract the interests of our, of the oil and gas companies of the world. A lot of them happen to be American, but not all of them are, and of outside competent people, make a deal and get the thing started. I'm hopeful that we will be successful in that but there's no doubt that there is the economic force that you very wisely pointed out and that does tend to run in the other direction.

James Schlesinger: Mr. Minister, are you worried? You don't look worried, -- [Laughter] -- but the question is, are you worried that U.S. weekly crude oil inventories, which are near a six year high, are growing too fast and may push the oil price down too low for Saudi Arabia? If your answer to this is yes, would the Kingdom reduce its oil output?

Ali Al-Naimi: The answer is no. I don't look worried. And this is a conscious decision.

Samuel Bodman: I look worried, Mr. Minister. It's not you. [Laughter].

Ali Al-Naimi: This is a conscious decision to allow inventories to build. This is the benefit of dialogue between consumers and producers. This is a benefit of seeing transparent data and believing what you see and this is really not a worrying phenomenon at all. We have no plans to reduce production, period.

James Schlesinger: Thank you. Mr. Secretary, you referred to the political instability of much of the oil producing world. Indeed, history in a growing body of economic research suggests that such instability in resource-dominated economies is not unsurprising. With prices of oil at \$50 a barrel it seems clear that we are paying a premium for this instability. Why is there any reason at all to expect that this "instability premium" will go away any time soon? You may care to comment on that also, Mr. Minister.

Samuel Bodman: One, I've commented that the industry is responding. Our friends in Saudi Arabia are responding, so there is some evidence that we will be seeing increased supply over the next few years and I think that's a positive thing.

We're seeing a lot of forces at work -- I can only speak for the United States, I can't speak for other countries -- but there are a lot of forces here that are at work that people are looking at high gasoline prices, high oil prices, and are changing their decisions, their buying decisions, their habits. So we're seeing, for example, greater use of hybrid vehicles, and the President has proposed a tax program to stimulate the use of hybrid vehicles. So I think there is some reason for it.

I would also indicate, I also believe that in many of the countries that you allude to where there is political instability, there is also, there are forces of change going on in the world, so we see the possibility of working with many of these countries to improve the legal environment so that our U.S. companies will be interested and attracted by

working there.

The job of government is to try to, at least the government in this country, the job of the government is to try to do everything we can do to improve the environment for our private sector. The private sector of this country are the people who produce the jobs, who produce the wealth. As you pointed out yourself, sir, government is not the -- We do not make the judgments, we do not make the capital commitments, we do not enjoy the rewards. Our job is to try to provide an environment and I'm going to continue to do that, we will continue to do that, and I think we will be successful in some cases and we will probably fail in others, but that doesn't mean we won't be working at it.

James Schlesinger: Thank you. Mr. Minister, how has the Arab/South American Summit in Brazilia affected the oil industry equation?

Ali Al-Naimi: [Laughter]. You know that we have had meetings in the past between South American countries or Latin American countries, those that are within OPEC and those that are outside of OPEC. We have worked together, whether they are in OPEC or outside OPEC, to really help stabilize the oil price and avoid disruptions, avoid huge gyrations. I think that has helped a great deal.

This kind of conference will probably facilitate the task of the producing countries to be able to work together and focus on the issue of really a stable oil market. We have tried as hard as we can. If anything hurts it's the major gyrations in the market, either shortages of supply or variation in price. If we can avoid that, the oil market will be in a very healthy situation.

James Schlesinger: Mr. Secretary, would you comment on the President of Brazil's attempt to line up South American and Arab nations probably with the notion of dealing in an unfriendly manner with the United States?

Samuel Bodman: I wouldn't want to comment on that. [Laughter].

James Schlesinger: Okay. A final question here is to Secretary Bodman. With oil prices down, do you see a downward trend in the long term? I think you've said that you don't want to forecast.

Samuel Bodman: I'd be reluctant to forecast. I'm not sure what they mean by oil prices down. I suppose \$49 is better than \$54, I suppose. I don't think it's wise to extrapolate that. These matters are going to get decided by the ability and the response of the consumers of the world on the one hand and the response of the suppliers.

As the Minister I think wisely has pointed out, it is their judgment that the oil prices that we have today are a substantial weight on the economies of the world, and therefore they are increasing supply to try to bring a greater balance. So I would think over time, time meaning two, three, four years, we will see some reduction in prices as these supplies come on, and as responses in the marketplace take place of the sort that I described. But I wouldn't want to try to forecast any near-term change one way or the other.

James Schlesinger: The other half of the question. During your meeting with Minister Naimi, did you have any specific requests, which you can share with us, to make for Saudi Arabia to keep the market well supplied?

Samuel Bodman: Most of my questions of the Minister yesterday related to understanding some of the details of their program for expansion, when they will be

bringing on various resources, their investments in new refineries, and I must say I was quite impressed with the thought that has already gone into this, with the commitment that has in fact already been made, as I understand it from the Minister, and that the work has begun to move ahead with a very rapid response to the current market situation.

So the meeting yesterday was more one of information, asking for information. I've known the Minister from my past life in the government, and I was confident and remain confident of the goodwill of the people of Saudi Arabia in trying to respond, not for our interest but for their interest, and it's to their advantage of having an orderly marketplace and they seem to be responding, I think very effectively and responsibly in that fashion.

James Schlesinger: Thank you. Mr. Minister, let me throw in one other question which is you've heard the proposals for alternative fuels, non-oil sources of energy, you've heard about a carbon tax. How does this strike you?

Ali Al-Naimi: You have two questions. I'm not going to comment on the carbon tax. That's a sovereign state decision.

But as far as alternatives to crude, as I have said in my remarks, we need many sources of energy, and if consuming countries think that producers of crude oil don't want to see developments of alternative fuels, that is absolutely wrong. The world is going to need a lot of BTUs and probably hydrocarbons, whether they are coal, gas, or oil, will continue to play the major role for the foreseeable future, the next 30 years or so. But certainly the world is going to need another reliable, maybe less depletable source of energy and it's encouraging to see that work is being done today, hopefully to forestall shortages in the future. So we are, as I've said before, we are absolutely not... we are with it, not against it.

James Schlesinger: Would you like to comment, Sam?

Samuel Bodman: No, other than to say I believe him when he says that. I've had occasion to visit with and work with the Minister before. He and I are very much of a like mind. I don't find areas of disagreement, frankly, and that's one of the reasons I enjoy working with him.

James Schlesinger: Thank you, Mr. Minister. We are all appreciative of your candor during this discussion. Thank you for coming back to the United States and to CSIS. And thank you, Mr. Secretary, for your candor in answering questions. I must say that in some ways it is more pleasant for me to be asking the questions than answering them. [Laughter]. [Applause]