THE FUTURE OF U.S. INTERNATIONAL NUCLEAR COOPERATION

HEARING

BEFORE THE

SUBCOMMITTEE ON TERRORISM, NONPROLIFERATION AND TRADE

OF THE

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THE FUTURE OF U.S. INTERNATIONAL NUCLEAR COOPERATION

THURSDAY, MAY 6, 2010

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TERRORISM,
NONPROLIFERATION AND TRADE,
COMMITTEE ON FOREIGN AFFAIRS,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:05 a.m. in room 2172, Rayburn House Office Building, the Honorable Brad Sherman, (chairman of the subcommittee) presiding.

Mr. SHERMAN. I want to thank our witnesses for being here. As the world meets in New York to discuss the future of the NPT, concerns about climate change and the unreliable price of fossil fuel have created perhaps a renaissance in nuclear power. In fact, there was a noticeable up tick in interest in nuclear power. Unfortunately, some of this has been in the Middle East where some of the announcements seem to emulate Iran—that is, to announce that the country is basically going to develop nuclear weapons under the transparent pretence of developing nuclear power.

Indeed, there is a right in the NPT to the peaceful use of nuclear power under Article 4. Unfortunately, under the interpretation of many, this right extends to the full fuel cycle, to enrichment and reprocessing, providing of course the country is in compliance with its NPT obligations. This would allow many dozens of countries to come right up to the threshold of nuclear weapons with the hope and expectation that they will not cross that threshold.

It raises some questions. Are the current safeguard techniques and technologies of the IAE up to the task? Is enrichment and reprocessing capacity—does that take you so close to nuclear weapons that the final steps could take place more quickly than we could possibly detect? Are certain activities essentially unsafeguardable?

The current multilateral solution, now approaching consensus at the Nuclear Suppliers Group, is to say that while you may have the right to enrichment and/or reprocessing, no one is required to provide you with the technology to provide such a "right" and hopefully no one in the Nuclear Suppliers Group will provide such technology unless there is adequate safeguards are met. This approach would represent a marked improvement over the current guidelines in the Nuclear Suppliers Group, but it does not address indigenous development in black and gray market acquisitions of this repressing technology.

I would hope that the United States would begin to take the position that the full fuel cycle is not the entitlement of non-nuclear states where they have no legitimate economic reason for pursuing such capacity. For example, Iran's desire or stated desire to enrich the amount of power they are planning to generate, and what they could generate from their own domestic uranium deposits, is like building a slaughterhouse and saying the reason is you want a sandwich. Full fuel cycle for no logical economic reason is the development of the nuclear weapon under the cover of Article 4, and certainly the full fuel cycle should not be available to those who have already violated the NPT.

Under current U.S. law, civil nuclear cooperation agreements, known as 123 agreements, provide a framework for nuclear cooperation and commerce between the United States and foreign states. Normally these are negotiated by the President, submitted to Congress and become active operative 90 days after such submission.

There is this process of a congressional right of disapproval, which is what we do in Congress when we want to give ourselves the illusion that we have some influence beyond merely advisory influence on foreign affairs. The fact is, a resolution of disapproval, as I understand Section 123, doesn't even have to reach the floor. But even if it does, and even if it were passed overwhelmingly by both Houses of Congress, it is subject to a veto, and then one-third of either House constituting less than one-sixth of congressional opinion could block the resolution of disapproval.

Now, India was a special case where we needed affirmative approval and in that situation I think Congress acted responsibly. Most recently we saw the US–UAE civil cooperation agreement go into force. I opposed that agreement initially, not so much because of its text, but because of UAE's lack of export regulation enforcement. Notwithstanding the comprehensive legislation adopted there in 2007, the regulatory framework remains pretty much nonexistent.

The administration was forced by Congress to re-negotiate that agreement, and to provide that we would not see enriching done by UAE and I think that that was a very good change and should be a model for future agreements.

Another condition in the UAE agreement was a binding commitment from the UAE to implement the additional protocol to provide for greater inspection by the IAEA. This, among other things, grants the IAE access to undeclared facilities, given that any nuclear weapons development carried out by non-weapon states would have to be undeclared. The additional protocol seems necessary for any reasonable regime of PT compliance.

Former IAEA Director Albarte has stated that the additional protocol is necessary for the IAEA to ensure that all the countries' nuclear activities are dedicated to peaceful purposes. The U.S. should require nations to implement the additional protocol as part of 123 agreements.

Countries that sell nuclear technology and countries to which we sell our nuclear technology should restrict access to their nuclear facilities and to nuclear technology by preventing nationals of such countries as Iran, North Korea and Syria from having access.

Those who have recently violated or are in violation of the NPT should not be able to learn nuclear technology at the hands of those who have been supplied by the United States.

And we have to acknowledge that U.S. concerns over proliferation puts U.S. suppliers at a disadvantage. Our own industry base might suffer as we unilaterally impose restrictions on civil cooperation—restrictions that I believe are necessary for global security—and other countries with similar capacities may not impose such restrictions. We must convince non-nuclear capable countries to adopt similar controls for nuclear technology. We have to explore what leverage we have to get them to join us in this.

U.S. nonproliferation concerns are not the only disadvantage suffered by U.S. companies. Major competitors for U.S. firms in this industry are at least partially state-owned, and so they enjoy not only government backing but sovereign immunity protections against liability for accidents. U.S. firms cannot claim sovereign immunity. Under the auspices of the IAEA, a Convention on Supplementary Compensation for nuclear damage—I will refer to it as a supplementary convention—was negotiated to create a global legal framework for liability in nuclear accidents. Ratification and implementation of this convention helps to level the playing field for American businesses, and it must be a necessary condition for nuclear cooperation.

When the State Department goes before the American people and says we are entering into a 123 agreement to provide jobs, and then signs an agreement in which America gets 0.0 jobs because the signing country has not implemented the supplementary compensation for nuclear damage, then the American people have been deliberately misled by their own government.

And what we see with India is that we crashed down the door to get India what it wanted, and as of now we are eligible for 0.0 jobs. Now I am sure the administration will tell us that in due time the Indian Parliament will pass the necessary legislation, and I can understand in the wake of Bhopal the reluctance of the Indian parliamentarians to do it, but for us to open the door only so that jobs can go to France and Russia is a disservice to the American people; it resembles—we had a very famous American diplomat here before us who was bragging about how as ambassador he had put on the grounds of the U.S. Embassy Chrysler automobiles to entice people as part of a show, to entice people to buy American cars, only to tell us that one of those cars was the Crossfire—a car that was 99 percent European built, and 99 percent European value added. Attention at the State Department to the economic needs of the American people needs to be increased.

Now, I would like to see us adopt legislation so that we don't have this charade of congressional disapproval as the only way that Congress can pretend to have a role in 123 agreements. Instead, we should describe a model agreement which should include the Convention on Supplementary Compensation, the additional protocol, and a commitment by the other country not to enrich and reprocess, and a commitment by the other country to limit third party access to plants and information. Those four elements ought to be part of any model, and if the treaty matches that model, then the current system of congressional review seems adequate.

But where it falls outside that model, then it should require affirmative votes in the House and in the Senate; only then will Congress play the role set forth in Article 1 of the American Constitution.

I look forward to hearing from our witness, but with even greater intensity I look forward to hearing from my colleagues and their opening statements, starting with the ever eloquent Mr. Royce.

Mr. ROYCE. Thank you, Mr. Chairman.

I would like to make a note before I start my statement that we received the administration's prepared testimony less than 1 hour before this hearing, and when I think back about how long this hearing has been scheduled—weeks at least on my calendar—it really does reduce the effectiveness of the hearing when the members and when the staff cannot review the administration position.

In over 10 years of chairing or serving as ranking member, this is the worst showing I have seen, and I just wanted to make note of it, Mr. Chairman.

Mr. Chairman, nuclear technology is spreading. It is spreading very rapidly. By one estimate, over 500 nuclear plants are under construction or are planned worldwide. Nuclear energy certainly has its advantages. Its risks are substantial though, especially as developing countries utilize that technology. The threats of terrorist attacks against nuclear facilities, nuclear theft, and states developing nuclear weapons, as is Iran, are all too real. This week the NTP review conference kicked off. For too long the NPT's Article 4, so-called "right" to possess all elements of nuclear technology, particularly the fuel cycle, has gone unchallenged. This gutting of the NPT gives Iran a leg up as it relentlessly develops its uranium enrichment capacity, placing nuclear weapons within its very close reach.

This dims my enthusiasm for the spread of nuclear energy. The Obama administration, like the previous ones, has unwisely conceded any NPT states the right to take this reckless enrichment course. Instead the administration is seeking bilateral agreements with countries, many in the Middle East, that they won't enrich uranium. This is what the Bush administration did with the centerpiece being the Nuclear Cooperation Agreement with the United Arab Emeritus in which the UAE commits not to enrich.

While the goal is good, but other countries are balking, and these bilateral agreements are piecemeal. Some exporters of nuclear technology are sure to work around them. The administration must do a better job at driving the Nuclear Suppliers Group to restrict the export of sensitive technology.

Meanwhile, the volatile Middle East is racing toward nuclearization. Most every country in the region is developing or has expressed interest in developing nuclear facilities. The motives are mixed, but surely the prospect of nuclear armed Iran looms large. Addressing Iran in a very forceful way, and you and I serve on that conference committee, Mr. Chairman, would certainly take steam out of this rush.

The process for approving nuclear cooperation agreements puts Congress in the cheap seats. An agreement is okayed unless both congressional bodies act to disapprove, and get a veto proof margin at that. The ranking member of the full committee introduced leg-

islation earlier this Congress to reverse that process, requiring congressional approval, which I have co-sponsored.

I am alarmed that the administration is pushing to approve a nuclear cooperation agreement with Russia. That agreement was pulled nearly 2 years ago. With Russia resisting meaningful sanctions on Iran, and its role in Iran's nuclear and missile programs, the timing could not be worse. The provision is now being conferenced in the Iran sanctions bill.

From my standpoint, I would conclude, Mr. Chairman, by saying what I said at the conference committee opening last week. To pass an Iran sanctions bill that this administration can eviscerate through maladministration, as it and others have done with existing Iran sanctions, would be worse than doing nothing. To merely pretend that we did something would be a harmful charade. The conference must produce dramatic, severe sanctions. The time for calibration is long gone. So it is very unfortunate that the administration is pressing for waivers and carve-outs to gut the bill.

Thank you, Mr. Chairman.

Mr. SHERMAN. I join in the ranking member's concern for the administration's attempt to gut the new Iran sanctions bill, and point out that a State Department that has systematically and intentionally violated America's existing sanctions laws for the purpose of protecting Tehran's business partners should not be given much weight as we craft new legislation.

With that I yield to the vice chair of the committee, Mr. Scott.

Mr. SCOTT. Thank you, Mr. Chairman, and it is a pleasure to be here as always on this most urgent issue.

The topic of today's hearing on the United States nuclear cooperation agreements is of the utmost importance as the United States and our allies continue to assess and respond to the ever-changing geo-political climate. It is also of particular interest to me as a member of the NATO Parliamentary Assembly, and as the general rapporteur of NATO's Science and Technology Committee, a nuclear security and weapons of mass destruction.

We live in a nation that is in the eyes of billions of people to be the quintessential example of what it means to be in the first world, to be or not a remaining super power. We live in a world where in its increasing global population as well as the exponentially increasing energy demands require to achieve and maintain an industrialized standard of living has placed a strain on our fossil fuel supply; namely, coal and petroleum-based products. These sources are indeed finite—no question. At some point they are going to run out. As a matter of fact, many believe that we have already reached the peak of our supply.

And so we must lead the way in providing guidance and assistance to the developing world in their quest to raise their standard of living of their people, to greater access to technology, and the energy resources required to do so. To deny them such would be hypocritical and, quite honestly, a human rights travesty.

To provide such leadership is to all of our best interest but it must be it is critical that it be the right leadership. We must lead as all great leaders must—responsibly. Beyond the simple recognition that these resources are indeed finite, that they are going to rather quickly run out, lie other concerns that we must address.

We need only look to the terrible incident off the Gulf of Mexico to become aware of the environmental devastation that can occur, and in the process realize that what these incidents occur it is not to the recognition of the loss of impact on our environment, but again quickening the pace for us to run out of these valuable resources.

We must also be aware of the global security impact that access or lack thereof to all the revenue from its sale can have on rogue nations that support terrorism. Indeed, keeping nuclear fossil material from being in the hands of terrorists and nuclear weapons in the hands of terrorists is indeed our number one issue and concern.

We witness almost monthly now incidents which tell us that they are in line, lined up, young, radical, and in most cases now citizens of the United States. We have got to act much more quickly.

And as I said, the day will come when fossil fuels reliance will follow the way of the dinosaur, with extinction. The choice that we face, however, is whether such an extinction, like with the dinosaur, is abrupt and globally devastating or whether through the right kind of leadership we can evolve to a cleaner, better, cheaper alternatives that will bring all of us a brighter tomorrow.

Nuclear energy has had many ups and down in both its perception and its implementation. There are, of course, legitimate concerns. Since the 1970s, no nuclear power plant has been constructed in the United States. Think about that. Since the 1970s, and this is largely due to the construction of such plants typically costing far more than initially estimated—at least historically speaking—as well as public perceptions regarding safety, transportation of waste, and its disposal and the fear of inadequately secured material again falling into the hands of terrorists, those who wish to develop and use nuclear weapons or a dirty bomb.

With our hearing today, we must address all three points in order to better assess whether they are still relevant today, and if nuclear energy is a responsible vital option to decrease not only our reliance on fossil fuels but also the developing world's growing reliance on them. If the transition to a viable alternative does not occur soon, we as Americans, as well as mankind as a whole, will experience devastating growing pains rather than the smart growth that we are capable of achieving.

Nor can we leave this discussion without having on the table the situation facing us with Iran. You know, I was in New York on Monday sitting in the audience when the President of Iran Ahmadinejad came forward and spoke. It was amazing as I watched the strut as he took the podium. There was this sense of cockiness. There was this sense of throwing down. I am more convinced after being there in person at the U.N. to witness this speech that, ladies and gentleman, Iran presents an horrific challenge, and it is my hope that we understand what is before us as this committee and our conference committee extrapolates the significance of our role in history in putting forward the toughest, most significant Iran sanctions bill possible because not only in the strut to the podium, but in what he said. And then afterwards in the afternoon how our Secretary of State Hillary Clinton came forward and answered that challenge with the toughness and the resolve that is needed, and we in this Foreign Affairs Committee can-

not do any more different than support the toughness that our Secretary of State laid on the table in response to Ahmadinejad's remarks at the US.

And so in conclusion, Mr. Chairman, our committee must approach today's topic with a recognition of this delicate balance necessary to promote America's interest and interred and shared interest of our allies at home and abroad. We must promote an energy policy that recognizes basic rights of nations to develop, and we must also balance such policy with the responsible eye on the environmental impacts, but most importantly, global security.

Thank you, Mr. Chairman.

Mr. SHERMAN. I thank the gentleman for his comments, particularly those on the need for sanctions, and I now yield to Mr. Poe for an opening statement if he has one.

Mr. POE. Thank you, Mr. Chairman and thank you for calling this hearing today.

The future of international nuclear cooperation is certainly a timely topic. I am a strong believer in the use of nuclear energy nuclear power, and we need a whole lot more of it, especially in the United States. However, my chief concern at this moment is about Iran, one of the world's most belligerent regimes. It has defied warnings again and again not to build nuclear weapons. Ahmadinejad has announced on April 9 that Iran had built a centrifuge machine capable of enriching uranium at six times the speed of its first generation machines, and then he said, "Iran's nuclear path is irreversible."

The administration's own nuclear posture review admits that Iran has "violated nonproliferation obligations, defied directives of the United Nations Security Council, pursued missile delivery capabilities and resisted international efforts to resolve through diplomatic means the crisis that they have created."

This, to me, sounds very serious, that they are a rogue nation and could care less what anybody thinks, the United Nations, the United States, or any other group of countries. This very week the United States is trying to build international cooperation at the U.N. to stop Iran from building those nuclear weapons that it wants to have, but Ahmadinejad is still singing the same old song and the same old verse—the threat of international sanctions don't bother him at all, and don't scare him.

At the U.N., Ahmadinejad acknowledged new international sanctions could soon be imposed on Iran, but stresses that this wouldn't deter his government from pushing forward with its own nuclear program in spite of world opinion and threats of sanctions.

Historically, sanctions of any kind against countries don't work. People cheat. They cheat in the name of money, the profit motive, and they sell their agreements to other people so that they can obtain, as I call it, filthy lucre profiteering on the will of countries that are opposed to trade with a certain country, and so they haven't worked historically ever.

I hope the world, the United Nations, the United States does not get in a Neville Chamberlain philosophy of appeasement and claim peace in our time. That didn't work in the past and the world suffered for it, and it is still suffering for it. I would hope that sanctions would work, and strong sanctions must be imposed upon Iran.

They must understand that we mean business with those companies that trade with Iran and violate those sanctions, and there must be consequences. Iran cannot obtain nuclear weapons.

I look forward to hearing about what the United States is doing to make sure that this does not happen. I have question that I have been asking for some time. At the worst case scenario if Iran obtains nuclear weapons, what is Plan B? What are we going to do? We don't want to get to that point, but what is Plan B?

I have yet to hear an answer from really anyone on what we are going to do. The answer is always the same. We are not going to let that happen, but I would like to know what Plan B is, or if there even is a Plan B. We cannot allow Iran to use or obtain nuclear weapons. They have said that the first missile will be toward Tel aviv. I believe them when they say that, and they are building missiles, of course, or using missiles that—creating missiles that will have long-range capability that will eventually go to Western Europe or even the United States. This is the world crisis, and the world needs to be serious about this, work together and to stop this nonsense and Ahmadinejad.

Thank you, Mr. Chairman. I yield back.

Mr. SHERMAN. Thank you. It is not surprising Ahmadinejad is laughing at the tiny sanctions that are being talked about at the U.N. at the present time.

With that, do we have an opening statement from Ambassador Watson?

Ms. WATSON. Yes. I want to thank you, Mr. Chairman, for holding this very important hearing today on the future of the U.S. international nuclear cooperation. This hearing is especially timely as the nonproliferation treaty review conference continues in New York.

As this conference moves forward, and as we discuss and review the security interests of the United States, we must also remember to look for alternatives to nuclear energy and require a long-term strategy for the disposal and storage of radioactive waste and nuclear waste can pose severe health and environmental concerns if not properly managed. It is also in our nation's best interest to fully utilize all of our diplomatic resources.

As a former diplomat myself, I understand the vital role that diplomacy plays in national security as well as aiding in regional stability around the globe. We must reason and we really must think this through. I believe that Ahmadinejad does a performance that even the majority of his people don't go along with. He is known to be hospitalized for emotional and mental stress. So I think a lot of what he says and does is to put on a show for us. We must be smarter, we must be more thoughtful, we must be more intelligent about how we respond.

So, I would like to thank today's witnesses for their testimony, and as we continue to monitor updates and activities of the 2010 nonproliferation review conference going on in New York we are reminded that it is important that we hold hearings, such as today's, to aid us in the creation of a national security policy that is sustainable, smart, and safe.

So I want to thank you, Mr. Chairman, and Ranking Member, and I yield back.

Mr. SHERMAN. Thank you. Without objection, I will ask that member of the full committee, Dana Rohrabacher, be allowed to participate although he is not a member of our subcommittee, but participate after those members who are members of our subcommittee. Hearing no objection, I now ask the gentleman from Virginia if he has an opening statement.

Mr. CONNOLLY. I thank you, Mr. Chairman.

Mr. SHERMAN. He is recognized for 5 minutes.

Mr. CONNOLLY. Thank you.

The security of our borders is very much tied to our engagement with other nations on arms control. The growing nuclear ambitions of North Korea and Iran, coupled with potential threats from unsecured nuclear material, highlight the need for the United States to re-prioritize arms control and note the actions that past Presidents from both parties took with regard to nuclear weapons.

President Obama's recent renegotiation of the new strategic arms reduction treaty is a welcome continuation of a long legacy of nuclear cooperation between Washington and Moscow. Our two nations together hold more than 90 percent of the world's nuclear weapons, and they agreed to reduce nuclear arms by an additional 30 percent. Moreover, new start places no limits on the U.S.'s missile defense systems and plans. The treaty establishes a nuclear agreement between the two parties, and allows the United States and Russia and other nations to address threats posed by emerging nuclear ambitions from rogue states like North Korea and Iran.

Recently the U.S. hosted a Nuclear Security Summit in which 47 nations participated. The summit concluded with a joint communique in which they stated their commitment to nuclear security and reduce the threat of nuclear actions. The Nuclear Security Summit acknowledged the importance of concepts that are complementary to U.S. national security objectives.

For example, the attendees recognized that highly enriched uranium and separated plutonium requires special precautions and agreed to promote measures to secure, account for, and consolidate those dangerous materials. Perhaps most notably the communique also recognized the need for cooperation among states to effectively prevent and respond to incidents of illicit nuclear trafficking.

Given the growing threat to our borders from non-state actors over the past decade, this last declaration lays the foundation for future cooperation with regard to trafficking of nuclear material. The United States ought to cooperate with its allies to prevent nuclear proliferation to maximize the positive national security outcome. It may arguably be the biggest single threat, external threat we face.

President Obama's actions follow a long-established precedent with the United States leadership in nuclear cooperation. The Reagan administration outlined negotiating positions to address intermediate range missiles, long-range strategic weapons and ballistic missile defenses. During his second term, in 1987, President Reagan signed the Intermediate Range Nuclear Forces Treaty, eliminating all nuclear arm ground launched ballistic and cruise missiles with ranges between 300 and 3,400 miles, and their infrastructure.

The momentum continued with President George H.W. Bush who continued to pursue the first Strategic Arms Reduction Treaty which the United States and the Soviet Union signed in 1991. In order for the United States to have credibility and authority in international nuclear issues, it continued engagement and cooperation as necessary.

The U.S. convening and hosting of the recent summit, coupled with its recent renegotiation with new start with Russia places the United States in the unique negotiating position ahead of the upcoming review conference of the NPT. At the May conference the United States will have reserves of credibility and good will essential to gaining allies and addressing the looming threats from North Korea and Iran's nuclear ambitions.

With regard to Iran, Chairman Berman and this committee, this subcommittee, has shown exceptional leadership, and I look forward to supporting much further action on the Iran's sanctions bill in the coming weeks on the floor. I welcome the testimony of our witnesses today on how the U.S. can work with other nations to take concrete action to deter these very real threats, and I yield back.

Thank you, Mr. Chairman.

Mr. SHERMAN. With that I will recognize for a brief opening statement our friendly interloper Mr. Rohrabacher.

Mr. ROHRABACHER. Thank you very much, Mr. Chairman, and I appreciate my colleague reminding us that it was President Reagan who first achieved a major reduction, reduction of the number of nuclear weapons delivery systems, and I remember the fight over zero option versus the nuclear freeze movement at the time which seemed to be quite partisan in its nature, and "virulent in its attack on President Reagan's sincerity in trying to achieve that goal."

Today we must make sure that the decisions that we make are not affected by such partisanship as I saw back in the 1980s, and that is why I am hoping that President Obama is successful in his efforts to reach a reduction in nuclear weapons with a democratic Russia as Ronald Reagan was successful in achieving a reduction in the delivery systems with the Soviet Union.

Nuclear energy can make a major contribution to the well being of the people of the world. It should, in fact. But we know there is this downside and the downside is the byproduct of the peaceful use of nuclear energy is nuclear weapons material that can incinerate hundreds of thousands, if not millions, of people.

The Iranian challenge that we face today underscores that dichotomy. The Mullah regime continues to claim that it has the right to use nuclear energy for peaceful purposes, and that is true, they do have a right to use it for peaceful purposes, but the rest of us have every reason to believe that that is not their motive in moving forward with their nuclear program and have every reason to fear a country like that governed by such a vicious, anti-Western Mullah dictatorship having a possession of weapons of mass destruction, especially nuclear weapons.

Let us note today, however, there is a new technology and one of the things that concerns me, Mr. Chairman, in this debate, national debate, in this national approach to Iran and other challenges like this is we are not talking about the new potential tech-

nologies that offer us a way to permit countries in the third world and other countries that are claiming the right to use nuclear energy for their purposes, but do not provide a byproduct, do not leave a byproduct that can be used for weapons.

General Atomics, a company in California, a much respected company, has a new nuclear power system that it is promoting that we have every reason to believe will provide nuclear energy. It is a high-temperature gas reactor that will not have the byproduct that can be used for nuclear weapons, and in fact eats the waste that has been left from other reactors.

When are we going to make sure that that becomes part of this national debate, and that our people who are representing us are utilizing this new opportunity to overcome the challenge we face?

We will never be able to eliminate nuclear weapons altogether, but we can reduce the threat of nuclear weapons to mankind, and I think that, number, one the new technology I must mentioned, but number two, in achieving that goal is we must work with Russia, our former enemy, former communist dictatorship ran that country, and now there is a government trying to be democratic, we need to be working with them to try to bring down the number of nuclear weapons that we maintain, which is incredibly costly for both of our countries, and the level of nuclear weapons which we will never use, then takes away money that we can use for other things that would be important to our national defense as well as the economic well being of our people. That is number one, to work with the Russians on that, and missile defense; and number two, utilizing the new technological opportunities that we have to use nuclear energy around the world for peaceful purposes that does not have the downside of producing material for nuclear weapons.

I thank you very much, Mr. Chairman, for holding this hearing. I look forward to discussing this issue with the witnesses today.

Mr. SHERMAN. Thank you. Thanks to all members for their opening statements. It is now my pleasure to introduce Vann Van Diepen. He is the principal Deputy Assistant Secretary of State for International Security and Nonproliferation. He has held that position since June 2009. I am informed he is also the Acting Assistant Secretary, and the International Security and Nonproliferation Bureau spearheads U.S. efforts to promote consensus on WMD proliferation through bilateral and multilateral diplomacy.

I want to welcome Mr. Van Diepen here. He has been often before this subcommittee, not quite to the point where he has earned a personal parking space here at Rayburn, but he is getting close, and I also want to point out that either—I know Mr. Van Diepen will try to sit here for part of the second panel, but even after he leaves, a highly qualified, brilliant and incisive State Department personnel who will remain undisclosed will be lurking in our audience and they will brief Mr. Van Diepen and others of importance in the State Department on the testimony of the second panel.

We look forward to hearing your testimony and I look forward, of course, to you giving me the copy that was sent to the White House and then the red line that shows me the changes that the White House made, but I will get that after the hearing. Mr. Van Diepen.

STATEMENT OF MR. VANN H. VAN DIEPEN, ACTING ASSISTANT SECRETARY, BUREAU OF INTERNATIONAL SECURITY AND NONPROLIFERATION, U.S. DEPARTMENT OF STATE

Mr. VAN DIEPEN. Thank you very much, Mr. Chairman and members of the subcommittee. I appreciate the opportunity to testify today on the future of U.S. international nuclear cooperation.

The United States is leading the way to ensure that such cooperation properly balances the relevant nonproliferation, economic, and climate change factors. This morning I will describe the U.S. Government's recent and planned future activities related to nuclear cooperation agreements, so called 123 agreements, and other U.S. Government efforts to meet this objective.

The United States supports the responsible development of civil nuclear power; that is, a development in a manner consistent with the highest standards of safety, security and nonproliferation. In the forefront of this cooperation is the United States Arab Emeritus, with whom our 123 agreement entered into force on December 19 of last year. The UAE agreed to rely on global nuclear services rather than developing domestic uranium enrichment or reprocessing capabilities. The U.S. believes this agreements sets a positive example of the responsible development of a nuclear power program.

Additional 123 agreements with Australia, Russia, and Jordan are in varying stages of development. I am pleased to report that the United States and Australia signed a new 123 agreement on May 4 that was transmitted to the Congress yesterday. This new agreement which replaces the exiting agreement that expires in January will allow the continued import of Australian natural uranium to fuel America's operating reactors for decades to come.

On Russia, the White House continues to monitor what might be the appropriate time to resubmit the U.S.-Russia 123 agreement to Congress, and we are continuing negotiations with Jordan on a 123 agreement.

We also are considering negotiating new or reviewed 123 agreements with Vietnam and South Korea. The United States and Vietnam signed a Memorandum of Understanding on civil nuclear cooperation this March, and we have recently begun discussions with Vietnam regarding the benefits of a possible 123 agreement.

The current U.S.-Republic of Korea Nuclear Cooperation Agreement expires in early 2014, and the South Korean Government has already expressed an interest in commencing negotiations on an extension, and in my written testimony a few other agreements we expect to begin negotiating soon are noted.

Though not a 123 agreement, I also wanted to highlight the proposed so-called subsequent arrangement that the U.S. Department of Energy is planning to submit to Congress under the existing U.S.-India 123 agreement, and this grants India the right to reprocess U.S.-obligated material the 123 agreement already does. The proposed subsequent arrangement obligates India to maintain adequate safeguards and physical protection requirements on all U.S.-obligated material that may be reprocessed at the covered facilities.

As noted by a number of you already, this week's opening of the 2010 NPT review conference reminds us that the peaceful uses of

nuclear energy must be pursued in a manner consistent with avoiding the risk of proliferation. To this end, the United States is leading an effort to amend the Nuclear Suppliers Group, or NSG guidelines to strengthen controls on the transfer of enrichment and reprocessing technologies, and we are also pursuing the development of a number of mechanisms to assure reliable nuclear fuel services so that it is even clearer that countries seeking to develop nuclear power do not also need to develop their own enrichment or reprocessing facilities.

In conclusion, the United States recognizes that the international community is at a turning point in the expansion of civil nuclear power. The U.S. is therefore taking the lead in the development of bilateral and multilateral agreements and guidelines to ensure that states in compliance with their nonproliferation obligations have access to the peaceful uses of nuclear power.

Thank you very much.

[The prepared statement of Mr. Van Diepen follows:]

Written Testimony of Vann H. Van Diepen on the Hearing on the Future of U.S. International Nuclear Cooperation, House Foreign Affairs Committee, Subcommittee on Terrorism, Nonproliferation, and Trade

May 6, 2010

Mr. Chairman and Ranking Member:

Thank you for the opportunity to testify today before this Subcommittee of the House Foreign Affairs Committee in regard to the future of U.S. international nuclear cooperation. It is evident that there is an extremely high level of interest in international nuclear cooperation among governments, multilateral institutions, non-governmental organizations, and private industry. Such cooperation has significant nonproliferation, economic, and climate change opportunities and implications. The United States is leading the way bilaterally, multilaterally, and in cooperation with private industry to ensure that international nuclear cooperation in the 21st century properly balances all of these factors.

This morning I will describe the U.S. Government's recent and planned future activities related to agreements for peaceful nuclear cooperation, or 123 Agreements, as described in Section 123 of the Atomic Energy Act, as amended. I will also explain the U.S. Government's ongoing

efforts to support the global expansion of civil nuclear commerce while meeting our nonproliferation policy objectives.

Global Expansion of Nuclear Power

First, allow me to state that the United States supports the responsible development of civil nuclear power – that is, in a manner consistent with the highest standards of safety, security, and nonproliferation. This clear mandate comes from President Obama, who stated last year in Prague that "we must harness the power of nuclear energy on behalf of our efforts to combat climate change, and to advance peace and opportunity for all people."

To this, the President added that "we should build a new framework for civil nuclear cooperation … so that countries can access peaceful power without increasing the risks of proliferation. That must be the right of every nation that renounces nuclear weapons, especially developing countries embarking on peaceful programs."

While the majority of new nuclear power plants overseas will be built in countries already deploying this technology, a number of states are embarking on new programs. It should be noted that much of this cooperation can take place in the absence of bilateral a 123 Agreements,

since it involves the exchange of expertise, lessons learned, and best practices rather than the export of nuclear material or reactor components.

It should also be noted that the business of designing and building a nuclear power plant is a global affair, with companies from around the world providing components and expertise. If new nuclear plants are built in the U.S., they will likely involve substantial imports from designers and manufacturers abroad. The United States is working closely with other countries to ensure that the standards in the global civil nuclear marketplace meet the highest levels of quality for the safety of U.S. citizens as well.

Recently Concluded 123 Agreements- United Arab Emirates

Of course, for those new states that are on the verge of building nuclear power plants, a 123 Agreement will ultimately be necessary for U.S. industry to play a significant role. We are therefore taking the necessary steps to ensure that our industry can participate in those countries that we believe will be procuring nuclear power plant technology.

In the forefront of this cooperation is the United Arab Emirates, which is taking rapid steps towards the deployment of nuclear power by 2018. We are very pleased that our 123 Agreement with the UAE entered into force on

December 17, 2009. Both in the Agreement and in its domestic legislation, the UAE made a principled decision to abide by the highest global nonproliferation standards, which translated into an unprecedented national policy. The UAE voluntarily agreed to rely on global nuclear fuel services rather than developing domestic uranium enrichment and used fuel reprocessing capabilities. The United States believes this Agreement sets a positive example of the responsible development of a nuclear power program.

Future U.S. Government Activities Related to 123 Agreements

Let me now turn to 123 Agreements that are in varying stages of development, and then those that are currently being considered.

Agreements in development

Australia

First, I am pleased to report that the United States and Australia signed a new 123 Agreement on May 4, 2010. This Agreement is to succeed the current U.S.-Australia nuclear cooperation agreement which expires in January 2011 and will allow continued and mutually beneficial peaceful nuclear commerce to continue between the United States and Australia – one of the world's leading producers of the natural uranium that will fuel

America's operating reactors for decades to come. The new Agreement with Australia contains strengthened provisions related to transfer of information, material, and equipment, as well as updating our physical security and intellectual property requirements to reflect current international standards in these areas. This Agreement was sent yesterday to this Committee and the Senate Foreign Relations Committee for your review under the Atomic Energy Act.

Russia

The White House continues to monitor when might be the appropriate time to resubmit the U.S.-Russia 123 Agreement to the Congress. The White House has publicly stated that the Russian Government's cooperation on the Iranian nuclear issue will be a significant consideration in making this determination and this continues to be the case. In anticipation of sending the Agreement to Congress last week, we initiated a discussion with several members in an attempt to facilitate a dialogue on questions or concerns you might have. We are in standby mode in anticipation of the White House decision to re-submit the Agreement to Congress.

Jordan

Negotiations on a 123 Agreement with Jordan were completed in February 2008 but the agreed text was not submitted to the Congress for

review. The United States is continuing negotiations with Jordan with the objective of concluding them later this year and submitting the agreed text to Congress at an appropriate time.

Agreements Under Consideration

I would now like to turn to a discussion of states with whom we are either considering negotiating a new 123 Agreement or negotiating extensions or replacements of our current agreements.

Vietnam

As I mentioned, the United States is working to establish the groundwork necessary for our industry to cooperate with countries prepared to import U.S.-origin nuclear materials or major reactor components, and a good example of a partner in these efforts is Vietnam.

The United States and Vietnam signed a Memorandum of Understanding on Civil Nuclear Cooperation in March of 2010, and Vietnam has now expressed interest in a 123 Agreement. Of the 60-plus states expressing interest in civil nuclear power, Vietnam stands out as one of the most serious, as over the past two years, it has taken significant steps towards nuclear power. It plans to commission its first nuclear power plant around 2020, and is carefully building the infrastructure needed to operate a safe and secure civil nuclear program. The Vietnamese state-owned utility

has been tasked with constructing the first nuclear plants, and Vietnam has cited particular interest in U.S. reactor technology. The United States has already engaged a wide range of Vietnamese officials on the purposes and ramifications of a 123 Agreement and we will continue this dialogue in the months ahead and, if appropriate, seek the authority to negotiate such an agreement with Vietnam.

Armenia

Armenia has also recently expressed interest in negotiating a 123 Agreement with the United States. Armenia has stated its desire for U.S. nuclear instrumentation and control technologies for its replacement nuclear power plant. We are currently exploring with Armenia whether its needs require a 123 Agreement or whether the desired technologies can be transferred absent such an agreement, subject to compliance with other applicable requirements.

Republic of Korea

The current U.S.-Republic of Korea nuclear cooperation agreement expires in early 2014, and the Republic of Korea Government has already expressed an interest in commencing negotiations on an extension. The Republic of Korea's nuclear industry has changed dramatically since the current agreement was amended in 1974. The country now is the fifth

largest generator of nuclear powered electricity in the world and plans to double its capacity in the next 20 years. The management of used fuel containing U.S.-obligated special nuclear material will be a particularly difficult issue to address. The United States and the Republic of Korea are currently cooperating on the technical level on the identification of the most feasible used fuel management options for the Republic of Korea, and the United States is hopeful that cooperation in this area, along with the enduring, robust and broad cooperation we have enjoyed in other areas of nuclear energy research and development over the past thirty years will lay the foundation for the re-negotiation of the U.S.-Republic of Korea nuclear cooperation agreement.

Taiwan/Thailand

Two other current agreements for nuclear cooperation with Taiwan and Thailand expire in 2014. We will want to ensure that a new or revised nuclear cooperation agreement with Thailand will set the stage for U.S. industry participation in the responsible development of nuclear power by Thailand. Concluding an agreement with the people of Taiwan through the channels established by the Taiwan Relations Act will be a unique challenge. We will want to consult closely with Congress on our approach.

Other Agreements Related to 123 Agreements

There are two other relevant agreements to which I would like to bring your attention. First, the United States is nearing the completion of negotiations on a parallel agreement to the 1992 "Agreement Between the Three Governments of the United Kingdom of Great Britain and Northern Ireland, The Federal Republic of Germany and the Kingdom of the Netherlands and the Government of the United States of America Regarding the Establishment, Construction, and Operation of a Uranium Enrichment Installation in the United States" which was necessary in order for a British, German, and Dutch consortium to construct a uranium enrichment facility in Eunice, New Mexico, using European enrichment technology. This agreement, modeled very closely on the 1992 Agreement, will allow the French firm AREVA to build a uranium enrichment facility near Idaho Falls, Idaho, using this European technology. The United States hopes to reach final agreement on the text of this new executive agreement within the next few months.

Second, I would like to highlight the proposed "subsequent arrangement" that the Department of Energy is planning to submit to this Committee and the Senate Foreign Relations Committee regarding Article 6, Section iii of the U.S.-India 123 Agreement which grants India the right to reprocess U.S.-obligated nuclear material. To bring that right into effect, the

Parties had to negotiate arrangements and procedures under which that reprocessing may take place, India must establish a new national facility dedicated to the reprocessing of safeguarded nuclear material under IAEA safeguards. In accordance with Article 6, Section iii, the United States and India negotiated Arrangements and Procedures, which constitute a subsequent arrangement under the Atomic Energy Act, in March 2010. The proposed subsequent arrangement obligates India to maintain adequate safeguards and physical protection requirements on all U.S.-obligated nuclear material reprocessed at the covered facilities as described in the Subsequent Arrangement. We look forward to our future discussions with the Congress regarding this proposed Subsequent Arrangement.

Promoting U.S. industry

I have alluded to the fact that 123 Agreements are a prerequisite for the export of nuclear material or major reactor components from the United States. However, our industry's activities also include the supply of project management, logistics, engineering and design, construction, specialty equipment manufacture, fuel services, consulting, and more. According to U.S. Census Bureau statistics, in 2009, the U.S. Government facilitated civilian nuclear energy-related activities abroad totaling 2.4 billion dollars and nuclear imports totaling 4.2 billion dollars. We expect this number to

grow as the "nuclear renaissance" unfolds. The civil nuclear industry holds great promise for American workers and technology, and the U.S. Government will play its part to hone the competitive edge of our firms operating overseas within the confines of our nonproliferation imperatives.

Addressing the Risk of Nuclear Proliferation

This week's opening of the 2010 Review Conference of the Nuclear Non-Proliferation Treaty reminds us that the peaceful uses of nuclear energy must be pursued in a manner consistent with avoiding the risk of proliferation. A global expansion of nuclear power will not serve the international community's collective interest in peace, security, and sustainable development if it is accompanied by a dramatic increase in the risk of nuclear proliferation. This would be the case if all states embarking on nuclear power programs opted to pursue uranium enrichment or used fuel reprocessing technology. The United States is therefore working to limit the unnecessary spread of sensitive nuclear fuel cycle technologies in several different ways.

First, let me update you on our efforts within the Nuclear Suppliers Group, or NSG, a group of forty-six nuclear supplier countries that seeks to contribute to the non-proliferation of nuclear weapons through the

implementation of guidelines for nuclear-related exports. The United States is leading an effort to amend the NSG Guidelines to strengthen the conditions on transfers of enrichment and reprocessing technologies. The United States is hopeful that this amendment will be adopted at the June Plenary of NSG Participating Governments in Christchurch, New Zealand.

The United States is also leading an effort within the NSG to initiate a fundamental review of the NSG's export control lists. This effort will take a comprehensive look at and amend the NSG's control lists to incorporate past lessons learned.

A second way of potentially addressing some of the proliferation challenge is through the development of mechanisms to assure reliable nuclear fuel services.

The United States is taking steps with international colleagues to develop a new international framework. Last October, the Executive Committee of the Global Nuclear Energy Partnership, which includes 25 partners and 31 observer nations, agreed to "explore ways to enhance the international framework for civil nuclear cooperation," noting that "cradle-to-grave nuclear fuel management could be one important element of this framework." There are a number of complex and challenging issues that would need to be addressed for any new framework for civil nuclear

cooperation to succeed, but the year ahead should provide a number of good opportunities to discuss these issues with our international colleagues.

We will also continue to support mechanisms to reinforce the supply of nuclear fuel, including international fuel banks. A dozen complementary fuel service-mechanisms have been proposed, and discussions are underway to evaluate potential solutions that could be acceptable to all interested states.

Civil nuclear power is a subject that must be approached comprehensively, with an emphasis on pragmatic solutions that are in the best energy, economic, technological, and security/nonproliferation interests of all concerned. We must both take steps to address possible proliferation risks and facilitate safe and secure access to peaceful uses for states in compliance with their nuclear proliferation obligations. President Obama emphasized this point at Prague when stating that "[n]o approach will succeed if it is based on the denial of rights to nations that play by the rules."

Conclusion

The United States recognizes that the international community is at a turning point in the expansion of civil nuclear power. The United States is therefore taking the lead in the development of bilateral and multilateral

agreements and guidelines to ensure that states in compliance with their nonproliferation obligations have access to the peaceful uses of nuclear power, and to ensure that appropriate nonproliferation conditions are maintained by those states that have chosen to enjoy the peaceful benefits that the responsible development of nuclear energy can provide.

Mr. Chairman and Ranking Member, thank you.

Mr. SHERMAN. Thank you for your testimony. I will now recognize for questions the vice chairman, Mr. Scott, then our ranking member, then I will ask my questions and move forward from there.

Mr. SCOTT. Mr. Van Diepen, let me start off with the congressional role in the 123 agreements. Section 202 of P.L. 110–369, the United States-India Nuclear Cooperation Approval and Nonproliferation Enhancement Act, which President Bush signed into law in October 2008, amended Section 123 of the Atomic Energy Act to require the President of the United States to keep the Senate Foreign Relations Committee and our House Foreign Affairs Committee fully and currently informed of any initiative or negotiations relating to a new or amended agreement for peaceful nuclear cooperation.

And my question is, how does the Obama administration interpret this requirement?

Mr. VAN DIEPEN. Well, Congressman, not being a lawyer I am not sure how much detail I can go into on that, but I think the language is pretty clear on its face. We have a commitment to keep you fully and currently informed, and I believe we try very hard to do that.

Mr. SCOTT. At what point or what stage in the discussions of such an agreement will the relevant congressional committees be notified?

Mr. VAN DIEPEN. Sir, I think the right thing to do is to make sure that we have a correct and considered answer to that question, so if you don't mind we will provide you something for the record and make sure it is authoritative.

Mr. SCOTT. Okay. Let me go to the agreement with India and the Nuclear Suppliers Group if I could. The cooperation agreement with India which entered into force in 2008 is unusual because India is not a signatory to the NPT, and though India possesses and has tested nuclear weapons the Nuclear Proliferation Treaty does not recognize India as a nuclear weapons state because it acquired these weapons after January 1, 1967.

So the Nuclear Suppliers Group is a multilateral control regime for nuclear technology, and India does not meet any of these criterions. In the lead up to the U.S.-India agreement with the Bush administration, they successfully negotiated an exemption for India, and this exemption was granted unanimously by the NSG.

So my question is, what does the India exemption indicate about the strength of the Nuclear Suppliers Group?

Mr. VAN DIEPEN. Thank you, Mr. Chairman.

Well, first of all just to be clear what that exemption was was an exemption from an NSG requirement that substantial nuclear cooperation only occur with countries that have so-called full-scope IAE safeguards, IAE, that all of their nuclear activities are under safeguards, and India does not fall into that category, of course, because they are outside the NPT and are maintaining a nuclear weapons program, and so the exemption was simply to permit safeguarded peaceful nuclear cooperation with safeguarded peaceful India nuclear facilities that would otherwise have been precluded because of the full-scope safeguards requirement.

That exemption was fully consistent with the NPT and by definition, given that it secured a consensus of the NSG countries, was agreed to be consistent with the purposes and objectives of the NSG.

The fundamental purpose of the NSG is to make sure that nuclear exports are done responsibly and don't contribute to proliferation, and I think all the NSG members agree that the types of exports that are subject to this exemption fall into that category.

Mr. SCOTT. Now, in your opinion does the fact that the Bush administration sought and obtained a Nuclear Suppliers Group exception prior to concluding an agreement with India indicate that the Nuclear Suppliers Group's compliance is a necessary priority for all supplier states?

Mr. VAN DIEPEN. I am not quite sure I understand the question, Congressman, but certainly we seek for all countries to apply the guidelines and controls of all the various nonproliferation regimes, including the Nuclear Suppliers Group.

Mr. SCOTT. I guess on that point I am simply asking does it indicate that the Nuclear Suppliers Group rules can be easily weakened in the face of political expediency?

Mr. VAN DIEPEN. I can say from personal experience in these regimes, Congressman, that getting a consensus on anything is never easy, so I think the idea that there is an easy way to change the rules is not the lesson to be learned from this one.

Mr. SCOTT. Thank you, Mr. Chairman.

Mr. SHERMAN. Mr. Royce.

Mr. ROYCE. Thank you, Mr. Chairman.

Mr. Van Diepen, the Iran Refined Petroleum Act of 2009 was passed overwhelmingly by the House and the Senate, and it contains a provision which precludes a nuclear cooperation agreement with any country in which an individual or an entity is implicated in selling nuclear technology to Iran, and in which that country, of course, fails to take any effective action to stop or to penalize the individual or the company that was involved in it.

It is my understanding that the administration opposes this provision. Is this correct?

Mr. VAN DIEPEN. I am sorry, Congressman. I am not aware of the details of that particular issue, but we will certainly get you an answer for the record on that.

Mr. ROYCE. Well, let us ask a hypothetical then. Should the U.S. be engaged in nuclear commerce with such a country? I am just informing you it is in the legislation, all right? So the question is, should the United States be engaged in nuclear commerce with a country which is in fact failing to curtail that type of assistance to Iran?

Mr. VAN DIEPEN. I think it probably depends a lot on the situation. I mean, for example, if you had a country that as an active state was deliberately assisting another country's nuclear weapons program, I would assume that all of us would probably agree that that is not the kind of country that we would want to have peaceful nuclear cooperation with.

On the other hand, if there is a country where contrary to the laws of that country and without the authorization that government's individuals are engaging in various sorts of proliferation-re-

lated activities, that could be a very different situation, depending upon the extent to which that country was taking action to try and stop that type of activity.

Mr. ROYCE. Well, the point is, is the administration asking for the nuclear cooperation with Russia to be reconsidered?

Mr. VAN DIEPEN. As I noted in my statement, Mr. Chairman, the White House is looking at that issue right now and considering whether and when we should reintroduce the 123 agreement with Russia.

Mr. ROYCE. Well, going back to the legislation that we are trying to pass out of conference committee, shouldn't this agreement with Russia be held in abeyance until there is unambiguous evidence of cooperation from the Russian state on this issue of Iran given the technology transfers that have occurred?

Mr. VAN DIEPEN. Again, that issue is with the White House so it is well above my pay grade, but clearly one of the things they are taking very careful consideration of is the extent to which the Russians are being cooperative with us on the Iran issue and, you know, clearly in a number of ways they are, including having supported past U.N. Security Council resolutions imposing sanctions against Iran for its nuclear program, supporting the kinds of things we are doing in the NSG to put more controls on enrichment reprocessing technology, being part of the P–5+1 process that is working to resolve the Iran nuclear issue, but ultimately the White House will make those decisions, very much including——

Mr. ROYCE. Yes, I failed to note a lot of cooperation from either Russia or China on this front, but let me ask another question.

The U.S.-UAE Nuclear Cooperation Agreement went into force last December, and there has been great congressional concern over the UAE's weak export controls. First, it was the UAE that was the principal conduit of goods and materials intended for Iran's nuclear program; second, when we think about A.Q. Kahn, this is where A.Q. Kahn did much of his business in the UAE; and third, we know that the UAE has laundered Iranian money. So the administration has consistently testified about how the UAE has improved in theses three areas, but I think our concerns in Congress remain. I would like to hear from you on your assessment of the UAE.

Mr. VAN DIEPEN. Thank you, Congressman, and I think it is one of these situations where both things are true simultaneously. The UAE has done a lot and has made a lot of improvements, but like you, we remain very watchful of activities there. The government has taken some very substantial steps, not just putting in place the legislation which is important, but in cooperating in an increasingly consistent and effective way with us on specific transactions of concern, improving implementations of U.N. Security Council sanctions, including financial controls against dealings with Iran, designated Iran entities, so on and so forth.

We have got a very good working relationship established with the UAE. We have been providing them with increasingly substantial export control assistance to make sure they have the wherewithal to implement and enforce the laws that are on the books, so a lot has been done, but it is a big problem. It goes back a long way, and like you, we remain watchful and continue to intervene to try and keep things moving in the right direction.

Mr. ROYCE. Thank you, Mr. Chairman. Thank you.

Mr. SHERMAN. I thank the ranking member. I fear that Russia cooperating with the United States means—on Iran—means cooperating efforts to impose tiny sanctions whose sole effect will be to fool the American people into thinking we are doing something, but are so minuscule as to have no chance of forcing the regime in Tehran to change its behavior or lose its control of power.

Turning to our 123 agreements, you identified quite a number of countries that we are in negotiations with, and I would like you to identify whether the agreements that you are working on will achieve the four model standard positions I set forth in my opening statement.

For example, which of those agreements can you assure us will have a requirement that the other country enter into the Convention on Supplementary Compensation? Are you able to say any of these will have such a provision in the agreement?

Mr. VAN DIEPEN. Congressman, I don't believe that that is the case. I think perhaps the best——

Mr. SHERMAN. So this is a zero jobs—aside from the jobs of people who work at the State Department, this is a zero jobs strategy?

Mr. VAN DIEPEN. No, sir, I don't believe that is the case. First of all, our——

Mr. SHERMAN. Well, zero may overstate it, but the fact is American companies cannot compete with those companies that enjoy sovereign immunity since they face unlimited liability and the other company faces zero liability.

Mr. VAN DIEPEN. Well, again, this ends up being a case-specific thing——

Mr. SHERMAN. When I say "enter into," let me rephrase. Enter into that supplementary convention or enact a similar liability law. I don't want to debate with you whether it is zero jobs or minuscule jobs. The fact is you are about to submit a bunch of agreements to us where most of the jobs are going to be at the State Department negotiating the agreement, and very few of them are going to be involved in our nuclear industry.

What about the additional protocol, can you assure us that any of these agreements will require the other party, and not referring to our agreement with Russia, but all the other non-nuclear states to enter into the additional protocol?

Mr. VAN DIEPEN. Again, I am not that familiar necessarily with the specific test of each and every agreement, but the great majority of the countries that we are engaged in these activities with already are states parties to an additional protocol, so such a provision really would not be necessary.

Mr. SHERMAN. It certainly would be helpful for them to commit to us that they are not going to somehow evade or withdraw from the additional protocol. Which of these agreements will cause the other country to renounce enrichment and reprocess?

Mr. VAN DIEPEN. Again, that will all be an agreement-specific activity.

Mr. SHERMAN. Okay. I am going to ask for a comprehensive response for the record.

Mr. VAN DIEPEN. I figured that is where you were going, Mr. Chairman.

Mr. SHERMAN. And as of now you cannot assure us that any of these agreements will have either the liability laws or the enrichment and reprocessing provisions that I think are necessary.

What about the provisions that a country will ban from its facilities and from obtaining nuclear technology nationals of countries of concern, especially Iran and North Korea?

Mr. VAN DIEPEN. That I am pretty sure is not in these agreements. I mean that is——

Mr. SHERMAN. Not in the agreements.

Mr. VAN DIEPEN [continuing]. Not that I am aware has come up previously.

Mr. SHERMAN. You are saying we aren't even bothering to try to get a provision like that in the agreement?

Mr. VAN DIEPEN. Well, I guess it is probably fair to say that it would be useful for us to have a better understanding of what you have in mind.

Mr. SHERMAN. Well, quite a number of countries have restrictions on whether persons of certain nationalities are allowed to tour their nuclear facilities or otherwise acquaint themselves with nuclear technology. There are models, I believe the United States would be one of them, and you would think that these other countries would not be taking Iranian scientists on tours of facilities that we helped build or other facilities that we didn't if we are in cooperation with them.

If you want, I will draft the treaty language for you, but as of now we are not seeking to insert such a provision into the 123 agreements we are negotiating, is that correct?

Mr. VAN DIEPEN. Not to my knowledge, sir.

Mr. SHERMAN. Okay. Well, hopefully you are here not just to inform us, but also to learn. I hope you will go back and try to get these.

So let us return to the whole issue of whether American companies will be able to compete. India has set aside roughly 10 reactor sites for us but it is very clear that the first construction sites will not be American, and that in fact until and unless, and it is very much unless, they change their law no American company is going to be able to participate.

Why are these agreements in the interest of American workers?

Mr. VAN DIEPEN. These agreements meaning 123 agreements?

Mr. SHERMAN. The 123 agreements you are negotiating in which you are not getting any change in the liability laws of the country.

Mr. VAN DIEPEN. Well, again, it is case-specific as to whether or not the country we happen to be negotiating 123 agreement is a part to the CSC.

Mr. SHERMAN. Right.

Mr. VAN DIEPEN. Which means this is not relevant. Now in India's case, of course, it needs to pass proper domestic legislation and to become a party to the CSC.

Mr. SHERMAN. Well, they don't need it. We need it. We battered the door down for them, got them everything they want, and put ourselves in a position where we may be talking about zero participation of American companies. I guess that was before "jobs, jobs, jobs" was the official slogan. So in any case the issue of whether there are going to be any jobs for American companies or these

other factors that I have outlined are not high enough on your list of priorities for you to be aware of how they are being treated in individual agreements, but you will furnish material as to the status of each of these agreements with non-nuclear states on these four criteria. Have you identified the criteria clearly enough for you?

Mr. VAN DIEPEN. Well, Mr. Chairman, first of all, to be very clear here, the United States has long been pushing countries to subscribe to the CSC. We have been pushing the Indians to do the relevant legislation. I also know——

Mr. SHERMAN. Yes, our attitude toward pushing is we give them everything they want and then we go down on our knees and beg, and that strategy of negotiation doesn't work in any other line of business. I doubt it is going to work here. Asking is one thing, requiring it as a condition of entering into agreement the other party wants is something else.

Mr. VAN DIEPEN. Understood, Mr. Chairman. The other thing I would point out is that what a 123 enables is only certain categories of nuclear commerce, and there is a lot of opportunities for U.S. companies, which they are getting pursuant to these various nuclear cooperation deals that are not affected by 123.

Mr. SHERMAN. Look, I have gone way over my time. I don't think that we are doing a good job if we allow ourselves to be sub-sub-subcontractors, and play no other role. You cannot support the foreign policy established in the United States and ignore the jobs aspect.

With that I yield to the gentleman from Illinois, a gentleman from Illinois who is a member of the subcommittee, and therefore comes before our friendly interloper from the full committee.

Mr. MANZULLO. I have always been concerned about manufacturing and the loss of our defense industrial base, and even though the Pentagon talks a lot about that, when you take a look at the way they award contracts they just don't seem to get it, that we have to have the ability to fight our own wars and maintain our own defense industrial base, and I am really concerned over the fact that the United States has lost the cutting edge in development and manufacturing and sales of nuclear reactors, but I can understand that we have had a very unwise policy not to build any nuclear reactors in our country for the past 20 years or so while other countries have been doing that.

And my question to you, and you will probably say it is not your area of expertise, but maybe you can give us some guidance on it—a couple of questions.

What is the overall impact of the United States no longer having—I hate to use these words—leading technologies because we have Westinghouse and GE that are still actively involved in this, but as you stated in your testimony on page 3,

> "If new nuclear plants are built in the U.S., they will likely involve substantial imports from designers and manufacturers abroad."

Do we have a lack of capacity here to design our own, and manufacture our own nuclear reactors in this country?

Mr. VAN DIEPEN. Well, Congressman, my understanding is in terms of technology and reactor design and things like that we still are the cutting edge. Even though reactors have not been built here for many years, U.S. reactors have been built overseas and continue to be built overseas, and more importantly, U.S. technology and the future of the nuclear reactor business is still very much in the hands of U.S. technology and U.S. companies.

One of the reasons why many countries want to cooperate with us in peaceful nuclear technology is to be able to get the benefits of this cutting edge U.S. technology. And so I think there is still a great deal of cutting edge technology in U.S. hands.

Now that said, like many other businesses, the automobile business, the airplane business, you now have an increasingly internet network, global supply chain kind of operation, and if you think about all the different pieces of equipment and technology that are involved not only in the reactor but also the associated power generation infrastructure, et cetera. There is a very big global operation involved in that, and so there is really no such thing as a purely country X nuclear power project. Whether it is built here or built somewhere else, there is going to be U.S. involvement in many cases and there is going to be foreign involvement.

Mr. MANZULLO. I understand that, but I presume, and maybe I am wrong, but the Russians and the Chinese, because they are building nuclear reactors in their own countries, respectively, would have more manufacturing in their own countries. Would that be correct?

Mr. VAN DIEPEN. In terms of sort of gross manufacturing capability, that may well be correct, but in terms of who has got the most advanced reactors, it is definitely not the Russians and not the Chinese, and indeed one of the reasons why the Chinese sought nuclear cooperation with us in the 1990s was to be able to have access to more advanced U.S. reactor technology.

Mr. MANZULLO. So where are these being built with U.S. technology? What countries are building these American reactors?

Mr. VAN DIEPEN. It is probably better for me to give you an answer for the record that has not correct details, but in China, for example, reactors are being built based on U.S. technology.

Mr. MANZULLO. And so we will be buying—we will be using U.S. technology and building reactors in China that will be exported to the United States to add to our nuclear capacity?

Mr. VAN DIEPEN. No, sir. I mean, nuclear power reactors are huge multi-component structures that are not built in country A and moved to country B. Rather they are built in the place where they are intended to be.

Mr. MANZULLO. But components from everywhere.

Mr. VAN DIEPEN. Various components come from various places, and many of those components will come from the United States.

Mr. MANZULLO. I will take you up on your very generous offer to research that and perhaps later on today we can talk on the phone. My concern is that we shouldn't have lost this technology—we shouldn't have lost the manufacturing in the first place, but if you don't build them here it is kind of hard to keep it here. But also if there is any way that we can regain that manufacturing ca-

pability in this country through the tax code or something else like that.

My district is heavily manufacturing. We are probably 25–26 percent unemployed at this point. No on really knows. Illinois, you know, is 50 percent nuclear. But if I or someone could call your office this afternoon, and we could follow up on that I would appreciate it. Thank you.

Mr. SHERMAN. Let us now hear from Ambassador Watson.

Ms. WATSON. Prior to its 1974 nuclear test, and this is about the agreement with India and the Nuclear Suppliers Group, India had received assistance in developing a civilian nuclear program from the United States and Canada. This assistance followed an Indian commitment to use nuclear trade only for peaceful purposes, and the shock of India's nuclear test which contradicted this commitment was a key factor leading to the creation of the control regime that is now the Nuclear Suppliers Group.

How has the formation of the Nuclear Suppliers Group improved the global nonproliferation regime, and are the NSG guidelines adequate for ensuring that nuclear trade be used only for peaceful purposes?

Mr. VAN DIEPEN. Thank you, Congresswoman.

I think the NSG has had a major impact in retarding the proliferation of nuclear weapons capabilities. For example, prior to the institution of the so-called dual use regime in the early 1990s there were no multilateral export controls on dual use items of particular applicability to nuclear fuel cycles and building nuclear weapons. The U.S. had unilateral controls, but no other country did, and so by putting those controls in place we have gone a long way toward impeding nuclear proliferation.

Right now the control initiative are being reviewed again to make sure that they are up to date with the latest technological changes.

In terms of the NSG guidelines, overall I think they are pretty adequate, but as we have already been discussing one area that we are trying to improve is the strength of the controls on enrichment and reprocessing technology, and so that is a particular area of focus at the moment.

Ms. WATSON. Okay. What effect would an NSG rule change that establish a set of criteria for transferring enrichment and reprocessing technology have if it is adopted, and looking ahead, will more states who meet the criteria end up possessing enrichment and reprocessing plants under safeguards?

Mr. VAN DIEPEN. Thank you, Congresswoman.

That arrangement you have described is exactly what we are doing in the NSG to try to strengthen the control, and we think that will go a long way toward keeping adequate controls on these technologies, and I think it is important to point out that above and beyond the rules one should look at the actual behavior of the countries who are in a position to actually supply this technology, which is not very many, and over the past decade these countries have acted in a very responsible way in their controls of this technology, and so this criteria really are a way of sort of codifying practice that is already ongoing, practice that has been highly responsible, and to make sure that if other NSG countries develop

their own indigenous enrichment and reprocessing capabilities, that they will exercise the same kind of restraint.

Ms. WATSON. Would tighter restrictions on the sale of enrichment and processing technology backfire by inspiring countries to independently develop these technologies or cause black market demands for such technologies? What is the experience?

Mr. VAN DIEPEN. No, I don't believe that is the case, Congresswoman. In fact, under the existing system without having these controls in place you had under the A.Q. Kahn network a clandestine black market, and these kinds of technologies already in place. You had countries that were in fact trying to clandestinely develop nuclear fuel cycle activity. So I think I would say that that proves the value of adding those kinds of control which, of course, is exactly why we are trying to do it.

Ms. WATSON. Thank you. Mr. Chairman, I would hope that we would have Mr. Van Diepen back again when we know more about, and I think you did mention there will be follow ups because we need to be better informed, and I yield back.

Mr. SHERMAN. You are this close to getting that reserved parking spot.

Ms. WATSON. I yield back, Mr. Chairman.

Mr. SHERMAN. And now the gentleman from California.

Mr. ROHRABACHER. Thank you very much, Mr. Chairman. Let me first and foremost identify myself with the line of questioning and the statements made by the chairman during his interrogation or discussion, if you will. I think he made some very important points, and let me note those are bipartisan points that are important to all Americans, and recognized on both sides of the aisle.

I will also identify myself with the remarks of Mr. Manzullo and his concerns that we are not just setting up a scenario in which Americans will play a minor role in manufacturing and a support role rather than a lead role in manufacturing the technology that we are talking about in terms of nuclear power generation in the future.

We have every reason to worry about that for a number of reasons, one of which Mr. Manzullo didn't mention, and that is the actual—how do you say—quality of those items that are manufactured in China that become part of our very high technology projects that have a lot of risk associated with them because at times what we have found is those parts end up being either defective or substandard as compared to the quality of manufacturing that we have had in the United States.

Of course, our manufacturers in the United States, many of whom have gone out of business because we have not pushed China on certain issues and we have opened up our markets and our country has been flooded with cheap substandard products which has, unfortunately, affected our manufacturers of very quality projects and products that Mr. Manzullo was referring to.

I just think there is an undercurrent here which was indicated by the chairman's questioning as well as Mr. Manzullo's statements that our Government does not seem to be getting tough, and our representatives, meaning our friends at the State Department, are not reflecting the tough positioning that is necessary to protect

the interests of the American people, especially the American manufacturers.

So I would hope that as you proceed and as this administration proceeds to move forward on these various issues that we are discussing, whether it is nuclear arms reduction or whether it is the nonproliferation agreements along with these 123 agreements that the administration will learn from the mistakes of the past administrations, both Republicans and Democrats, and be a little tougher rather than relying on giving people what they want and begging, as the chairman said, for them to come to an agreement on other issues.

I will just leave it at that and I think that there has been some very serious issues raised today, and I just wanted to make sure that I was identified with those people who were raising those issues. Thank you very much, Mr. Chairman.

Mr. SHERMAN. Thank you. There is now a vote about to be called in the House. We could probably get in maybe one witness statement, so I will ask the second panel to come forward, but we won't be hearing any of our questions until these votes.

Thank you, Mr. Van Diepen.

As they are stepping forward I would like to introduce our first speaker of the second panel, Mr. Leonard Spector. Mr. Spector is the deputy director of the James Martin Center for Nonproliferation Studies of the Monterey Institute of International Studies, and heads the center's Washington, DC, office. He also co-directs the center's program on nonproliferation policy in law. Mr. Spector was involved in drafting the current version of Section 123 of the Atomic Energy Act. Mr. Spector.

STATEMENT OF MR. LEONARD S. SPECTOR, DEPUTY DIRECTOR, JAMES MARTIN CENTER FOR NONPROLIFERATION STUDIES, MONTEREY INSTITUTE OF INTERNATIONAL STUDIES

Mr. SPECTOR. Thank you, Mr. Chairman. I will try to keep my remarks quite brief because I know that we have a very significant time constraint.

The basic thrust of my remarks was that the idea of legislating to alter the criteria that are now used for agreements for cooperation as embodied in Section 123 of the Atomic Energy Act might not be the best course largely because on the one hand the administration is pretty actively pursuing very many of the initiatives that this step would reenforce, so in a sense you don't really have an adversarial situation here with an administration—which sometimes happens—but much more of a consistency between national policy and the issues that you are trying to reenforce, and I think in my testimony I try to go through some of these efforts that are being undertaken.

For example, on the additional protocol it is not only being included in new agreements for cooperation de facto, as seen in the UAE agreement and in the requirement of the UAE agreement that this be in other agreements in the region, but it is also being pursued at the Nuclear Suppliers Group as a condition of supply for all countries.

So it is not as if the administration is sitting on its hands and it is not as if there is a kind of disposition not to make as aggressive efforts as possible to get this forward.

So the question then becomes, and I would say the same is true for reprocessing and enrichment. The restrictions that were just discussed about reprocessing and enrichment transfers and the actual behavior of states in the Nuclear Suppliers Group has been pretty good, and the administration is pretty aggressively trying to get agreement on these restraints.

The issue becomes is legislation helpful in this setting or does it sort of have some consequences that may not be helpful, and I think that is a difficult matter and I think something the committee needs to consider. One reason it may not be helpful is because as a result of the last 4 or 5 years when enrichment and reprocessing has been so central to the international debate on nuclear energy a lot of countries in the developing world have kind of fought back, not just Iran, but many others, to complain that the United States is intruding on their right to enjoy the full benefits of the nuclear fuel cycle.

Legislation would sort of reenforce that sort of vision and that sense that the United States is sort of forcing into the system new explicit restrictions whereas the current approach, which is sort of country by country through the Nuclear Suppliers Group a little bit more behind the scenes, may have the same result, and I think it will, as legislation might without that sort of potential—you know, challenge of being a bit too overt and too explicit.

I used to be a congressional staffer so I certainly appreciate the virtues of legislation, but I think at this moment and in this area it may not take things in the right direction.

The other area, however, has to do with the possibility of the adjustment in the review process of agreements for cooperation, and there I think, you know, steps could be taken to reenforce the congressional role without necessarily having the same effect, and what I suggest in my testimony is a tradeoff that the Congress seek to require an affirmative vote on agreements for cooperation but in a sense give back—you know, yield some of your time so that instead of having a 90-day of continuous session review process, which can stretch on for 6 months sometime, maybe shorten it down to 60 days of continuous session. In other words, you accelerate the process but at the same time require the affirmative vote so that you really have more authority in the process than you would currently.

Finally, I did emphasize the oversight function, and there are a number of areas I won't have time to go into them in detail, but I would only say that this hearing itself has served a purpose. It has certainly put on the agenda the need for this being careful about access of foreign nationals to our technology from some countries. I don't think that has been under discussion significantly until now, and I think the way the liability issue has come up in this hearing is another step forward to appreciate how serious that can be.

On the liability matter, I had studied this a number of years ago and I felt the CSC was not a particularly good choice from the standpoint of the population that might be affected by a nuclear

power plant accident because the limits are too low. So that while the U.S. vendor would have the protection it thinks of having the liability channeled to the operator, in fact the ultimate outcome might not be very good for the affected population.

I think this is something of a trade issue. There are countries, Japan has privately-owned reactor vendors. South Korea's reactor vendors are privately owned, and if they are able to somehow get guarantees from their government that the government will indemnify and therefore they don't have to have a liability legislation that we have been discussing, that seems to me that the matter may be one to be taken up not only in the respect that you have been speaking of, of pressuring recipient countries, but also some of the other vendor countries to adopt trade practices that are more in keeping with the private sector.

[The prepared statement of Mr. Spector follows:]

Center for Nonproliferation Studies
Monterey Institute of International Studies
An affiliate of Middlebury College

The Future of U.S. International Nuclear Cooperation

Testimony
of
Leonard S. Spector
Deputy Director
Center for Nonproliferation Studies
Monterey Institute of International Studies

Before
the
Subcommittee on Terrorism Nonproliferation and Trade
Committee on Foreign Affairs
U.S. House of Representatives
May 6, 2010

Testimony of Leonard S. Spector
Deputy Director
Monterey Institute Center for Nonproliferation Studies[1]

Thank you, Mr. Chairman, for the opportunity to testify this morning on the future of U.S. international nuclear cooperation.

U.S. nuclear cooperation activities are a crucial component of overall U.S. nonproliferation efforts and operate through many channels, including bilateral diplomacy, decisions on export licensing, the negotiation and implementation of U.S. nuclear trade agreements, and engagement in a variety of international forums.

These activities seek to advance several overarching – and sometimes competing – goals. Of greatest importance are strengthening international constraints on the proliferation of nuclear weapons, reinforcing relationships with friendly states, ensuring that U.S. nuclear exports are not misused, and promoting opportunities for the U.S. nuclear industry.

Although that nuclear industry is no longer dominant in the world, the United States remains the leader in shaping the rules of international nuclear trade because of its commanding global diplomatic presence, which derives from this country's broader economic and military power, and because of U.S. alliances and partnerships with a wide range of like-minded states. Our preeminent intelligence capabilities are also crucial in shaping international understanding of the need for strict rules of nuclear trade.

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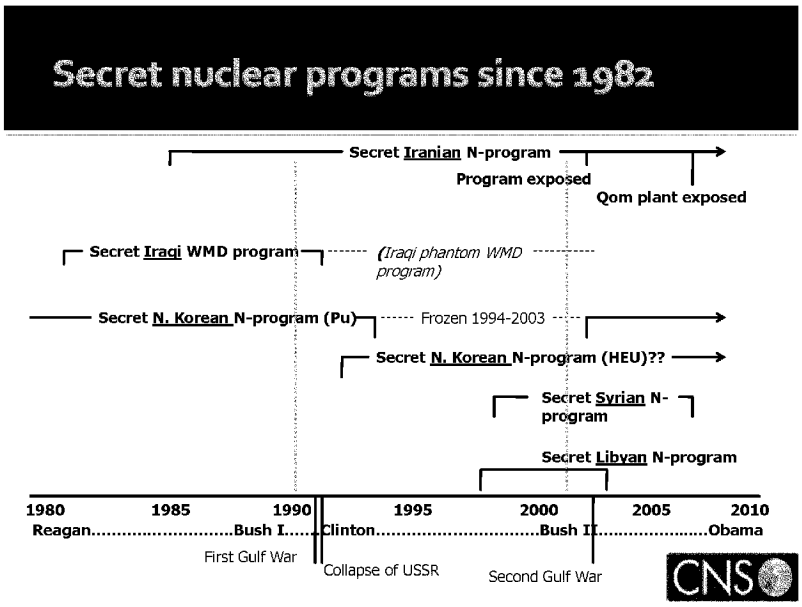
[1] The views expressed in this testimony are those of the witness and not necessarily those of the James Martin Center for Nonproliferation Studies or the Monterey Institute of International Studies or any of their sponsors.

As the Subcommittee is aware, the United States is deeply concerned over severe weaknesses in International Atomic Energy Agency (IAEA) safeguards – the inspection and accounting system the agency uses to confirm that nuclear materials subject to its monitoring are being solely for peaceful purposes – and over the potential spread of uranium enrichment and plutonium separation (reprocessing) capabilities, which can be used to produce nuclear-weapon usable materials. U.S. officials in this and the previous Administration have been working on a number of fronts to address both of these issues.

Let me take a moment to underscore the risks posed by the weaknesses of the IAEA system. The illustration below highlights the secret nuclear programs that have challenged the IAEA system in recent decades. The light vertical lines are intended to remind the reader that in 1990 three secret nuclear weapon efforts were under way simultaneously and that in 2001, there were four such programs under way.



Importantly, none of these programs was detected by the IAEA in its initial phase. All, it appears, were identified by U.S., Israeli, possibly South Korean, and/or British intelligence agencies.

Indeed, the empirical evidence of the weakness of the IAEA system is so strong that former IAEA Director General Mohammed ElBaradei has himself declared that the "classic" IAEA safeguards system is inadequate.

The remedy for this weakness – at least in part – is the Additional Protocol, the model set of strengthened safeguards authorities that the IAEA has asked its members to adopt as an amendment to their basic safeguards agreement with the agency.

The United States is pursuing a two-pronged strategy to gain wider acceptance of the protocol:

- It is seeking agreement within the 46-member Nuclear Suppliers Group to make the Additional Protocol a condition of supply; although some members, at the moment, are blocking a consensus in the group, most, if not all, nuclear power reactor vendor states have adopted this rule individually, on a de facto basis.
- Simultaneously, Washington is seeking this added nonproliferation measure in new U.S. agreements for cooperation, as seen in the recently approved U.S.-UAE agreement and as reported to be included in the U.S.-Jordan agreement, still in negotiation. And, Washington is urging individual states, to adopt this standard, irrespective of whether they have nuclear trade agreements with us. This "retail" approach seeks to make the Additional Protocol the new international standard, by slowly changing the "facts on the ground," so that any state that fails to adopt this measure will be isolated and appear to be resisting the new norm of international nuclear transparency.

These strategies appear to be making gains, even among the states of the 118-member Non-Aligned Movement, which as a bloc resists measures that it sees as burdening the right to enjoy the benefits of peaceful nuclear technology. In practice, despite the official stance of the bloc as a whole, 60 percent of relevant NAM members have taken steps toward adopting the Additional Protocol.[2]

With regard to limiting the spread of enrichment and reprocessing, Washington is also pursuing multiple strategies. At the Suppliers Group, it is seeking standards that would permit the transfer of sensitive nuclear technologies only to states that met stringent objective criteria (including adoption of the Additional Protocol) and that also satisfied more subjective criteria concerning their likelihood of proliferating. As the group continues

[2] Excluding the DPRK, India, and Pakistan, since any Additional Protocol in their cases has only symbolic value, and also excluding non-state Palestine, as of January 2010, of the remaining 114 NAM states, 35 had the Additional Protocols in force, 24 had signed their Additional Protocols, and 9 had obtained IAEA Board of Governors approval of draft Additional Protocols. Indeed, Indonesia and South Africa, two leading NAM members, have Additional Protocols in force.

to debate the matter, moreover, Washington persuaded the other leading economic powers –the Group of Eight – to adopt these strict transfer rules on a provisional basis.

Separately, the Bush and Obama Administrations gained the acceptance of restraints on pursuit of these technologies by a number of individual states in the Middle East, obtaining a binding commitment by the UAE in its bilateral nuclear trade agreement that it would not develop them and signing Memoranda of Understanding with Bahrain, Jordan, Kuwait, and Saudi Arabia under which these states declared their intention to use international markets for nuclear fuel cycle services, rather than develop sensitive facilities indigenously. The United States is in negotiations with Jordan regarding an agreement for nuclear cooperation, where Washington hopes to include a formal UAE-style renunciation of enrichment and reprocessing.

Finally, the United States is seeking to discourage states from developing national enrichment and/or reprocessing by developing mechanisms to reassure states that they can obtain such services from external sources. International reserves of nuclear fuel – or "fuel banks" – that would be available reactor operators that were cut off by its traditional suppliers and multilateral fuel cycle facilities in which states could purchase an ownership stake are among the options that now gaining international support.

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I have discussed these strategies at some length because they represent an alternative approach to legislation that may be under consideration that would make acceptance of the Additional Protocol and renunciation of enrichment and reprocessing requirements for new agreements for cooperation under section 123 of the Atomic Energy Act.

I helped to draft the current version of Section 123. At the time, there was considerable resistance by the Carter Administration to some of its provisions, including the then-new requirement that recipients of all U.S. nuclear goods accept IAEA inspections on all of their nuclear activities – so-called "full-scope safeguards." The provision required the United States to

eventually terminate nuclear trade with India, Israel, and Pakistan. We also sought to make it very difficult for the United States to approve the reprocessing of U.S.-origin spent fuel under our existing and future agreements.

Both of these initiatives were very disruptive for various reasons, although over the years, they did help to build important international norms on these issues, even if imperfectly, in face of considerable initial international resistance to these changes.

The question for the Subcommittee is whether legislation strengthening Section 123 is the best approach today. At the moment, I believe the Executive Branch and the Congress are very much in tune on the substance: as I mentioned, both the Bush and Obama Administrations have pressed for the very goals that the legislation would enshrine. And significant progress is being made.

At the same time, as we will be observing unambiguously at the on-going nuclear Nonproliferation Treaty (NPT) Review Conference in New York, that highly publicized demands for emerging nuclear energy states to accept restraints on their nuclear affairs are very much a red flag. Such demands will unquestionably breed resistance not only to these new initiatives, themselves, but will also engender resentment that will carry over to other nuclear issues. This could make it more difficult for the United States to obtain consensus on Iran sanctions and other proliferation measures where international solidarity is essential.

The Subcommittee should also recognize that the Obama Administration in the UAE agreement has locked in the terms and conditions embedded in that document as the minimum requirements for subsequent agreements in the region. This is because of the provision specifying that if the United States does not obtain comparable arrangements in other regional accords, the UAE will have the right to alter the terms it has currently agreed to.

It is also worth underscoring that the Administration is seeking to gain acceptance of strict rules on the transfer of enrichment and reprocessing technology at the Nuclear Suppliers Group and is also seeking to amend group's export control Guidelines to make recipients' implementation of the Additional Protocol a condition of supply. If these efforts are successful, the need for legislation regarding these issues would be at least partially moot.

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A further matter is whether Section 123 should be changed to require an affirmative vote by both Houses of Congress before an agreement for cooperation can enter into force. Here, I must say, my loyalty is divided, having worked both in the Senate and in the Executive Branch. It is fair to say, however, that the original arrangement of permitting a negative vote by either house to block an agreement – the "legislative veto" – gave more power to the Congress in this important area than it enjoys today. The legislative veto was deemed unconstitutional by the Supreme Court, so if the relationship between the Executive Branch and Congress in this area is to be rebalanced, an alternative approach will be needed.

One option might be to require an affirmative vote, using the *fast track* procedures in place for agreements that do not meet the basic requirements of Section 123, but on a *shorter timeline* – 30 days of continuous session for review and action rather than the current 60 days.[3] This would give the Congress greater authority, but would also reduce delay, a trade-off that the Executive Branch and foreign parties to such agreements might not find unreasonable.

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Let me turn very briefly to other Congressional actions of importance in this sphere, involving the oversight function rather than legislation. The Subcommittee is aware, I know, of the critical role that such oversight

[3] This time frame is used in Section 123 (c) of the Atomic Energy Act for agreements not involving large-scale nuclear transfers, such as nuclear power reactors.

played in leading the Obama Administration to renegotiate certain aspects of the UAE agreement and to reinforce the importance of Dubai's toughening the administration of export controls. Even with the current arrangement for reviewing 123 agreements, the Congress had considerable leverage to obtain necessary changes in that document.

Oversight will be especially important in monitoring the implementation of existing U.S. agreements for cooperation, where the Administration must make decisions regarding whether to permit additional reprocessing of U.S.-origin used nuclear fuel. Japan, for example, is expected to seek authorization in the near future for the construction of a second large-scale reprocessing facility. The U.S. decision on this will not only affect Japan, however: If the Administration agrees to the second Japanese plant, it will be very difficult, indeed, for it to refuse South Korea permission to engage in a near-reprocessing technology for treatment of U.S.-origin spent fuel, known as pyro-processing, an issue that is already receiving attention as Washington and Seoul anticipate the renewal of the U.S.-South Korea agreement for cooperation in 2014. The result could be a Northeast Asia populated with actual and virtual nuclear weapon states, creating a potentially very dangerous environment in coming years.

A further area for Congressional attention is the current project by GE-Hitachi Global Laser Enrichment, LLC, to build a prototype laser uranium enrichment facility in Wilmington, North Carolina. The demonstration effect of the world's first commercial effort to enrich uranium by means of lasers is sure to encourage other nations to follow suit. Laser enrichment, once proven, will become virtually impossible to monitor in states of concern because it can be conducted on a scale sufficient to support a nuclear weapon program in very small and hard to detect facilities. The difficulties of detecting clandestine *centrifuge* uranium enrichment plants, such as the one built by Iran at Qom, or Syria's al-Kibar plutonium production reactor will pale in comparison to the challenge of finding undeclared laser enrichment facilities. This Subcommittee, in the exercise of its oversight authority, should demand an assessment of the proliferation

impact of construction of the GE plant, an assessment the Administration has to date refused to undertake.[4]

Additionally, as we press other states to refrain from building national enrichment and reprocessing facilities, we are building the former ourselves. We can mitigate the bad example of this activity, however. First, we can publicize that in the case of two of these facilities, the URENCO National Enrichment Facility, near Eunice, New Mexico, and Areva Eagle Rock enrichment plant, near Idaho Falls, Idaho, the United States will not receive the key technology needed to build the facilities' centrifuges. This so-called "black-box" approach, if adopted in other countries considering national enrichment plants, would be an important constraint against proliferation. Similarly, both of these facilities will be owned and operated by foreign corporations, a further measure that could be valuable as additional states consider building enrichment facilities on their territory. Finally, an important gesture demonstrating the importance of IAEA inspections and the commitment of the United States that enrichment facilities on its territory will be used only for peaceful purposes would to place these facilities, and the USEC American Centrifuge Plant, in Piketon, Ohio, under IAEA safeguards. (The same might be done for the GE-Hitachi if it is completed and if this could be accomplished without compromising classified information.)

Finally, as was clear earlier in my testimony, U.S. diplomacy – and U.S. diplomats – are crucial to all facets of U.S. nonproliferation policy. This means that funding for their activities is equally crucial, and I hope that in the authorization process, this Subcommittee will help provide the necessary resources for this important work.

Thank you for your attention.

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[4] To be clear, the issue here is not the possible leakage of the technology being used in this facility, known as SILEX, but rather the international attention a successful laser enrichment facility of any type will generate and the encouragement it will provide for other states to pursue this technology. A number of states, including Iran, are known to have already pursued laser enrichment technology clandestinely, but apparently without success. A U.S. commercial laser facility will inevitably rekindle interest in this technology.

Mr. SHERMAN. Mr. Spector, thank you for your testimony and, with the indulgence of my colleagues, since your whole opening statement was basically a rebuttal to my opening statement, would point out that your solution with regard to liability is to propose to the American taxpayer what I could only call the thermonuclear bailout level. I mean, right now in the Senate they are saying that we shouldn't expose the American taxpayer to $50 billion worth of risk with regard to blowouts on Wall Street, and you are asking for trillions of dollars——

Mr. SPECTOR. No, I——

Mr. SHERMAN [continuing]. Or at least many billions of dollars of risk to the U.S. taxpayer.

Mr. SPECTOR. Excuse me, I was not—if I may explain my point. I wasn't propose that we adopt the same strategy as Japan and South Korea. I was proposing that our trade negotiators press them to adopt the same strategy as we are, which is to say the companies——

Mr. SHERMAN. Okay, reclaiming the time that I have stolen from my colleagues, you have basically said Congress should move over and get out of the way because the administration is going to seek our objectives. The previous witness made it clear that he doesn't know if any of these agreements are going to contain the liability provisions necessary for us to get jobs; that he is unclear of the concept of getting restrictions on third party nationals access to facilities, and certainly is trying to achieve that objective. And with regard to enrichment and reprocessing, the UAE negotiated the agreement with the United States without such a restriction, and only with congressional demands was such a restriction added.

So to say that we should go to sleep and count on the administration to achieve our objectives is something that we will explore in these hearings.

Mr. ROHRABACHER. Mr. Chairman, I would ask unanimous consent to at this point in the record place some materials which my office will be forthcoming with that indicates that there is a technological alternative to the issues of liability that you have raised.

Mr. SHERMAN. Without objection, the material that Mr. Rohrabacher wants to put in the record will be inserted at this point.

And I believe we have votes, so we will stand adjourned and hear from our other witnesses when we reconvene after these votes. Thank you.

[Recess.]

Mr. SHERMAN. I would ask that people take their seats and we will be ready to hear from Mr. Glasgow in just a second. I am confident that several other members of the subcommittee will be joining us soon, but I have been notified by telepathy that they would like us to continue.

I would now like to welcome Mr. James Glasgow. He is a partner in the Pillsbury law firm's energy practice, and he serves as counsel on a number of nuclear energy-related issues. Mr. Glasgow is here as a representative of the Nuclear Energy Institute, the 350-member policy organization for the nuclear technologies industry, and I would hope—I realize you already have your opening statement, but if part of it could comment on how through these agreements we can not just generate profits, which of course occurs with

licensing agreements, but also jobs in the actual construction and manufacturing. Mr. Glasgow.

STATEMENT OF MR. JAMES A. GLASGOW, PARTNER, PILLSBURY WINTHROP SHAW PITTMAN LLP (REPRESENTING THE NUCLEAR ENERGY INSTITUTE)

Mr. GLASGOW. Mr. Chairman and members of the subcommittee, I am pleased to be invited to testify today on the subject of the future of U.S. international nuclear cooperation. I ask your permission to enter my prepared statement into the record, and I will provide a brief summary at this time.

My testimony, as you mentioned, is presented on behalf of the Nuclear Energy Institute. The NEI is responsible for establishing U.S. nuclear industry policy on regulatory, financial, technical, and legislative issues. NEI members include all companies licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect engineering firms, fuel fabrication facilities, material licensees and other organizations and individuals involved in the nuclear energy industry.

My law firm, Pillsbury Winthrop, is a longstanding member of NEI. For many years I have advised clients concerning international nuclear commerce matters, and during my tenure in the late seventies and early eighties in the Office of General Counsel at the Department of Energy, I helped negotiate a number of U.S. agreements for cooperation concerning peaceful uses of nuclear energy, so-called 123 agreements.

As has been mentioned, this hearing is being held at the same time as the review conference for the treaty on the nonproliferation of nuclear weapons, the NTP. For 40 years the NTP has served as a principal international agreement that provides a global barrier for the spread of nuclear weapons, although there are challenges to it as has been discussed today. I should mention that the NEI over its history has made a number of strong efforts to support the NTP such as in the mid-90s when the NEI strongly supported renewal of the NPT.

The U.S. nuclear industry does, however, have an important role with respect to the NPT specifically and bilateral 123 agreements as well. It plays an important role in achieving one of the key purposes of the NPT, which is to provide access to nuclear energy, but only, of course, in the NTP member states that agree not to acquire nuclear weapons, the so-called non-nuclear weapon states.

Mr. Chairman, NEI believes the United States can best achieve its nonproliferation objectives when U.S. companies are major suppliers of nuclear reactor components, services, and the nuclear materials needed to run reactors. Recognition by U.S. trading partners that the United States is a reliable supplier gives the United States the ability to influence the type of nuclear power programs implemented in countries that have announced such programs and plan to build reactors.

Now I should at the same time take up the point that you raised, Mr. Chairman, about jobs. Will the U.S. industry's participation in the nuclear industry under 123 agreements create jobs? The answer is an affirmative resounding yes, and that has been the case already. American companies supplying power reactors to China

have generated a substantial number of jobs, approximately 5,000, as I have heard, even though the reactors are being built in China, and one can cite many other examples.

But I would like to mention a bit about impediments to such commerce and to creation of jobs, and one of those that I would like to mention is the Section 57(b) of the Atomic Energy Act and the DOE's implementing rules. Now, the NEI is aware that DOE is going to mount an initiative to revise this 50-year-old rule, and NEI applauds that decision by DOE. These rules have the unintended effect of standing in the way of cooperative programs and exchange of information for purpose of improving the operational safety of nuclear power reactors around the world. They also unnecessarily constrain U.S. companies' abilities to assist in the construction and operation of overseas nuclear power stations, so major changes are needed.

Since little time remains I will touch on the 123 agreements and the idea of shifting more authority to Congress with respect to those agreements. My point, succinctly made, is that Congress has already expanded its authority with respect to such agreements. The Proxmire Amendment of 1985 is one such example. Does NEI see problems with creating a new role for Congress as would be done by H.R. 547 to require it to approve agreements before they could enter into force? This could long delay critical agreements that are needed in the national interest and should be approached with great caution, particularly because of some of the constitutional issues.

I see that my time is at an end. NEI appreciates the opportunity to provide these views, and I stand ready to answer questions.

[The prepared statement of Mr. Glasgow follows:]

Statement for the Record

James A. Glasgow
Partner, Pillsbury Winthrop Shaw Pittman LLP
on Behalf of the Nuclear Energy Institute

Hearing on The Future of U.S. International Nuclear Cooperation
House Committee on Foreign Affairs
Subcommittee on Terrorism, Nonproliferation and Trade

May 6, 2010

Mr. Chairman, Members of the Subcommittee, I am pleased to be invited to testify today on the future of U.S. international nuclear cooperation. My testimony is presented on behalf of the Nuclear Energy Institute (NEI). NEI is responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including regulatory, financial, technical and legislative issues. NEI members include all companies licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

My law firm, Pillsbury Winthrop Shaw Pittman LLP, is a longstanding member of NEI. I have participated for many years in NEI programs dealing with peaceful nuclear commerce issues and opportunities. In addition, while serving as an attorney at the U.S. Department of Energy from 1977-1981, I was a member of the U.S. Government teams that negotiated U.S. agreements for cooperation with the European Atomic Energy Community (EURATOM) and several countries in Asia and the Middle East. Over several decades of private law practice, I have advised clients concerning international nuclear commerce matters and presented papers on this subject at conferences held by the American Nuclear Society, World Nuclear Association, Uranium Institute, U.S. Council for Energy Awareness, and NEI.

It is appropriate that this hearing is being held this week as the Review Conference for the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) begins in New York. For 40 years, the NPT has served as the principal international agreement that provides a global barrier to the spread of nuclear weapons. The NPT rests on three interrelated and mutually reinforcing pillars – non-proliferation, peaceful uses of nuclear energy and disarmament. Although tested by the actions of a few rogue nations, this framework remains as valid and essential today as it was when the NPT entered into force 40 years ago. The private sector is an essential component of the global non-proliferation regime, since it is through industry that nations gain access to the peaceful uses of nuclear technologies, subject to appropriate government controls.

My testimony this morning will deal only in passing with the foreign policy considerations that are best left to the Department of State. Instead, I will focus primarily on the unique role that the U.S. nuclear industry plays in helping the U.S. Government achieve its nuclear non-proliferation and security objectives while also providing a substantial number of American jobs.

U.S. Nuclear Industry Participation in the International Nuclear Renaissance

As has been frequently discussed during Congressional hearings over the last three decades, the United States can best achieve its non-proliferation objectives when U.S. companies are major suppliers of nuclear reactor components, services and the nuclear materials to produce the low-enriched uranium needed to fuel those reactors. Recognition by U.S. trading partners that the United States is a reliable supplier gives the United States the ability to influence the type of nuclear power programs implemented in countries that have begun such programs or have announced an intent to do so. Simply stated, the United States has no influence over non-proliferation policy if American companies are not participating in the market.

Shortly after the Eisenhower Atoms for Peace Program was announced in 1953, many countries entered into peaceful nuclear cooperation agreements with the U.S. Since such agreements are merely a legal framework for U.S. supply of nuclear materials, components and services, the influence that the U.S. gained with these trading partners depended largely on the ability of U.S. companies to supply research and power reactors, and associated nuclear fuel and services, to customers in South America, Europe, Asia and Africa. For several decades, U.S. reactor designs and U.S. reactor manufacturers and fuel suppliers had the dominant market share in the Western World.

Beginning in the 1970s, and steadily increasing since then, vendors of nuclear reactors in Europe and Asia developed their own reactor designs and capacity to manufacture components and fuel. By the 1980s, buyers of power reactors could choose among reactor suppliers in France, Canada, Japan, Russia and several other countries. Today, reactor design and manufacturing capacity is further spread around the world, and new international suppliers are emerging, as illustrated by the Emirates Nuclear Energy Corporation's (ENEC's) selection of Korea Electric Power Company (KEPCO) to supply four power reactors to the United Arab Emirates (UAE).

The International Atomic Energy Agency has estimated that the market that will emerge out of the coming global nuclear renaissance will range from 178 to 357 new reactors worldwide. This potential market represents substantial economic opportunity for U.S. companies. As a rule of thumb, the Commerce Department estimates that every $1 billion of exports by U.S. companies represents 5,000 to 10,000 jobs. Additional overseas orders for new reactors, components, engineering services, and fuel would create even more jobs. In the near-term, job creation in the United States and rebuilding of the nuclear supply chain will be heavily dependent on overseas orders.

Given the changes in the world market for nuclear energy goods and services, it is important to consider the continuing strengths of the U.S. nuclear power industry, and the central role that U.S. companies can and should play as the pace of nuclear power development quickens around the globe. The U.S. nuclear industry includes companies that are majority-owned by U.S. shareholders as well as other companies that have a substantial presence in the United States but are majority-owned by non-U.S. interests. As is true of many industries, the U.S. nuclear power industry is increasingly global, not only from the perspective of U.S. suppliers but also of U.S. nuclear utilities, which increasingly procure reactor components and nuclear services in many countries that have a strong peaceful nuclear cooperation relationship with the United States.

Thus, the U.S. industry increasingly must understand and comply with a complex web of multilateral and bilateral agreements, laws of various countries and detailed import and export regulations to function successfully in a global marketplace. In dealing with these laws, rules and agreements, NEI and its members have acquired a perspective that should be valuable to the Executive Branch and Congress as they exercise their important responsibilities under the Atomic Energy Act and other applicable laws and agreements that govern U.S. peaceful nuclear commerce.

Leveling the Playing Field to Allow U.S. Companies to Compete with Overseas Suppliers of Nuclear Power Plant Equipment, Materials and Technical Data

The ability of U.S. companies to supply materials, engineering services, components and technical data for the construction and operation of nuclear power stations outside the U.S. depends mainly on (1) U.S. agreements for cooperation; (2) timely issuance of U.S. export licenses and authorizations; (3) multilateral agreements, such as the Treaty on the Non-proliferation of Nuclear Weapons (NPT) and organizations, such as the Nuclear Suppliers Group (NSG); and (4) U.S. government support for U.S. companies during international competition for contracts to construct and operate nuclear power stations in other countries.

1. Eliminating Unnecessary DOE Controls Over U.S. Companies' Assistance to Foreign Nuclear Power Programs

As specified in Section 57b of the Atomic Energy Act, U.S. companies may not provide assistance to other countries with respect to their nuclear power programs except as provided in an agreement for cooperation or as authorized by the Department of Energy (DOE). Enacted in 1954, Section 57b of the Atomic Energy Act sought to protect U.S. national security at a time when nuclear power was in its infancy. Despite the far-reaching changes in the nuclear power industry since enactment of this provision, the rules promulgated by the U.S. Atomic Energy Commission more than 50 years ago to implement Section 57b are unchanged in many important respects.

NEI applauds DOE's intent to initiate a rulemaking to revise its rules that implement Section 57b (codified at 10 CFR Part 810). Unless rewritten, these rules could diminish the U.S. nuclear industry's ability to reach its full potential in peaceful nuclear commerce.

Briefly, Part 810 prohibits U.S. companies from assisting existing and new nuclear power programs unless such assistance is within the scope of a general or specific authorization issued by the Secretary of Energy, following an interagency review process specified by the Atomic Energy Act. Since specific DOE authorizations by the Secretary of Energy are necessary, these DOE rules can create an impediment to U.S. nuclear companies' ability to conduct routine business – including, for example, hiring nuclear engineers and technically qualified workers from several countries, including Russia, China, and India, to assist in the design of new reactors and operation and maintenance of U.S. power reactors. DOE needs to assure that the rules finally adopted are effective in applying non-proliferation principles without creating unnecessary burdens.

A substantial amount of technical data concerning nuclear power reactors is related to the safe operation and maintenance of these units. Further, a significant percentage of information exchange between U.S. and foreign entities regarding the use of nuclear energy involves benign matters from the standpoint of non-proliferation, such as procurement of components and systems by U.S. nuclear companies and benchmarking on safety issues between U.S. and foreign utilities and vendors. The current Part 810 rules have the unintended effect of standing in the way of cooperative programs and information exchange designed to improve the operational safety of nuclear power reactors around the world.

Some of the controls imposed by Part 810 on U.S. companies' transfer of power reactor technical data to non-U.S. individuals are no longer necessary in the interest of U.S. security. By constraining U.S. companies' participation in peaceful nuclear power programs in many countries, DOE's current rules confer a substantial competitive advantage on foreign suppliers with no corresponding benefit to U.S. non-proliferation objectives. NEI believes that Part 810 should be revised to remove restrictions that are no longer needed to protect U.S. security interests, focusing instead on data and assistance concerning aspects of the nuclear fuel cycle that are sensitive from a non-proliferation perspective, such as enrichment of uranium and reprocessing of used fuel.

These rules should also conform to requirements imposed by other members of the Nuclear Suppliers Group, to ensure that U.S. companies are not placed at a disadvantage.

2. New Multilateral Agreements to Achieve U.S. Non-proliferation Objectives and Create a Level Playing Field to Allow U.S. Companies to Compete for International Nuclear Power Contracts

(a) International Agreements to Provide Assured Long-Term Supply of Nuclear Fuel to Countries that Pledge Not to Pursue Reprocessing or Enrichment

Mechanisms to provide long-term nuclear fuel supply assurances to countries that agree not to design or build uranium enrichment or used fuel reprocessing facilities have been discussed in Congressional Committee hearings and reports of the Congressional Research Service. A central feature of the Agreement for Cooperation between the United States and the United Arab Emirates is the UAE's pledge not to acquire reprocessing or enrichment technology or facilities. However, if countries that are pursuing new nuclear programs agree not to obtain such facilities, they must rely on the commercial market suppliers – the United States, France, the United Kingdom, the Netherlands, Germany and Russia – that possess enrichment and reprocessing capacity to supply fresh fuel and take back used fuel, and possibly to recycle the fissile materials and reduce the volume of nuclear waste. Obviously, none of these activities can take place without Section 123 agreements for cooperation.

The U.S. nuclear industry is able to make a substantial contribution to establishing long-term fuel assurances that will complement the U.S. Government's ongoing efforts to convince additional countries in the Middle East and elsewhere to enter into binding commitments to forego developing enrichment or reprocessing facilities. U.S. providers of uranium and suppliers of

conversion, enrichment and nuclear fuel fabrication services are familiar with innovative contractual mechanisms for achieving long-term fuel supply arrangements. Nuclear fuel assurances clearly must be acceptable to the governments that are launching new nuclear power programs and to the private sector entities that will provide the financing for such undertakings. Nuclear fuel leasing is a promising means of providing the requisite assurances while also maintaining governmental control over the used fuel after it is discharged from reactors.

(b) Binding International Commitments by Supplier Countries to Refrain from Providing Enrichment and Reprocessing Technology and Facilities to Countries that Currently Do Not Have Such Capability

The Nuclear Suppliers Group (NSG) Guidelines currently impose significant constraints on NSG members' export of technical data and nuclear technologies that are sensitive from a non-proliferation perspective, such as enrichment and reprocessing facilities. It may be appropriate to consider negotiation of a multilateral agreement that would require Member States to refrain from transferring such sensitive facilities, technologies or technical data to countries currently lacking such capability, which could then be incorporated into bilateral arrangements to supply nuclear power components and materials to countries that are launching new nuclear power programs. In testimony on October 7, 2009, before the Senate Foreign Relations Subcommittee on Near Eastern and South and Central Asian Affairs, the State Department observed that establishing such international binding commitments is a difficult task that will take substantial time to pursue, with an uncertain outcome..

(c) U.S. Government Support for the U.S. Industry in Connection with International Procurement of Nuclear Power Stations

Countries that pursue plans to develop a nuclear power program typically do so by issuing an invitation to tender, and conducting a lengthy evaluation process that culminates with the award of an engineering, procurement and construction (EPC) contract or other appropriate contract to the winning entity. During such competition, support for the bidders by their governments often is a major factor. For example, as has been publicly reported, the President of France and the President of the Republic of Korea each visited the UAE in connection with proposals to the Emirates Nuclear Energy Corporation. A similar level of U.S. Government support may be vital to the ability of U.S. companies to prevail in major competitions to supply nuclear power reactors to other countries that are developing new nuclear power programs, when coupled with commercial proposals that are competitive from an economic standpoint. U.S. economic support for such proposals is also necessary to match the financing mechanisms and assurances offered by the Governments of France, Japan, South Korea and other countries.

NEI commends the Department of Commerce for recognizing the need for greater Federal advocacy and support of U.S. industry through the formation of the Civil Nuclear Trade Advisory Committee. This advisory committee will play an important role in providing consensus advice to the Secretary of Commerce on the specific needs of the U.S. nuclear industry as it pursues opportunities globally. To create a level playing field for U.S. industry, more is needed, however. Such joint industry-government initiatives, to identify and implement the economic support that is needed for the U.S. nuclear power industry to compete, should be

assigned high priority. As noted earlier, the United States gains leverage over other nations' non-proliferation policies and programs only through active participation in the commercial nuclear energy business worldwide.

Bilateral Agreements for Cooperation Concerning Peaceful Uses of Nuclear Energy

1. Importance of Agreements for Cooperation

As NEI and its members have long recognized, the ability of U.S. companies to supply nuclear materials, products and services to customers in other countries for peaceful purposes is significantly affected – indeed precluded in some instances – by U.S. laws, regulations and bilateral agreements that govern U.S. exports of such materials and components and participation in overseas nuclear power programs.

Major developments with respect to U.S. peaceful nuclear cooperation with other countries have occurred recently, including entry into force of the U.S. Agreement for Cooperation with the UAE in December of 2009 and an Agreement for Cooperation with India in 2008. Yet many major challenges and opportunities lie ahead, including negotiation of new and amended Section 123 agreements. Timely U.S. entry into such new and amended agreements is essential. Without such agreements, the U.S. industry will have little or no chance to supply power reactors to the growing number of countries that have announced plans to build nuclear power stations.

When assessing whether U.S. national security interests are well-served by U.S. entry into agreements for cooperation concerning peaceful uses of nuclear energy (Section 123 agreements), a major consideration is the fact that such agreements are merely a framework for U.S. peaceful nuclear cooperation. Such agreements are a prerequisite to U.S. supply of power reactors, major reactor components and nuclear fuel. Without exports of nuclear material and components and transfer of technical assistance as needed for nuclear power programs, U.S. agreements for cooperation pursuant to Section 123 remain empty shells that cannot achieve their intended purpose of U.S. engagement in peaceful nuclear commerce. As State Department officials have often observed in testimony before House and Senate Committees, such agreements do not obligate the United States to make any exports of nuclear material or components or transfer any technical data. Moreover, exports of nuclear material and equipment must satisfy the criteria set forth in the Atomic Energy Act and may take place only as authorized by the U.S. Nuclear Regulatory Commission (NRC) in general or specific export licenses.

2. Congress' Role with Respect to Section 123 Agreements

Among other objectives, this hearing is intended to examine whether additional requirements should be imposed on the Executive Branch with respect to negotiation of Section 123 agreements and preparation of the non-proliferation assessment statement (NPAS) that the President is required to submit to Congress in connection with its review of such agreements. Section 123 already requires the State Department, with the assistance of DOE, to provide to Congress a detailed NPAS, in both classified and unclassified versions, to assess whether a proposed agreement meets all of the criteria specified in Section 123 and other applicable

provisions of the Atomic Energy Act. NEI believes that establishing additional requirements of this nature is unlikely to improve U.S. ability to achieve its non-proliferation goals. Additional requirements could, in fact, result in a further decline in the U.S. nuclear industry's ability to design and build new nuclear power stations throughout the world, which would only compromise U.S. achievement of its non-proliferation goals.

This Subcommittee is considering whether changes are needed in the Atomic Energy Act provisions, such as Section 123, that govern U.S. entry into agreements for cooperation with other countries and entities such as EURATOM and the IAEA. In NEI's view, Section 123 appropriately assigns to the State Department, assisted by DOE, responsibility for negotiating agreements for cooperation. Congress' role is to review such agreements for 90 days of continuous session, after which the State Department may bring them into force, if the Congress does not enact a joint resolution of disapproval that is signed into law by the President.

A bill pending in the House (H.R. 547) seeks to amend Section 123 of the Atomic Energy Act to prevent the United States from entering into peaceful nuclear cooperation agreements unless they are approved by a joint resolution enacted by the House and Senate. Amending Section 123 in this manner would be a significant departure from the 50 years of experience with Section 123's allocation to Congress of the authority to review such agreements, after which they may enter into force unless they are disapproved.

Over the years, Congress has strengthened its review authority over Section 123 agreements. After significantly revising Section 123 through enactment of the Nuclear Non-proliferation Act of 1978 (NNPA), Congress added an initial 30-day consultation period to the requirement that Section 123 agreements be reviewed by Congress for 60 days of continuous session. This initial 30-day period is intended to allow Congress to focus on whether a proposed agreement for cooperation satisfies the requirements specified in Section 123 for such agreements. If an agreement does not satisfy all of those requirements, the President may submit it to Congress with a waiver of one or more of Section 123's requirements. In that event, the Agreement may not enter into force unless Congress affirmatively approves it.

NEI submits that the substantial role already established for Congress in Section 123 for reviewing agreements for cooperation is working well, and has proven effective in improving the quality of Section 123 agreements. Hearings by the House and Senate on proposed agreements have effectively probed matters of concern and prompted detailed responses by the State Department to questions raised during the hearings. Despite occasional concerns raised in such hearings, resolutions of disapproval have rarely been introduced and, when introduced, have not been passed by either the House or Senate. However, in 1985, Congress enacted substantial restrictions on the implementation of the U.S.-China Agreement for Cooperation, which entered into force later that year.

Amending Section 123 procedures to prevent new agreements from coming into force unless Congress enacted a joint resolution to approve the agreement would create the possibility that such agreements could be delayed. Such delay could harm the U.S. ability to achieve its strategic, foreign policy and non-proliferation objectives, which depend largely on U.S. companies' supply of nuclear materials and components pursuant to Section 123 agreements.

Further, abandoning Section 123's carefully crafted balance of authority between the President and the Congress, and substituting a Congressional approval requirement for Section 123 agreements, could impede the ability of the President, under Article II of the Constitution, to negotiate international agreements and conduct the foreign policy of the United States.

The delays and uncertainty that would accompany any significant revisions to Congress' authority pursuant to Section 123 would come at an especially critical time. The long-standing U.S. Agreement for Cooperation with Australia, a major supplier of uranium to U.S. utilities, has expired. I understand that the negotiations to extend the Agreement have been completed and the Agreement will soon be sent to Congress for its review. Two agreements with major buyers of U.S. nuclear products and services (South Korea and Taiwan) will reach the end of their terms in 2014 and must be comprehensively amended, or replaced by new agreements, in order to meet the requirements of the NNPA. Upon the expiration of these Agreements, U.S. exports of nuclear fuel and major reactor components to such countries will not be possible until new or amended agreements are brought into force. Several new agreements for cooperation are being negotiated. Moreover, while the U.S.-Russia Agreement was submitted to Congress in 2008, it was then withdrawn by the Bush Administration. That proposed agreement apparently will be sent to Congress for review in the near future.

In summary, the vital interest of the United States in the expeditious renewal of Section 123 agreements that have recently expired, and entry into new agreements with countries that have announced an intent to pursue nuclear power programs, should not be jeopardized by enactment of an amendment to Section 123 that attempts to alter the constitutional allocation of power to the President and the Congress.

Conclusion

NEI appreciates this opportunity to provide its views. NEI believes U.S. industry can and must play an essential role in achieving U.S. non-proliferation goals. The private sector is the instrument by which one of the three pillars of the Non-Proliferation Treaty – assured access to the peaceful uses of nuclear technology – is accomplished. The U.S. nuclear industry welcomes the opportunity to participate in industry-government collaboration to improve the U.S. government's ability to achieve its non-proliferation goals, and strengthen the U.S. nuclear industry's ability to compete on a level playing field for contracts to construct and operate nuclear power stations and provide the nuclear fuel and services that these plants require.

Mr. SHERMAN. And we now move onto our last witness, Henry Sokolski, executive director of the Nonproliferation Policy Education Center. He served as a member of the Congressional Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism. Previously he served as deputy for nonproliferation policy in the Department of Defense, and I should point out that this month he has already issued a new book, and I would make it part of the record but I want people to actually go out and buy the book themselves, and it is, of course, entitled "Reviewing the Nuclear Nonproliferation and Treaty."

With that let us hear from our witness.

STATEMENT OF MR. HENRY SOKOLSKI, EXECUTIVE DIRECTOR, NONPROLIFERATION POLICY EDUCATION CENTER

Mr. SOKOLSKI. Mr. Chairman, it is kind of you to urge people to buy it, but since it was produced at taxpayers' expense it is free.

Mr. SHERMAN. Ah.

Mr. SOKOLSKI. And they can get it from the Web without having to go anywhere.

Mr. SHERMAN. And that Web site would be?

Mr. SOKOLSKI. Yes, www.NPEC–WEB.org. Thank you very much.

I would like to thank you and members of the committee for inviting me to testify today. I would ask that the lengthy testimony that I wrote, along with an article on nuclear power, energy markets and proliferation be entered into the record and I will summarize my testimony.

In my testimony I note that despite our best efforts to establish a new model of tougher nuclear nonproliferation conditions with the UAE, most Middle Eastern states, including the ones the United States is currently negotiating deals, with are not buying these conditions. That with China's recent sale of power reactors to Pakistan, the Nuclear Suppliers Group could soon become impotent and constraining civilian nuclear exports to countries like Pakistan, Israel and beyond.

Also, with congressional and executive branch interest in reversing U.S. policy against the commercial use of plutonium-based nuclear fuels, future U.S. nuclear cooperative agreements may explicitly allow nuclear fuel making activities.

Finally, it appears that the administration wants to resubmit the U.S.-Russia nuclear deal even though Russian entities are still assisting Iran's nuclear missile and advanced conventional military programs.

None of this, I note, will make future nuclear cooperative agreements that you will be receiving any less controversial. Moreover, all of them will continue to be fast track with some nominal congressional presenting requirements, but nothing more. This then brings me to my key recommendations which is that Congress needs to require that both houses approve all nuclear cooperative agreements that the executive branch negotiates.

Having studied constitutional law myself and referring to others who have, I believe the power that you gave the executive to run these agreements for you is delegated from Article 1, so you have a genuine constitutional issue here, but you are not nude in this fight.

An alternative might be to lay out detailed conditions which if met would make it possible for any agreement that met these conditions to be handled as they currently are, as so-called compliant agreements. The trick here is to get the conditions right. These would include having the country in question meet all the nonproliferation conditions contained in the UAE deal, and that they could not get around them by dealing with other supplier states—a very important qualification which I don't think was yet attended to in the UAE deal. Have the IAEA also be authorized in these deals to conduct near real-time surveillance inspections which is not covered by the additional protocol but is critical; that they agree that if they recycle U.S. nuclear material, receive intangible technical support or any other forms of nuclear cooperation, they would lose those rights if they tested nuclear weapons.

I go in further as to when and how you resume such cooperation. They would have to do a number of things.

In addition, I argue that it is essential that Congress insist that the executive specify what the legally binding requirement for timely warning entails with regard to U.S. exports; that they finally implement Title 5 of the Nuclear Nonproliferation Act, which requires the U.S. to conduct non-nuclear energy cooperation and energy assessment assistance with developing states; that American withhold support efforts by any international institution dealing with financial assistance—this would be the World Bank, regional banks—to use subsidized loans to promote civilian nuclear power programs; and closing significant loopholes that enable the Secretary of Energy to approve transfers of nuclear technology without advisement or presentment to Congress.

Finally, that you reenforce the current policy of deferring the use of plutonium-based commercial fuels by demanding that any legislative efforts, such as in the Senate, to reverse this policy, be referred to your committee first before markup and finalization.

Some, of course, will argue that all of this is unrealistic, that the United States can't be expected to do anything more than what other leading nations are willing to do. This view, however, I think is mistaken.

Consider France, it is losing billions in its effort to build a reactor in Finland, and lost out on a reactor bid in the UAE. It, however, is building nearly a $3 billion mixed oxide fuel fabrication plant here in the U.S., and it hopes to build power reactors worth many tens of millions of dollars, and an enrichment plant. All of these will require subsidized U.S. Federal loan guarantees, and licenses. This is reason enough for France to listen to what the United States might want to do with nonproliferation requirements. Assuming they are reasonable, if France, then Germany and the U.K., to maintain European Union harmony will likely follow, and Russia, which is now in need of security German assistance to perfect its power reactors, could find its own reactor exports operating under German export control provisions. I would think that we would be able to persuade South Korea and Japan to fall into line, leaving China as the odd man out.

One last comment. It seems to me that this is more than merely plausible, and if we think back there are two agreements that the United States was vitally involved in with nuclear cooperation for

Iran and India. Those agreements set the pace. There were no votes. There was no serious oversight. We are paying the price for that, so investment now would be cheap in the long run. I think revising the Atomic Energy Act is a good idea.

[The prepared statement of Mr. Sokolski follows:]

Keeping U.S. International Nuclear Cooperation Peaceful

Testimony of

Henry Sokolski

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The Nonproliferation Policy Education Center
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Given Before a Hearing of

The House Committee on Foreign Affairs
Subcommittee on Terrorism, Nonproliferation, and Trade

"The Future of U.S. International Nuclear Cooperation"

May 6, 2010
Room 2172
Rayburn House Office Building
Washington, DC

I would like to thank the Chairman, the Ranking member and the Committee for inviting me to testify today on the future of U.S. international civilian nuclear cooperation and how the United States might improve the nonproliferation aspects of such collaboration. It has been over three decades since Congress has reviewed U.S. policies and laws regarding U.S. international civilian nuclear cooperation. Your committee deserves praise for being the first to get back to conducting oversight on this important matter.

My basic message to you today is that Congress needs to enforce existing nonproliferation provisions in the Atomic Energy Act, add additional conditions, and instructs the Executive to get other governments to adopt similar nuclear restrictions. If congress fails to do so, it should count on reviewing an increasing number of highly controversial nuclear deals that will do less and less to slow the spread of nuclear weapons.

Several recent developments suggest why.

What's Ahead

***First**, as a result of our desire to reset our relations with Russia, the White House will soon be asking Congress to approve a nuclear cooperative agreement with Moscow.* Approval of such an agreement could have major nonproliferation implications. Russia has yet to endorse strong sanctions against Iran, it refuses to blend down any more of the many tons highly enriched weapons material it still has, and continues to assist Iran's advanced conventional military programs, nuclear activities, and its nuclear weapons-capable missile programs. Some critics have already accused the State Department of trying to use this agreement to bribe Moscow into helping the United States deal with Iran.

***Second,** despite our best efforts last year to establish a new model of tougher nuclear nonproliferation conditions with the U.S.- United Arab Emirates (UAE) civilian nuclear cooperation deal, most Middle Eastern states are not buying.* Several Middle Eastern states have already refused U.S. requests to adopt similar conditions. More important, nearly all of the world's key nuclear suppliers – i.e., Russia, France, South Korea, Canada, and China - have already reached nuclear cooperative agreements that lack the UAE nonproliferation conditions with most of the countries in the region. France is now in discussions with Iraq about nuclear cooperation, again free of the UAE conditions of foreswearing nuclear fuel making and adopting more intrusive nuclear inspections under the International Atomic Energy Agency's (IAEA) Additional Protocol. Meanwhile, Jordanian, Turkish and Egyptian officials have made it clear that they wish to retain the right to make nuclear fuel. Only Saudi Arabia (which helped bankroll Pakistan's weapons program) and Bahrain (which is politically unstable) have indicated a willingness to forgo exercising this right. All of this threatens to unravel the U.S. UAE nonproliferation initiative. In fact, under the terms of the U.S.-UAE nuclear cooperative deal, if the U.S. approves any nuclear cooperative agreement that has more favorable

terms for any other Middle Eastern state, the UAE has legal grounds to demand renegotiation of their own deal to secure similar terms.

***Third**, with China's recent sale of power reactors to Pakistan, the Nuclear Suppliers Group (NSG) could soon become impotent in constraining civilian nuclear exports.* Earlier last month, we saw China announce its intention to sell Pakistan additional nuclear power reactors even though Pakistan is not a member of the Nuclear Nonproliferation Treaty (NPT). Under NSG rules, such a sale is prohibited. Coming on the heels of America's own efforts to encourage civilian nuclear exports to India (also an NPT nonmember), this sale's announcement puts the NSG's continued relevance in doubt. The NSG can choose to do nothing and slowly become irrelevant (it is unclear if China will seek NSG permission for the sale). Or it can attempt to detail the circumstances under which the NSG might approve nuclear exports to nuclear arming non NPT member such as Pakistan. In either case, the NSG would be hard pressed to say no to requests from other nuclear weapons armed non-NPT member states (e.g., Israel) or from any other state. In this regard, it is worth noting that Israel recently entered into discussions with France about importing a nuclear power reactor and both Israel and Pakistan have expressed an interest in securing nuclear cooperative agreements with the U.S.

***Fourth**, as the U.S. increases its support for the commercial use of plutonium based nuclear fuels both here and abroad (e.g., Russia, India, and Japan) and attempts to expand America's share of the international uranium fuel market, the U.S. will be pressed by several states to renegotiate current agreements to allow them to do the same.* South Korea's nuclear cooperative agreement with the U.S. is up for renewal in 2014. Seoul already is pressing U.S. officials to amend the current agreement to allow South Korea to make their own plutonium-based fuels. Up until now, the United States has refused South Korea permission to recycle U.S. origin spent fuel because of South Korea's past covert attempts to make nuclear weapons with such materials and its undeclared experimentation in nuclear fuel making. Given the U.S. Department of Energy's interest in developing and cooperating with other states in new ways to recycle plutonium, though, it is quite possible that the Executive might honor South Korea's nuclear fuel making requests. If such an agreement is forwarded to the Hill, it could set a major precedent for other states that already have nuclear cooperative agreements with the United States who have a similar desire to work with nuclear weapons usable materials.

Congress Should Have a Vote

Historically, Congress has rarely amended or blocked civilian nuclear cooperative agreements that the Executive has presented to it. Congress challenged the sale of reactor fuel to India proposed by President Jimmy Carter. It conditioned and so delayed the proposed agreement with China under President Reagan. Recently, it objected to the nuclear cooperative agreement with Russia and got President Bush to withdraw it from

consideration and called for and got the Bush and Obama administrations to renegotiate the nuclear cooperation deal with the UAE.

These Congressional interventions, though, were unusual. Under the Atomic Energy Act of 1954, civilian nuclear cooperative agreements automatically become law after 90 days of continuous legislative session unless Congressional majorities in both houses are able to pass a law rejecting or conditioning the deal. The President, of course, can veto any such legislation, which means that the legislative majorities objecting to or conditioning a nuclear cooperative agreement must be overwhelming for any Congressional condition or rejection to prevail.

This not only decreases Congress's incentive to object to proposed nuclear deals, it frequently discourages it from performing even minimal due diligence or oversight. Consider the recent nuclear cooperation agreement reached with Turkey. Turkey is a state that only recently was a major nuclear proliferation transshipment hub for controlled goods going to Iran. It currently has an ambiguous policy toward Iran's nuclear program and it once harbored desires to acquire nuclear weapons for itself. Yet, despite these points, Congress failed to hold even a single hearing regarding the U.S. nuclear deal.

This lack of Congressional oversight, meanwhile, has encouraged the Executive to become increasingly sloppy in how it implements its obligations under the Atomic Energy Act. With each nuclear cooperative agreement it submits to the Hill, the Executive is supposed to conduct a thorough nuclear proliferation assessment statement or NPAS. Yet, in the case of the controversial U.S.-Russia nuclear cooperative agreement the Bush Administration sent to Congress two years ago, the Government Accountability Office found that the NPAS was incomplete and rushed and that initially it was not even fully coordinated with the intelligence community.

A sure-fire remedy to these lapses would be for Congress to take back the authority it delegated more than a half century ago to the Executive to present nuclear cooperative agreements to the Hill not as treaties or laws, but as a type of fast-tracked executive agreement. This was done in 1954 when Congress passed the Atomic Energy Act. At the time, Congress's delegation of its power to regulate commerce seemed sensible. Eisenhower had just announced the Atoms for Peace Program and wanted to demonstrate America's willingness to share the "peaceful atom" with as many countries as quickly as possible to win a public relations effort against the Soviet Union.

Those days, though, have long since passed. Instead of extremely small zero power reactors of the sort Eisenhower offered in the 1950s, the United States is striking nuclear cooperation agreements to transfer 1,400 megawatt reactors capable of producing scores of bombs' worth of plutonium annually along with extensive nuclear training for hundreds of technicians. Also, after the nuclear inspections gaffes we have experienced with Iraq, Iran, Syria, Libya, Algeria, Taiwan, and South Korea, we now have a better idea of the inherent limits of nuclear "safeguards" than we did in the 1950s.

Certainly, if the number of countries operating nuclear power reactor doubles from 31 to roughly 60, the IAEA's ability to keep track of all the nuclear activities, materials and trained personnel that could be diverted to help make bombs is likely to decline. As it is, the IAEA already cannot detect covert fuel making and annually loses track of many bombs worth of bomb usable materials at declared nuclear fuel making plants. Also, the agency still cannot assure continuity of safeguards over spent and fresh reactor fuels at nearly two thirds of the sites it monitors today. Certainly, if Congress knew in the 1950s the magnitude of nuclear goods the U.S. might be trading in a half century later and under what level of inspections, it is doubtful that it would have been so quick to authorize U.S. nuclear cooperative agreements to be finalized without a Congressional vote.

That is why Congress needs to amend the Atomic Energy Act so that all future agreements require the approval of majorities in both houses. Some, of course, might object that this will require Congress to take on more work when it is already overloaded. The rejoinder is that doing due diligence at the front end is sure to save Congress and the country the embarrassment and danger of unanticipated U.S.-supported nuclear weapons proliferation tomorrow. Consider the case of Iran: Tehran's program was instigated and heavily supported with and by U.S. nuclear cooperation. Yet, when this critical cooperative agreement was first proposed, it never was seriously reviewed or put to a vote.

The Case for Enforcing Existing Laws

Certainly if Congress required the Executive to seek majorities in both houses to finalize future nuclear cooperative agreements, Congress would be in a far better position to demand that the Executive follow what is sound and required under current law. In specific, three provisions of the Atomic Energy Act of 1954 as revised by the Nuclear Nonproliferation Act of 1978 deserve attention.

First, Congress should demand that the Executive do thorough nuclear proliferation assessment statements as required by law. As intimated by last year's Government Accountability Office's critique of the NPAS done for the U.S. – Russian civilian nuclear cooperative agreement, Congress should not allow the Executive to conduct these assessments in too narrow a fashion. Instead of asking if there is any evidence that the country being examined has clearly violated any specific nuclear laws or controls, the Executive should give a complete picture of what sorts of illicit and suspect nuclear, dual use, and nuclear capable missile technology cooperation or transfers the candidate state has made to states of proliferation concern. With the most controversial nuclear cooperation agreements, Congress should ask for a team b assessment to highlight possible additional concerns.

Second, Congress should demand that the executive technically clarify what the legal requirement is to provide "timely warning" of possible military diversions of exported U.S. nuclear technology. In response to an earlier written inquiry this committee made on this point, State Department officials under the Bush Administration wrote in

November of 2007 that "A key consideration of the U.S. Government, in this regard, is the need to ensure timely warning of diversion to non-peaceful purposes sufficient to permit an effective response." The Nuclear Nonproliferation Act of 1978 also makes it clear that before the U.S. government can allow other states to recycle U.S. origin spent fuel to make plutonium, it must demonstrate that "timely warning" of any military diversion would be readily afforded. The requirement for timely warning in law and policy is certainly clear enough. What's not, however, is precisely what "timely warning" technically requires.

One standard answer is that if International Atomic Energy Agency (IAEA) safeguards are applied to any nuclear activity or material, they automatically afford timely warning of a possible military diversion. The problem with this argument, though, is that it is far from clear if 1. the IAEA can meet its own timeliness detection goals for specific nuclear materials and activities and 2. the IAEA's detection goals are tough enough in the first place. After several years of analysis of these matters by my own center and by the Congressionally mandated Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism, there is considerable evidence that the answer to both these questions is no. Unfortunately, to date, no administration Democratic or Republican has bothered to do the detailed technical analysis required to address this question.

Your committee fully appreciates this. That's why last year it voted to require the Executive to assess the IAEA's ability to meet its own timely detection goals and to routinely report their findings to Congress. You included this requirement in Section 416 of the House Foreign Relations Authorization Act for Fiscal Years 2010 and 2011 (H.R. 2410), which passed the House but has not yet been taken up in the Senate. Certainly, if necessary, this language could be introduced as an amendment to the Atomic Energy Act.

Finally, the Nuclear Nonproliferation Act of 1978 has a provision, Title V that requires the U.S. to conduct nonnuclear energy cooperation and energy assessment assistance with developing states. To date, no Administration has yet chosen to implement this provision. This is a mistake. The reason why is simple: The current debate over what peaceful nuclear activities are protected by the NPT turns in no small part on how economically competitive the nuclear project in question might be against nonnuclear alternatives. Certainly, such economic analysis has been historically critical to how the NPT's other pledges to share the peaceful benefits of nuclear energy are now read.

In specific, the NPT's promise to share the "potential benefits of peaceful nuclear explosives" by affording turn key civil nuclear explosive services to developing states was never realized (or requested) for the most prosaic of reasons. After calculations were made as to how much it could cost to clean up the radiological mess left after using nuclear explosives to dig mines, canals, and the like, the "benefits" turned out to be negative. That the use of such explosives was virtually indistinguishable from nuclear testing also didn't help. If a nuclear activity is uneconomic against nonnuclear alternatives and cannot be effectively safeguarded against being diverted because it is too

close already to being a nuclear weapon to provide timely warning of a military diversion, a pretty strong case can be made that it ought not to be protected by the NPT.

The Congressional Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism unanimously recommended that Title V of the Nuclear Nonproliferation Act of 1978 be implemented. Doing so would finally bring us back into compliance with existing law. It also would be a natural way to support the efforts of the United Nations to stand up a new International Renewable Energy Agency (IRENA). Again, this could be done without additional legislation (such as has been proposed by Congressman Jeff Fortenberry, H.R. 3774, and Senator Daniel Akaka, S. 1675) but could be legislated again if the current Administration is resistant to it.

Additional New Conditions

In addition to getting the Executive to implement the requirements of existing law, Congress would do well to amend the Atomic Energy Act to address a number of additional concerns.

First, it would make sense to legislate the nonproliferation requirements that the United States has already imposed on the UAE for all non-nuclear weapons customers. No licenses for export should be approved until the recipient has ratified the Additional Protocol under an existing IAEA safeguards agreement. The recipient also needs clearly to foreswear making nuclear fuel or heavy water in domestic law. In addition, the United States should demand that such recipients allow the IAEA to conduct near-real time surveillance of all safeguarded nuclear sites so as to establish continuity of inspections over spent and fresh reactor fuel.

Second, questions have arisen concerning the Obama Administration's most recent agreement to let India reprocess U.S. origin spent fuel even if or after India chose to resume nuclear testing. Given these questions, it would be useful to make it clear that all U.S. civilian nuclear cooperation would cease, including intangible nuclear technology transfers and programmatic approvals for reprocessing if any state chose to resume nuclear testing. It also would be useful to make clear that the United States should only resume nuclear cooperation if the country in question either agreed to nuclear weapons reductions or dismantlement or gave up making nuclear fuel.

Third, the bipartisan Congressional Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism unanimously agreed that the United States should discourage the use of government backed financial incentives to promote civilian nuclear power. Yet, Presidents Bush and Putin pleaded in 2007 for international financial institutions (e.g., the World Band and regional developmental banks) to afford subsidized financing to promote large nuclear energy projects. Legislation should make it clear that the U.S. delegates to any such banks should vote no to such proposals.

Also, there are fairly significant loopholes under the Atomic Energy Act that would allow the Secretary of Energy authority to approve transfers of nuclear reactor and other critical technology without the approval of Congress. Congress should close these loopholes legislatively.

Finally, there currently are moves to promote the use of plutonium based fuels both here and abroad. Perhaps the most significant is language in the proposed Kerry, Graham and Lieberman energy bill, Section 1104 that would establish that "It is the policy of the United States to recycle spent nuclear fuel to advance energy independence." This committee should demand that this bill be referred to it for review since this language would effectively reverse the 1976-77 Ford – Carter policy to defer the use of plutonium based fuels in commercial reactors. Any such reversal would undermine the clear intent of the Nuclear Nonproliferation Act of 1978, which was to discourage further commercialization of plutonium based fuels. The economic, nonproliferation, and nuclear security case for the United States maintaining its own domestic moratorium on commercial plutonium recycling has only gotten stronger since 1976. Maintaining this moratorium was one of the unanimous recommendations of the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism. Given the significant foreign policy implications of reversing U.S. policy, this committee, in particular, should review this case before any changes in law or policy are made.

U.S. Leadership

It is fashionable to argue that the United States cannot be expected to do anything more in the nuclear restraint business than what other leading nations are willing to do. Yet, this was not the position the U.S. Congress took when it last passed the amendments to the Atomic Energy Act of 1978. Instead, Congress took the position that the United State should take the lead in establishing higher nonproliferation standards and get other states to follow. At the time there were at least as many nuclear supplier states as there are today.

Yet, after Congress amended the Atomic Energy Act in 1978, the Nuclear Suppliers Group actually adopted controls over the very same dual use nuclear goods the United States added to its control lists. The NSG also refused to export to nonnuclear weapons states that did not place all of their declared nuclear facilities under international safeguards. Finally, commercial reprocessing ended in Germany and plans for such activities were dropped in South Korea, Pakistan, Iran, Belgium and several other states. In short, America led and a good deal of nuclear restraint was achieved.

Today, the world today is no different on this score than it was thirty years ago. Key nuclear supplier states still have reasons to care about what the United States thinks. Consider the case of France. France is quite keen on doing business in the United States. Although the French have lost several billions of dollars in the effort to build a reactor for

Finland and lost billions of dollars more on the contract it assumed it would secure to build reactors for the UAE, it hopes to make up these loses by selling nuclear plants in the United States. The first of these prospective sales is a 2.7 billion dollar mixed oxide fuel fabrication plant that is being paid for with U.S. taxpayers' money to help dispose of 43 tons of surplus military plutonium. The French have the contract. Then there are the power reactors (at least six) that France wants to build in the United States. Each of these will cost between four and seven billion dollars to construct. Most require subsidized federal loan guarantees, which will save the operator at least 13 billion dollars per reactor over 30 years. Finally, the French are seeking licenses for all of these plants and additional U.S. loan guarantees to complete a planned 2 billion dollar uranium enrichment facility in Idaho. The French claim that they have already secured nearly 4 billion dollars in prospective enrichment contracts for this plant.

All of this suggests why France has reason to listen to reasonable nuclear requests from Washington. Assuming France does the right thing and supports the conditions that the United States imposes on itself, count on the Germans and the United Kingdom following in kind to maintain European Union harmony. Russia, which is interested in securing German assistance in perfecting its power reactors, in turn, could find its own reactor exports operating under German export control provisions. Presumably, South Korea and Japan could be persuaded to follow these examples, leaving China in the unenviable position of being the odd man out.

None of this is inevitable but it is more than merely plausible. More important, the alternative future if the United States does not lead is more proliferation of more dangerous nuclear technology to more states. This is something the United States and Congress should do all it can to prevent. The place to begin is with the law and U.S. nuclear nonproliferation policy.

Mr. SHERMAN. Thank you for your testimony.

Mr. Glasgow, you have put forward the idea that having Congress actually follow the roles set forth in Article 1 of the constitution and vote up or down on these agreements would create unwarranted delay, and I am really concerned about whether that is kind of a phony argument or whether you are really worried about the delay.

Mr. Spector put forward the idea that instead of having 90 days during which the agreement is frozen as we wait to see if Congress will act we shorten that period to 60 days but during those 60 days we have an affirmative up or down vote of each House. Would you support an expedited, faster system that would require Congress to have an up or down vote or would you oppose a faster system using the argument that it creates unwarranted delay?

Mr. GLASGOW. Mr. Chairman, certainly a faster system has much to recommend it, and originally the Atomic Energy Act provided for 60 days of continuous session to review. It was only in 1985 that an additional 30-day period was——

Mr. SHERMAN. It is pretty obvious you would prefer 60 to 90, the question is will you go from 90 to 60 with an affirmative vote, and if not, how do you then say that you are concerned about unwarranted delay?

Mr. GLASGOW. I would be troubled by a system that creates a requirement of an affirmative congressional vote before an agreement for cooperation could be put into force. I know there is a lot of history here, and I will be very brief, but it is—first of all——

Mr. SHERMAN. Sir, rather than looking at the history of these agreements, I would look at the history of the U.S. Constitution. I think that the framers would be aghast to think that statutes are created by the President signing an agreement with a foreign potentate, and then that becoming the law of the land unless Congress was able to overcome it with two-thirds vote in both Houses. The history of our constitution is at least as important as the history of companies in a particular industry trying to make a profit.

Now, you have told us we have 5,000 jobs in one particular agreement with China. To me that is not the lion's share. You can't run the kind of country America has become with its international responsibilities. What percentage of worldwide employment in building and construction nuclear power plants does the United States have? Is it over 5 percent?

Mr. GLASGOW. Mr. Chairman, I certainly don't have that information right at hand.

Mr. SHERMAN. Please try to get it from your members.

Mr. GLASGOW. I will try to get that information. I know though that, of course, American industry wants to be able to compete on a level playing field.

Mr. SHERMAN. Let us focus on the level playing field. We have the liability issue. Let us say a company that has sovereign immunity, say one based in Russia or China, buys an American part, and installs it in a nuclear facility that has a terrible accident. Now they could assert sovereign immunity, the prime contractor, but could the plaintiffs then come and sue the part manufacturer and seek compensation even though the part manufacturer sold it to a sovereign and then the sovereign built the facility?

Mr. GLASGOW. This matter of being sued in the United States or other countries is an every day concern for U.S. companies that participate in this field. The NEI does back very strongly the Convention on Supplementary Compensation, the CSC, and would like it to come into force. We are short one country, and we have to come up to the 400,000 megawatt thermal threshold before it can enter into force as well. One more country that has a large program would do it, such as Japan.

But to really put the point sharply on the question you raised earlier, Mr. Chairman, whether the CSC should be incorporated as a requirement——

Mr. SHERMAN. Sir, I asked you a very specific legal question as the only lawyer in the room that I think that has a microphone. If an American company provides a part to a government-run corporation, say one in Russia or China, and then there is an accident, does the sovereign immunity protect that company or does anything else protect that company assuming there isn't a liability law or supplementary compensation convention in force?

Mr. GLASGOW. In the example you gave I believe an American court should dismiss that type of a lawsuit on the ground of forum non conveniens, and that conclusion would be particularly strong if the country in question, and you used the example of Russia, does have its own modern nuclear liability law, as does Russia, the——

Mr. SHERMAN. Let us say then would the American company be held liable in a foreign court, just shifting the Court? God, I would hate to be a defendant in a foreign court on a matter like this.

Mr. GLASGOW. In Russia, the answer should clearly be no. Russia is a party to the 1963 Vienna Convention which channels liability exclusively to the operator, and the Courts—Russian law requires——

Mr. SHERMAN. Speaking for your industry, is this a problem when—you talk about those 5,000 jobs and a few jobs here and a few jobs there that come from manufacturing components that will be used in facilities that will be located in countries that do not have liability conventions or laws. Do those companies get unlimited liability insurance, or what protects them from a $100 billion lawsuit?

Mr. GLASGOW. Often, meaningful liability insurance would be unavailable, and in my experience U.S. companies, and as well European companies, are not willing to participate in contracts in countries that do not have modern nuclear liability laws.

Mr. SHERMAN. So in the absence of those laws we don't just lose the lion's share, we lose the vulture's share, we lose all of the jobs involved in the project?

Mr. GLASGOW. Companies at all levels, even manufacturers of small parts and services, often decide not to participate in those contracts. This is the reason why CSC adherence is so important.

Mr. SHERMAN. I believe I have exceeded time. We will see whether we do a second round, and I yield to Mr. Scott.

Mr. SCOTT. Thank you.

I would like to just ask a few questions on the relationship with Russia on this issue. We soon will be asked by the White House to approve a nuclear cooperative agreement with Russia, and I

would like to ask each of you to give your take on the situation as we are faced with on several fronts. One is, Russia has tons of highly enriched weapons material already. I would like your take on how should that be disposed of, what should we do with that?

They continue to help Iran with their nuclear energy program and their nuclear weapons programs. I would like your take on that, specifically each of your conclusions whether or not in fact you believe without question, despite what Ahmadinejad said and spoke to the U.N. on Monday at the nonproliferation conference at the U.N., whether or not you feel each of you personally that they are in fact after procuring and developing nuclear weapons. I think that would be very important to establish from each of your perspectives, are they or are they not doing so?

Then secondly, it is my understanding that their main help on paper in front, out in the open, above the table that we know of that Iran has been over these 14 years in building this Bashir plant supposedly for civilian use of nuclear energy. However, there is a tremendous amount of spent fuel there, and should not Russia have some responsibility for helping to clean that up, dispose of that, determine where it is going?

So, I think that this would be a good departure just to get some response on Russia in these questions that I have asked because absolutely between the two of us, Russia and the United States, we hold almost all the trump cards on this whole issue of nuclear energy, and especially in view of the fact that over 90–95 percent of all the nuclear weapons are in either of our possessions or responsibilities. I would like each of your take on this

Mr. SPECTOR. Let me see, I think as far as the U.S.-Russia Agreement for Cooperation is concerned, you know, you might want to divide issues into show stoppers and important, but maybe we can work them. If we had evidence that Russia was deliberately tolerating or encouraging support for the sensitive parts of the Iranian nuclear program, that is, his clandestine enrichment plants that have come out for the missile program, I would say that would be cause for deep concern and conceivably sufficient to freeze this agreement. I don't think the agreement will come to you if that is going on at a level that is beyond individual companies operating—you know, defeating Russian export control laws.

Mr. SCOTT. Do you feel that it is going on

Mr. SPECTOR. It was not my impression that was true but I am not privy to the classified information. If it were true, as I say, I don't think the administration will come forward with the agreement.

Mr. SCOTT. But somebody is helping them

Mr. SPECTOR. Well, they have got an awful lot of assistance from A. Q. Kahn. They got a nuclear weapon design. They got the instructions as to how to manufacture the centrifuges and build them. They got technical assistance to support the hardware, and they have learned a lot independently. There is a lot of leakage from Western Europe. So they may not be getting that kind of insider information about how to design the bomb from the Russians or things of that kind, but I would say as you consider the agreement that would be crucial to look into and confirm that you were satisfied, and I think that is kind of a crucial issue.

High enriched uranium, there was an excellent program, I used to be at the Department of Energy and worked on some of these issues. I think 500 tons of that material was being downblended so it wasn't being used for weapons anymore, made into nuclear power plant fuel, and actually sold to the United States and it is being used around the country now. It would be good to do that a second time or to find some kind of mechanism to encourage Russia to take another 500 tons and downblend it the same way.

My sense is the evidence regarding Iran's intentions is so—there is so much of it now and it has accumulated for so long you are sort of forced to the conclusion that this is a nuclear weapon program. Maybe they will pause before they go all the way.

And as far as Bashir is concerned, there is this danger—I know Dr. Sokolski and others have raised it—about the spent fuel that will be there because it is a potential source of plutonium. But the Russians have pledged to take the stuff back to Russia, so at a certain stage it goes away from Iran. I don't think anyone has been happy about this deal, the nuclear power plant deal, but I think it has reached a stage now where if we could get other matters settled with Iran, it could be part of a tolerated package to close this situation out if we can get a freeze and maybe a rollback of other more sensitive activities.

Mr. SCOTT. Should that be a consideration of our consideration for the agreement that Russia be responsible for the spent fuel?

Mr. SPECTOR. I think Russia has—the agreement does provide for the take back of the spent fuel, so maybe you want to probe about details, how long will the fuel stay in Iran, how much would accumulate, I think those are appropriate questions, but the core question is, is there an arrangement, that is, a good arrangement basically? I would say the answer is yes.

Mr. SCOTT. Okay, thank you.

Mr. SOKOLSKI. Mr. Scott.

Mr. SCOTT. Mr. Sokolski.

Mr. SOKOLSKI. I have a very different take on each one of those questions. Having served on the Commission on the Prevention of WMD Proliferation and Terrorism, we looked into each one of these questions in detail with clearances, and in the report cards that we laid out and in the report we were very concerned with the nuclear proliferation assessment statement that was handed in, in 2008, which was as the Government Accountability Office said, quite hastily done and incomplete.

What they did and what you should not tolerate and actually get into if you get this agreement was they sent up an assessment that asked, "Is there anything that we know for sure the Russians are doing in violation of the law?" They then looked at that narrow question, and then went to the Russians and said, "Stop it." Instead of asking is there criminal activity, gang activity in the neighborhood, what is it and what is the prospect for more crime, they didn't look at that, and the Government Accountability Office was quite good in highlighting how much information was not in that report that was filtered out that you need to look at. That is point one.

I think point two——

Mr. SCOTT. If you could give me a couple of examples, what would that information be?

Mr. SOKOLSKI. I can talk about unclassified news reports and I will right now just to give you a flavor. There was a report in The Washington Post that a high-speed camera may have left one of the facilities in Russia, and it was very useful in designing implosion device or shockwave analysis. There was some discussion that I believe is in the public realm that David Albright spoke about which had to do with assistance with the heavy water reactor fuel, which is a production reactor essentially. They call it a research reactor. In any case I will stop there because I want to make sure if it is unclassified.

Mr. SCOTT. That is fine.

Mr. SOKOLSKI. Certainly in the missile area you have a plethora of problems which, you know, need to be looked into. We just had an announcement by the Secretary of Defense that said that he is worried an ICBM might be made as soon as 2015 if there is foreign assistance. Well, you might look into what Russian assistance might be involved there.

With regard to Bushehr, the Russian agreement is only to take the Russian fuel, and that is only the first 10 years worth. Moreover, that fuel sits there for several years before they take it, so I wouldn't be—I mean, that is still an issue. Moreover, the Iranians have not agreed after repeated requests to allow near real time surveillance so that we can see what is going on at these facilities every 5 minutes by a secure link between the camera and Vienna. They won't allow that so you can only see things every 90 days. That is a long enough period to divert fuel. That is a big concern. It is one of the things you wanted to have in that UAE agreement that you did not get.

Finally, it seems to me that the Hugh (highly enriched uranium) issue is a very important one. I agree with Sandy that we had a great deal. We also know for a fact, and there is lots of analysis that I had a fellow do on our Web site, that the Russians are no longer interested in doing blenddown agreements. We need to give them a reason to come around on that before you give an approval to something they want much more than we do, which is this nuclear cooperative agreement, and the reason they want this agreement is because they are the odd man out. Everyone has a nuclear cooperative agreement with the U.S. and gets access to our quality regulatory and safety information, in addition design information, but them, and it is starting to hurt sales. Well, you have got to use that as leverage.

Mr. SCOTT. And to my final question, it is your opinion unequivocally or not that Iran is after nuclear weapons?

Mr. SOKOLSKI. There is no question in my mind that they are on the brink, they want to be on the brink, and they want you to be on the edge of your stool every minute watching.

Mr. SCOTT. But your conclusion is that they are in fact after nuclear weapons?

Mr. SOKOLSKI. No question. Absolutely no question. When I served in the Pentagon back in 1990, I sent the first memo to the Secretary of Defense, which was shared with, I hope, the President that we had evidence that Iran was restarting all of its weapons

programs, and you know, we didn't do enough then and here we are now.

Mr. GLASGOW. Mr. Scott, could I provide just a very brief industry perspective on these questions which will be quite selective because on some of the questions we don't have enough information?

But certainly, when it comes to your question about blenddown or what to do with the tons of weapons material in Russia, the U.S. industry's role has been to help implement the Russia-U.S. highly enriched uranium agreement. American companies have stood ready to capably take on the task of accepting such material, blending it down in a swords to plowshares manner. American companies have performed the actual blend-down operations. This has been, I think, a good contribution to the effort.

On the question of Iran, the industry itself of course accepts what the U.S. Government has to say about this issue. I don't have anything new to present about whether they are developing nuclear weapons. I can say though that the industry has some tools at its disposal that could contribute in a way that I think would be constructive, if not for Iran, at least for some countries, and that is the idea of long-term fuel assurances and multilateral fuel cycle centers.

The idea of commercial arrangements and how these things could be crafted so they work and provide the right kind of assurances is something to which the industry can contribute. While the industry doesn't have the answer to Iran, it has some of the tools to frame the institutional and commercial arrangements that will help to address these problems.

Mr. SCOTT. Thank you, sir.

Mr. SHERMAN. I want to thank our witnesses for coming before us, and look forward to working with you to try to craft some better policy. Thank you very much.

[Whereupon, at 12:51 p.m., the subcommittee was adjourned.]

APPENDIX

Material Submitted for the Hearing Record

SUBCOMMITTEE HEARING NOTICE
COMMITTEE ON FOREIGN AFFAIRS
U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, D.C. 20515-0128

SUBCOMMITTEE ON TERRORISM, NONPROLIFERATION AND TRADE
Brad Sherman (D-CA), Chairman

April 29, 2010

TO: MEMBERS OF THE COMMITTEE ON FOREIGN AFFAIRS

You are respectfully requested to attend an OPEN hearing of the Subcommittee on Terrorism, Nonproliferation and Trade, to be held in **Room 2172 of the Rayburn House Office Building (and available live, via the WEBCAST link on the Committee website at http://www.hcfa.house.gov)**:

DATE: Thursday, May 6, 2010

TIME: 10:00 a.m.

SUBJECT: The Future of U.S. International Nuclear Cooperation

WITNESSES: **Panel I**
Mr. Vann H. Van Diepen
Acting Assistant Secretary
Bureau of International Security and Nonproliferation
U.S. Department of State

Panel II
Mr. Leonard S. Spector
Deputy Director
James Martin Center for Nonproliferation Studies
Monterey Institute of International Studies

Mr. James A. Glasgow
Partner, Pillsbury Winthrop Shaw Pittman LLP
(Representing The Nuclear Energy Institute)

Mr. Henry Sokolski
Executive Director
Nonproliferation Policy Education Center

By Direction of the Chairman

The Committee on Foreign Affairs seeks to make its facilities accessible to persons with disabilities. If you are in need of special accommodations, please call 202/225-5021 at least four business days in advance of the event, whenever practicable. Questions with regard to special accommodations in general (including availability of Committee materials in alternative formats and assistive listening devices) may be directed to the Committee.

COMMITTEE ON FOREIGN AFFAIRS

MINUTES OF SUBCOMMITTEE ON *TNT* MEETING

Day *Thursday* Date *05/06/10* Room *2172*

Starting Time *10:07 a.m.* Ending Time *12:45 p.m.*

Recesses *1* (*11:40* to *12:20*)

Presiding Member(s) *Hon. Brad Sherman*

CHECK ALL OF THE FOLLOWING THAT APPLY:

Open Session ☑
Executive (closed) Session ☐
Televised ☑

Electronically Recorded (taped) ☐
Stenographic Record ☑

TITLE OF HEARING or BILLS FOR MARKUP: *(Include bill number(s) and title(s) of legislation.)*

The Future of U.S. International Nuclear Cooperation

SUBCOMMITTEE MEMBERS PRESENT:

Mr. Sherman, Mr. Connolly, Mr. Scott (GA), Ms. Watson, Mr. Klein, Mr. Royce, Mr. Poe, Mr. Manzullo

NON-SUBCOMMITTEE MEMBERS PRESENT: *(Mark with an * if they are not Members of HFAC.)*

Mr. Rohrabacher

HEARING WITNESSES: Same as meeting notice attached? Yes ☑ No ☐
(If "no", please list below and include title, agency, department, or organization.)

STATEMENTS FOR THE RECORD: *(List any statements submitted for the record.)*

Witnesses.

ACTIONS TAKEN DURING THE MARKUP: *(Attach copies of legislation and amendments.)*

RECORDED VOTES TAKEN (FOR MARKUP): *(Attach final vote tally sheet listing each member.)*

Subject	Yeas	Nays	Present	Not Voting

TIME SCHEDULED TO RECONVENE _____
or
TIME ADJOURNED *12:45pm*

Subcommittee Staff Director