

# WHAT'S NEXT FOR THE U.S.-KOREA ALLIANCE

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HEARING  
BEFORE THE  
SUBCOMMITTEE ON ASIA AND THE PACIFIC  
OF THE  
COMMITTEE ON FOREIGN AFFAIRS  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED TWELFTH CONGRESS  
SECOND SESSION

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## WHAT'S NEXT FOR THE U.S.-KOREA ALLIANCE

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WEDNESDAY, JUNE 6, 2012

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON ASIA AND THE PACIFIC,  
COMMITTEE ON FOREIGN AFFAIRS,  
*Washington, DC.*

The committee met, pursuant to notice, at 1:30 p.m., in room 2172 Rayburn House Office Building, Hon. Donald A. Manzullo (chairman of the subcommittee) presiding.

Mr. MANZULLO. The Subcommittee on Asia and the Pacific will now come to order. On Sunday, June 25, 1950, the armies of North Korea attacked South Korea in a misguided attempt to forcefully alter the future of the Korean peninsula. Sixty-two years later, we continue to grapple with the consequences of that war. Much has changed for South Korea, however, since that faithful day so many years ago.

South Korea has undergone a dramatic transformation from a developing nation to one that is modern, vibrant, and full of promise, and opportunity. The Korean people deserve our full praise and admiration for their role in building a nation that is not only an economic powerhouse, but one that serves as a beacon of democracy and freedom for those oppressed around the world. This is the South Korea of today. A country that is standing on its own right, alongside advanced democracies in Western Europe, Japan, and even the United States. Given the positive changes in South Korea, it is only proper for us to consider real ways to improve the U.S.-Korean alliance beyond a security-focused relationship.

The future of the U.S.-Korea alliance remains largely unwritten. It is an opportunity for us to decide whether we shoot for the stars or embrace the status quo. If we choose the path of the status quo, then we forfeit a tremendous opportunity to forge a lasting, mutually beneficial relationship for generations to come. This is why I urge President Obama, and policy makers on both sides of the Pacific, to think big when it comes to the future of the U.S.-Korean alliance.

First, we must not shy away from having a real discussion regarding the importance of South Korea's application for a broader 123 Agreement on civilian nuclear energy. It is in our own interest, in the best interest of the United States, to enable Korea to develop a reliable source of domestic energy, particularly given the positive impact on American jobs in our own manufacturing sector. Korea has come a long way since the Cold War and it is my strong conviction that we must negotiate an agreement that reflects not only the

current situation in South Korea, but one that is flexible in the future.

Developing a closer, more integrated economic relationship with South Korea is also in the best interest of the United States. I dare say we in the U.S. can learn something from Korea's intense focus on research and development, and its continuing effort to deliver excellence in manufacturing. Indeed, Korea's global brands are now at the forefront of the marketplace and there is nothing wrong with developing a closer partnership so that we can also benefit from their best practices. This is why I believe we should issue more H-1B visas so that highly-skilled professionals from South Korea can work side-by-side with Americans to help propel America's economy into the future.

Finally, I want to make clear my stance on an issue that is very important to Koreans and Americans of Korean descent, namely the issue of the East Sea. I believe it is important for the United States not to take sides in a debate between Korea and Japan. Both nations are close friends and allies of the United States and we should honor both countries by saying once and for all that both the name "East Sea" and "Sea of Japan" should be used side-by-side.

The story of Korea is nothing short of a miracle when one considers the progress the nation has made in the past 60 years. I recently traveled to Korea to examine for myself the extent of Korea's development. Let me tell you, I was not only impressed by the warmth of the Korean people, but I was blown away at how advanced and refined that country is today. The people of Korea have taken full advantage of the peace and security guaranteed by the alliance to build a remarkable nation.

As we celebrate the 60th anniversary of D-Day and the sacrifices of the great generation, let us also take a moment to recognize the sacrifices of Korean veterans on this important occasion of Memorial Day in Korea. I now recognize the ranking member for his opening statement.

Mr. FALEOMAVAEGA. Thank you, Mr. Chairman, and I thank you for holding this hearing about the expanding U.S.-Korean alliance and I commend the Obama administration for their successful passage of the U.S.-Korean Free Trade Agreement which will create about 70,000 jobs for American workers. The U.S.-Korean Free Trade Agreement also promises to increase U.S. gross domestic product somewhere between \$11 billion to \$20 billion in new U.S. exports annually.

It will also expand U.S. businesses' access to the \$1 trillion South Korean market. For now, the U.S. continues to be South Korea's third-largest trading partner and South Korea is the United States seventh-largest trading partner. Two years ago, trade between the U.S. and South Korea totaled over \$86 billion. Given the historic nature of the passage of the U.S.-Korean Free Trade Agreement last year, I want to publicly acknowledge the grassroots efforts of Mr. Dong-Suk Kim, founder and former president of the Korean-American Voters' Council.

Mr. Kim gathered Korean-American business leaders from all over the country, urged Congress to pass the U.S. Free Trade Agreement, and I applaud him for all that he has done for increas-

ing Korean voter turnout from less than 5 percent in 1996 to over 65 percent in 2008, and also for his work during the 110th Congress, which led to the successful passage of House Resolution 121; a resolution calling upon the Government of Japan to issue a formal apology for the Imperial Armed Forces coercion of some 200,000 Asian-Pacific young women into sexual slavery during World War II.

Many of these young women were Korean. They are still awaiting their apology from the Government of Japan. Particularly, I want to thank my colleague, Congressman Mike Honda of California, for introducing the legislation, and on a bipartisan basis, the late Chairman Tom Lantos was also very much a part of that legislative activity. Also want to thank Mr. Tom Kim for his tireless efforts in representing the Korean Embassy here in the United States. All of us know how hard Mr. Kim had worked to garner support for the passage of this legislation.

I especially commend Korea's Ambassador to the United States. He is actually a former Prime Minister, Han Duck-soo, for his leadership in resolving differences in getting the deal done. Also want to express my appreciation for Chairman Kim Seung-youn of the Hanwha Group who personally made the time to visit Washington and rally support for passage of the U.S.-Korean Free Trade Agreement. Once more, I thank you, Mr. Chairman, for holding this hearing and I look forward to hearing from our witnesses this afternoon.

Mr. MANZULLO. Thank you. Congressman Kelly, do you have an opening statement?

Mr. KELLY. I do, Mr. Chairman, and thank you for holding this hearing. First of all, I think the relationship between the United States and Korea could not be stronger. The Republic is so strong with us right now. We have one of the strongest relationships in that part of the world and I think the passage, of course, is a good example of how we are working closely and geopolitically, how important it is to the United States and the Republic, and, Mr. Kim, thank you so much for your tireless work on that. I appreciate it.

We also have another opportunity to strengthen our trade partnership and advance national security interest in the area of energy. In our second panel today, we are going to hear from the Westinghouse Corporation. I got to tell you, after 40 years of our really close partnership in nuclear energy, it is now time to renew our 123 Agreement with Korea to strengthen our cooperation in this area.

A solid 123 Agreement will create good jobs for Americans in a key industry. I am talking about red, white, and blue jobs. I am talking about evening the playing field for American energy companies that are competing with foreign companies and ensure American global leadership through energy exports with strong domestic energy companies such as Westinghouse. So, Chairman, I want to thank you. And again, this is very timely with Memorial celebrations in Korea.

And this is a partner. The Republic has been a partner with us since 1950 in every endeavor we have had militarily. They don't wait for the call, they don't wait for somebody to say, we need your help. They are there and they stay until it is over. So I want to

publicly thank you for that commitment and you need to get that same commitment back from the United States, and I think we can provide that for you. So, Mr. Chairman, thank you so much.

Mr. MANZULLO. Mr. Burton.

Mr. BURTON. Thank you, Mr. Chairman, and I, along with my colleagues, will congratulate Tom Kim for all of his hard work in regard to the relationship that we have with Korea. I don't want to be redundant, but a lot of my colleagues here are too young to remember the Korean War, but I remember it, and millions of people had to be killed, or wounded, or left their homes when the Communists invaded from the North, and when the Chinese then came in as well.

And we, along with the United Nations' allies, fought and made sure that South Korea remained free. And if you look at that country after the decades since the Korean War, you see what a great economic miracle that has taken place in South Korea and you go just north of there to North Korea, we were just up there on the 38th Parallel at Panmunjom just a couple weeks ago, and there is no comparison. It is just a disaster. You got a line here and on one side you have got complete poverty, and tyranny, and dictatorship, and on the other side you have got a miracle that took place since the war ended.

And as my colleagues both have had, or my others have said, they have been a friend and an ally forever. We value that friendship. We are committed and will remain committed, I hope, as an ally and a supporter of Korea to make sure that we don't see a revisiting of the Korean War. And I hope that 20, 25, 30 years from now our relationship has even grown stronger economically as well as militarily. So thank you, Mr. Chairman, for having this hearing and I really appreciate you yielding to me.

Mr. MANZULLO. Thank you. Mr. Royce.

Mr. ROYCE. Thank you, Mr. Chairman. I think all of us realize that South Korea has been a long ally, an important ally, for the United States and I think relations between our two countries stand to become even stronger as the benefits of KORUS, as the benefits of this trade agreement, are realized. I think passage of the legislation was historic and it is going to bring benefits to both the American and Korean economies. Unfortunately, it took years for the administration to act and that allowed the European Union to gain a foothold in the Korean market at the expense of U.S. businesses.

And I think that took away U.S. marketshare that won't be easily regained. But now that the legislation is in force, this is an important point. I would like to just speak for a minute about another important challenge and that is North Korea, because I think it is disappointing that we do not have a proactive policy to change the regime in North Korea. Success cannot be built on wishful thinking about a regime that has shown a desire only to extract concessions from us and from South Korea.

I think we need to make human rights a central part of our agenda. This committee is long focused on the atrocities carried out by the regime against its own people. We have heard from numerous North Korean dissidents who have told us of unspeakable cruelties that they have undergone themselves and I am glad that

South Korea has placed an even greater focus on North Korean human rights as was evidenced by the massive street demonstrations against China's repatriation of North Korean refugees.

Human rights needs to be a centerpiece of this alliance and we have yet to fully explore how we can push a human rights agenda formed together with our South Korean ally. I think working together with South Korea on this mission, given the suffering that is occurring in the North, is very important. I thank you and I yield back, Mr. Chairman.

Mr. MANZULLO. Thank you. Our first witness is Deputy Assistant Secretary James Zumwalt with the Bureau of East Asian and Pacific Affairs. He previously served as the Embassy Tokyo Deputy Chief of Mission. I met Jim in Beijing a few years ago at the home of the Ambassador, when Ambassador Kelly had just returned from the initial six party talks and briefed us there at that time. Mr. Secretary, we look forward to your testimony.

Your testimony and the written testimony of all the other witnesses will be made part of the record.

**STATEMENT OF MR. JIM ZUMWALT, DEPUTY ASSISTANT SECRETARY, BUREAU OF EAST ASIAN AND PACIFIC AFFAIRS, U.S. DEPARTMENT OF STATE**

Mr. ZUMWALT. Thank you, Mr. Chairman. I have submitted a written statement for the record. Mr. Chairman, Mr. Faleomavaega, members of the subcommittee, thank you for inviting me to appear before you today to discuss our relationship with the Republic of Korea. The alliance between the United States and the Republic of Korea remains a lynchpin of security and prosperity in Northeast Asia. This alliance has never been stronger. It has served us well in countering the threats from North Korea.

Before discussing our partnership with the Republic of Korea, I would note that the greatest challenge our alliance faces continues to be North Korea, and the United States is fully committed to the defense of the Republic of Korea, and we will continue to stand shoulder-to-shoulder in the face of North Korean provocation. We will continue to coordinate closely with the Republic of Korea and other allies and partners on North Korea policy.

We are committed to the de-nuclearization of the Korean Peninsula, but we also remain deeply concerned about the dire human rights situation in North Korea. And I agree with the members' comments that we need to work very closely with our allies on addressing North Korean human rights issues.

The U.S.-Republic of Korea comprehensive strategic partnership is based on our common values, our shared interests, and trust built up over decades of cooperation. Our common values of commitment to freedom, democracy, and the rule of law, along with the close ties between the Korean and the American peoples, form a foundation of an increasingly global partnership between our two great nations.

The Republic of Korea embraces its role as one of the world's wealthiest nations with the capacity and the responsibility to contribute to resolving global problems. The United States and the rest of the international community benefit from Korea's growing global leadership and engagement. Our bilateral ties are growing

and deepening. In the last 3 months, our relationship marked three major milestones.

The first, as many of you mentioned, was the coming into force of the U.S.-Korea Free Trade Agreement. The second was President Obama's third visit to Korea as President. And the third was the Republic of Korea cementing its status as a country with global interests when it hosted more than 50 world leaders for the 2012 Nuclear Securities Summit.

The United States and the Republic of Korea already enjoy one of the world's most vibrant economic relationships. The entry into force of the U.S.-Korea Free Trade Agreement will lead to even more trade and investment between our two countries. Extensive people-to-people relations, including robust flows of Korean travelers and Korean students to the United States, form a strong base for our bilateral relationship. Recent polling shows that 72 percent of Koreans hold favorable views of the United States and an even larger number see the alliance as strong.

In closing, I would like to mention that we announced yesterday that the United States will host the second ever meeting of our foreign and defense ministers in Washington on June 14th. This meeting will enhance our solidarity as our alliance takes on an increasingly global scope. This so-called two-plus-two dialog among Secretary Clinton and Secretary Gates, Korean Foreign Minister Kim Sung Hwan and Korean Defense Minister Kim Kwan Jin, will even further strengthen our alliance, advance our partnership on a broad range of global and regional issues, and enhance our close coordination on North Korea.

Thank you for inviting me to testify on this important topic. Congressional support for the Republic of Korea and for our alliance and partnership has been critical to the success of our relationship. I look forward to your questions. Thank you.

[The prepared statement of Mr. Zumwalf follows:]

**Testimony of James P. Zumwalt  
Deputy Assistant Secretary of State  
Bureau of East Asian and Pacific Affairs  
U.S. Department of State**

**Before the**

**House Committee on Foreign Affairs  
Subcommittee on Asia and the Pacific**

**June 6, 2012**

**U.S.-Republic of Korea Alliance**

The alliance between the United States and the Republic of Korea remains a linchpin of security and prosperity in Northeast Asia. It has never been stronger. This alliance has served well to counter the threats from North Korea. Our comprehensive strategic partnership is based on our common values, shared interests, and trust built up over decades of cooperation. Our common values of commitment to freedom, democracy, and the rule of law, along with the close ties between our peoples, are the foundation of the increasingly global partnership between our two great nations.

The bilateral relationship is constantly growing and deepening. In the last three months we have seen three milestones in our relationship: our bilateral free trade agreement (KORUS FTA) took effect, President Obama made his third visit to Korea since taking office, and on March 26-27 the Republic of Korea successfully hosted more than 50 world leaders for the 2012 Nuclear Security Summit, cementing its status as a country with global interests. In addition, Pyongyang's April 13 missile launch and the possibility of another North Korean nuclear test underscored the precarious nature of the security situation on the Korean peninsula and the continuing importance of our alliance to preserving peace and security in Northeast Asia.

The United States and the Republic of Korea already enjoy one of the world's most vibrant economic relationships. The entry into force of the U.S.-Korea Free Trade Agreement will lead to even more trade between our two countries. Vibrant

people-to-people relations, including robust flows of travelers and students, form a strong base for our bilateral ties. Recent polling shows that 72 percent of Koreans hold favorable views of the United States, and an even higher percentage rate the alliance as strong.

### **The United States/Republic of Korea Security Alliance**

The United States and the Republic of Korea (ROK) continue to make important strides toward fulfilling the 2009 Joint Vision for the Alliance statement set forth by Presidents Barack Obama and Lee Myung-bak. In the context of the United States' renewed commitment to Asia, the U.S.-ROK Alliance provides an anchor for peace and security in the region. The Republic of Korea has welcomed the increased U.S. focus on Asia, and the United States has welcomed growing Republic of Korea contributions to regional and global peace and security.

Our long-standing security alliance remains the basis of our truly comprehensive partnership. This alliance has not simply withstood the test of time. It continues to grow and evolve in order to meet all possible threats. We are working to implement key bilateral transformation agreements under the Strategic Alliance 2015 Plan (SA2015). Through SA2015, the ROK Joint Chiefs of Staff will assume wartime operational control of Korean forces in December 2015, and U.S. Forces-Korea will become the United States-Korea Command. The repositioning and consolidation of U.S. Forces-Korea south of Seoul through the Yongsan Relocation Plan and the Land Partnership Plan will reduce the number of U.S. installations and facilities, thereby increasing readiness and efficiency of U.S. troops while reducing their footprint in Korea's capital city.

### **Global Korea**

While in Seoul in March, President Obama acknowledged Korea's remarkable transformation and its expanding regional and international role in a speech to Hankuk University students by applauding Korea's "leaders -- public servants, diplomats, businesspeople -- who've helped propel the modern miracle that is Korea-- transforming it from crushing poverty to one of the world's most dynamic economies; from authoritarianism to a thriving democracy; from a country focused inward to a leader for security and prosperity not only in this region but also around the world -- a truly 'Global Korea.'"

The Republic of Korea is playing an increasingly important regional and global role. It successfully hosted the November 2010 G-20 Summit, the November 2011 Fourth High-Level Forum on Aid Effectiveness, and the March 2012 Nuclear Security Summit. Korea will also host the Winter Olympic Games in 2018.

The Republic of Korea embraces its role as one of the world's wealthiest nations with the capacity and responsibility to contribute to resolving global problems. The United States and the rest of the international community benefit from Korea's growing global leadership and engagement. For example, Korea stations over 1,200 troops overseas. It participates in counter-piracy operations in the Gulf of Aden. The Republic of Korea has deployed a Provincial Reconstruction Team to Afghanistan and is providing significant support to the Afghanistan National Security Forces. The Republic of Korea is a committed member of various international nonproliferation regimes, including the Proliferation Security Initiative (PSI) and the Global Initiative to Combat Nuclear Terrorism (GICNT). The Republic of Korea also is expanding its development assistance and boosting aid coordination with the United States. The Republic of Korea allocated 1.7 trillion won (USD 1.5 billion) for aid in 2011 and is on track to fulfill its 2008 pledge to triple its ODA budget to USD 30 billion by 2015.

### **Economic Issues**

The long-awaited entry into force of the Korea-United States Free Trade Agreement (KORUS FTA) on March 15 marked a major milestone as one of the most important achievements in the history of our bilateral relationship. KORUS is the most commercially significant free trade agreement the United States has concluded in 17 years. It is a cutting-edge agreement that will further bind our two countries together. The Republic of Korea is the fourth-largest economy in Asia, the thirteenth-largest in the world, and our seventh-largest trading partner. Our two countries already have one of the most vibrant trading relationships in the world, one that topped over \$100 billion in 2011. The FTA is expected to create significant export opportunities for both our countries – increasing goods exports by billions of dollars annually for both sides – and support tens of thousands of new export-related jobs both in Korea and the United States. The agreement immediately eliminated nearly 80 percent of Korean tariffs on U.S. consumer and industrial goods and will phase out most of the remaining tariffs over time. For agricultural products, over two-thirds of U.S. agricultural exports to Korea, by value, became duty-free upon entry-into-force.

However, KORUS is not just about strengthening U.S.-Korea economic linkages. It will deepen our political and strategic partnership with a key Asia-Pacific ally. A trade agreement between our two countries sends a strong signal of our commitment to East Asia. It enhances our credibility as Asian nations continue to pursue regional economic integration.

Both sides have been working closely together to smoothly implement the agreement. Last month, the United States Trade Representative Ron Kirk and Korean Minister for Trade Bark Taeho co-chaired the first meeting of the agreement's Joint Committee. The Joint Committee is the premier committee under the agreement, responsible for supervising its implementation, coordinating the work of its other committees, and resolving issues that may arise.

### **People to People**

#### Travel

The grassroots relationships between our two peoples have multiplied and prospered over the last decades. Last year more than one million South Korean travelers visited the United States, making Korea our fifth-largest source of overseas visitors. The Republic of Korea sends more students to study in the United States per capita than any other major country, ranking second overall. Last year 70,000 Koreans were studying in the United States, a compliment to the U.S. educational system and a vote of confidence in the future of U.S.-Korea relations. The Korea Work, English Study, Travel (WEST) program is one of our premier U.S.-ROK bilateral educational exchange programs, with more than 1,200 WEST participants since the program began four years ago. The WEST program provides an opportunity for qualifying university students from Korea to study English, participate in internships, and travel independently. We are also working to expand participation by North Korean defectors.

Approximately 120,000 Americans, both military and private citizens, reside in the Republic of Korea.

#### Accomplishments of Korean Americans

Since the first Korean immigrants to the United States arrived in Honolulu, Hawaii, on January 13, 1903, Koreans have made crucial contributions to America's prosperity, defended America's freedom, added their own unique qualities to America's culture, and distinguished themselves in academia, science,

medicine, business, and athletics. Today, there are more than two million Korean Americans in the United States. In 2005, Congress passed a resolution of support for Korean-American Day, to be held annually on January 13.

Over the past century, the Korean-American Community has grown and prospered and contributed much to the development of the United States. Americans of Korean descent are being elected to public office in increasing numbers, thus contributing to their communities and their country. Korean Americans have worked hard for the sustainable development of U.S.-Korea relations and continue their efforts to increase the strength and vitality of the partnership.

#### Yeosu Expo

The United States' presence at the Yeosu Korea 2012 Expo (featuring the theme "The Living Ocean and Coast") promotes close U.S.-Korean cooperation on environmental and economic issues of global significance. Because the U.S. Pavilion is funded entirely through private donors, our participation at the Expo will highlight one of the Department of State's successful public-private partnerships and underscore the role of economic statecraft in our foreign policy.

#### **North Korea Policy**

Let me turn now to the greatest challenge of our alliance – North Korea. The United States is fully committed to the defense of the Republic of Korea, and we stand shoulder-to-shoulder in the face of DPRK provocations.

North Korea's April 13 missile launch was in clear violation of the commitments it made in the February 29 Leap Day announcements, in which Pyongyang pledged to implement a moratorium on long-range missile launches, nuclear tests, and nuclear activities at Yongbyon, including Uranium enrichment activities. It also agreed to the return of IAEA inspectors to verify and monitor the moratorium of uranium enrichment activities at Yongbyon and confirm the disablement of the 5-Megawatt reactor and associated facilities. The United Nations Security Council issued a Presidential Statement noting the launch violated United Nations Security Council Resolutions 1718 and 1874 and tasked UN Sanctions Committee to designate additional entities and items for targeted sanctions.

We continue to coordinate closely with the ROK, allies and partners on North Korea policy. The United States and the Republic of Korea are committed to the denuclearization of North Korea. The United States is prepared to engage

constructively with North Korea, but its new leadership must understand that there will be no rewards for provocations and that engaging in provocative acts will only increase North Korea's isolation and the hardships endured by its people. The path towards prosperity and security is for Pyongyang to live up to its international obligations and commitments.

#### North Korean Human Rights

We remain deeply concerned about the dire human rights situation in North Korea. During the first speech in 19 years by a sitting U.S. President to the South Korean public, President Obama on March 16, 2012, directly called on North Korea's leaders to choose the dignity and welfare of the North Korean people over the pursuit of nuclear weapons. Special Envoy for North Korean Human Rights Ambassador Robert King raised human rights issues with North Korean officials during his May 2011 visit to Pyongyang, and we continue to call attention to specific DPRK human rights violations at the UN Human Rights Council and with bilateral and multilateral partners. The State Department provides over \$3 million in grant money to NGOs focused increasing access to information and improving human rights for the people of North Korea.

#### **The Alliance--Prospects for the Future**

The United States and the Republic of Korea's strong partnership is rooted in our legacy of sacrifice, our common values, and shared interests. From service members who fought and bled and died together for Korean freedom, to students and workers and entrepreneurs who work together to create economic prosperity, to millions of proud and patriotic Korean immigrants and their descendents who contribute so much to American society, our two nations and our two peoples have stood together for more than 60 years. The alliance between the United States and the Republic of Korea is stronger than ever.

Recent events in the bilateral relationship, from President Lee's state visit last October to the ratification of KORUS in March mark the beginning of a new chapter in our partnership. In the Republic of Korea the United States has a global partner that is embracing the responsibilities of leadership in the 21<sup>st</sup> century. As we move forward it is important for us to continue investing in this relationship. We must reaffirm the unbreakable alliance between the United States and the Republic of Korea. We will continue to work together so that our citizens – and people around the world – may live in security and prosperity.

Thank you for inviting me to testify on this important topic. Congressional support for the Republic of Korea and for our alliance and partnership has been critical to the success of our relationship.

I am happy to answer any questions you may have.

Mr. MANZULLO. Thank you, Mr. Secretary.

Could you inform us of the status of the administration's negotiations with South Korea regarding civilian nuclear cooperation and what happens if an agreement cannot be reached by 2014 when the current 123 Agreement expires?

Mr. ZUMWALT. As you mentioned, we are talking with the Republic of Korea about a successor agreement on civil nuclear cooperation and I agree with you that negotiating, successfully, a successor agreement is very critical and we share the desire to see a vibrant South Korean civil nuclear industry. And there are several reasons for that; one, of course, we want to see Korea's economy prosper, but also, the U.S. nuclear industry is very closely tied with counterparts in South Korea, so the success of South Korea's civilian nuclear industry is also a success for the United States.

And a good example of that was when South Korea successfully got a contract to export nuclear reactors in the Persian Gulf and that Korean proposal included many components manufactured here in the United States. So this was an example of how success in the South Korean nuclear industry really is a win-win; a win, also, for the United States. So we share that goal to negotiate a successor agreement that will lead to Korea's nuclear industry continuing to prosper.

We also, of course, and South Korea shares this concern with us, have concerns about proliferation of material that could be used in manufacturing nuclear weapons. So we are now in the process of negotiating an agreement that will meet both of these objectives at the same time. We are in the middle of a negotiation. I hesitate, a little bit, to answer your question about what would happen if we fail because we don't plan on failing. We plan on succeeding and I think, right now, all of our attention is on negotiating an agreement that will be a worthy successor to the agreement we presently have.

Mr. MANZULLO. Let me rephrase that second question. If the agreement expires on its own in 2014, what is the impact of that?

Mr. ZUMWALT. Yes. I think we agree that having a successor agreement is very important and so our intention on both sides, I think, is to negotiate so that we can have an agreement and we realize that time is short, so we need to work on this very closely. But success is very important to the United States and important to Korea.

Mr. MANZULLO. Congressman Faleomavaega.

Mr. FALEOMAVAEGA. Thank you, Mr. Chairman, and I want to thank you, Mr. Secretary, for your testimony this afternoon. It is quite obvious, Mr. Secretary, that we cannot talk about U.S.-Korean relations without also including North Korea. A couple of months ago we had a hearing on the situation dealing with North Korea. We had all kinds of experts that came and testified and how well they were very familiar with the situation in North Korea, and what we should do, and what the other countries should do, but no one ever mentioned the fact that maybe we ought to consult, also, with South Korea as part of the equation and the problems that we are faced with.

And let me ask you, Mr. Secretary, is the administration seriously consulting with South Korea on all aspects dealing with the Korean Peninsula?

Mr. ZUMWALT. Cooperation with regional partners is very, very important and I agree with you completely that it is very important for us to consult closely with South Korea, also with Japan, China, Russia, and other countries on North Korea. We do consult very closely, in fact, Chairman Manzullo, when you were in Seoul, actually, I was there as well with Ambassador Glyn Davies, our special envoy for North Korea, who was meeting in Seoul with Korean and Japanese counterparts for a trilateral discussion on what we should do regarding North Korea.

He went on to Beijing and then on to Tokyo as well. Ambassador Robert King, our Ambassador for North Korea human rights issues, was just in Brussels for meetings with friends on North Korea human rights issues and his counterparts from Republic of Korea, from Japan, and other places, had good discussions—

Mr. FALEOMAVAEGA. Mr. Secretary, I didn't mean to interrupt your statement, but I just want to cut to the chase of what I am trying to say expressing my sense of concern. There is a feeling amongst some of our Asian allies that we do things but sometimes they don't seem to be consulted fully as an equal partner in the process. I remember years ago when there was a big debate in the Philippines whether or not we should continue having Subic Bay and Clark Air Force Base, and guess what, the Philippine Senate decided not to have us around because they felt our real purpose for being in the Philippines was to provide the strategic and military capability to defend Japan and not necessarily the Philippines.

So I just wanted to get to that idea. Are we really serious in looking at South Korea as a co-equal partner in the process, and not only at our convenience, and not seriously as a co-equal? That is the basis of what I am trying to suggest to you or ask you here with this question. Are we serious? Is South Korea an equal partner in the process?

Mr. ZUMWALT. Thank you for that clarification. I agree with you that we need to consult very closely with our friends and counterparts in the Republic of Korea about North Korea policy. The next opportunity for us to do so will be next week when the Korean foreign and defense ministers come to Washington for meetings with Secretary Clinton and Secretary Gates. And one of the main things we will be talking about is our policy—

Mr. FALEOMAVAEGA. Secretary Gates? Is he still—

Mr. ZUMWALT. Sorry. Excuse me. Secretary Panetta. Excuse me. So that will be the next opportunity for us to have these consultations. But I agree with you completely that full and complete consultations with our counterparts in the Republic of Korea is very important as we address North Korea.

Mr. FALEOMAVAEGA. The question about the six party talks, and quite obviously, it hasn't gotten anywhere. Do you think that perhaps the negotiation process should actually involve China, the United States, North and South Korea? Why is Japan and Russia included in the process? Do they have a, literally, direct interest in this process? It seems to me that North Korea really wants to deal

more with China and the United States, and as well as with South Korea. Why include Russia and Japan in the process?

Correct me if I am wrong, but would you say that the six party talk has been a failure? Why do we continue if it is a failure?

Mr. ZUMWALT. I think we are all very frustrated with our lack of progress in talking with North Korea about seeking a different path, but we remain determined. If North Korea chooses a different approach, we remain prepared to engage with North Korea. But really, the problem is not Russia or Japan, or including certain people, the problem really has been in North Korea. And so I think our attempt has been to engage regional partners—

Mr. FALEOMAVAEGA. Mr. Secretary, I hate to interrupt you. My time is about ready to go and I just want to say to the chairman as a matter of observation. How do you de-nuclearize a country that is already nuclear? I just want to leave that with question. Okay? Because my time is up. I am sorry. I yield back, Mr. Chairman.

Mr. MANZULLO. You are not going to attempt to answer that question, so I will go on to Congressman Kelly.

Mr. KELLY. Thank you, Chairman. Mr. Zumwalt, I know the implementation of the course was a big accomplishment. I think it took much too long, but we can't do anything about what happened before. So the implementation right now, is it going smoothly and is it improving the relationships that we needed to have with the Korean people?

Because I know in the elections, it hurt the conservative party, the fact that we couldn't get there quicker to the agreement, and so since the implementation now, just kind of give us a thumbnail sketch of what you see happening and the State Department working with South Korea to make sure that we get the maximum benefit for both countries out of that agreement.

Mr. ZUMWALT. I think implementation of the U.S.-Korea Free Trade Agreement is a very important issue going forward because we want to make sure that both sides get the benefits that were promised from this agreement. We have a system setup whereby there is an oversight committee looking at problems with implementation and the first meeting of that, which was chaired by U.S. Trade Representative Kirk here in Washington, occurred just last month.

And actually, this week, we have three committees looking at various issues regarding implementation. All reports are, so far, the implementation is going well. But another issue in addition to implementation, obviously, is making sure that the benefits of the agreement are understood by the business communities in both countries. And so one other area we want to work on very closely is making sure that U.S. companies understand the benefits and can take advantage of the benefits that KORUS implementation will make available to them.

Mr. KELLY. And I understand the relationship we are developing. Is there anything else you think we can do? Is there anything that State Department is looking at? Anything else, other than what you have already talked about? I know that that was a tough hurdle to get over and really, it was our dragging our feet on it that caused the problem in the Republic. So I like the fact that we the

have open dialog, but the opportunities are really off the charts for job creation in both countries and that region of the world.

It is just really, with a lot of emerging economies, we have a tremendous opportunity right now.

Mr. ZUMWALT. I agree with you. We do have a tremendous opportunity. Another area where I think the U.S. economy will benefit is, I think we will be successful at attracting additional investment into the United States because of the additional opportunities that KORUS provides. I was just talking with a third-country company and they are investing in pork production in the United States, partly to export to their home market, but also, they see the benefits of KORUS, and see, potentially, the U.S. as a place from which to export to Korea as well. So I think there will be benefits, also, in the area of investment as well as trade.

Mr. KELLY. Okay. Excellent. Thank you. I am going to yield back, Mr. Chairman.

Mr. MANZULLO. Thank you. Mr. Burton.

Mr. BURTON. You know, I sometimes wonder why we even talk to these guys. We talked years ago with Mengistu in Ethiopia, I don't know if you remember him or not, and we sent truckloads, tons, and tons, and tons of food, and he couldn't distribute the food to the people who were starving to death there. Well, he could, but he didn't. So because he couldn't distribute it the way he wanted to, we gave him the trucks to distribute the food, and then he sold it, and the people just starved. You can't trust these tin-horn dictators.

And what really bothers me about our negotiations with South Korea is like that—or North Korea rather, this food aid program that we had last year. It smacks of the same thing. You give them the food aid, and it goes through the government, and Lord only knows where it goes; certainly, probably doesn't get to the people it is intended to help. And these negotiations with them really bothers me.

You know, back in the Clinton administration, we negotiated with them on some nuclear reactors and they were going to curtail their nuclear program and they didn't. They lied again. And we keep negotiating with them. I just don't understand it. It seems like we ought to draw a line in the sand and say, this is it. We are not going to negotiate anymore. Here is what you got to do and if you don't want to do it, you know, you take the initiative and we will respond, and we will respond very strongly.

But it seems like that is the way politicians and leaders do anymore. We negotiate, negotiate, negotiate, like Chamberlain, until something like 50 million or 60 million people get killed, then we say, oops, we made a little mistake there. You can't negotiate with these dictators; these tyrants. You got to let them know that you are not going to go any further with them.

And then North Korea, with their new constitution, this revised constitution which proclaims their country as a nuclear armed nation. They no longer try to veil it. They are now saying, we are a nuclear armed nation. So this facade that we have dealt with all these years that they were going to start cutting back on their nuclear program was just a wasted amount of time.

So let me just ask one question, I don't have a lot, I have already got my opinions made, so you are not going to change them, I don't think. I don't like those Communists. I never have. I think they destroy everything, but have we thought about, and some people have talked about this, or have we talked to anybody in the South Korean Government about us putting some of our nuclear weapons on the South Korean Peninsula as a deterrent, under our control, or have we negotiated with them at all in their potential ability to develop weapons of their own?

I just like to know what the administration's position is on that and what you think about it.

Mr. ZUMWALT. Thank you very much and I realize I may not change your mind, but I would agree with you that we don't want to talk to North Korea just for the sake of talk. And so, unless we see a change of policy on the part of North Korea, we are not interested in negotiations just for the sake of a negotiation. So I would agree with that comment. Concerning the deterrent, one of the purposes of our alliance is to deter North Korean provocation. And obviously, the deterrent that we provide, including the full range of possibilities on the part of the U.S., is very important to us.

I don't believe we have had discussions about nuclear weapons on the Peninsula because I think the deterrent and the commitment we have made to South Korea is very clear, and we are able to meet our security alliance commitments with the present array that we now have. Thank you.

Mr. BURTON. Make one more comment real quick. We have been talking to, off and on, the tyrants in Tehran, and it isn't working, and it is not going to work. They just buy more time. And I can't remember any place where we worked and talked with tyrants we ever achieved a great deal and I don't think we are going to there either. I think at some point you have to show strength and just say, hey, that is it. You want to mess with us, you are going to be in big trouble. I know that is a hard line and I know that most people wouldn't agree with that.

I mean, you have got to be diplomatic. I just don't think it is going to work.

Mr. MANZULLO. Mr. Royce.

Mr. ROYCE. Thank you, Mr. Chairman. One of the things that is changing in North Korea are the attitudes of people as a result of watching the DVDs, this influx of DVDs that you have heard about, and that brings up this issue of public diplomacy. As people watch these South Korean DVDs, we already here the reports from studies that show the North Korean Government now has to back away from the—you know, they say, well, you live in a worker's paradise and everything is really, really bad in South Korea.

And now, people know that that is the opposite of being true. They know that things are really rough. I have been in North Korea. Things are really rough in North Korea, but in South Korea, the standard of living is quite high. And so it shatters the myth and this gives people second thoughts about the regime they are living in. And they are also, of course, learning about what is going on in China, the changes in China, but the hermit kingdom is not going through any of this.

How can we better use technology to bring information to North Koreans? I know that Lech Walesa and Vaclav Havel both said that it was the radio broadcasts that they and their people were listening to in Poland, in Czechoslovakia, that created this change in attitude where, after some months of sort of changed approach that occurred under the Reagan administration, the reports back that I have gotten from those that were involved at the time were that, people just changed their attitude, and it was time for change, and time for evolution. How do we tap into that?

Mr. ZUMWALT. I agree with you that the more contact that citizens in North Korea have with the outside world, the more likely that you will see change occurring. You had mentioned the advent of DVDs and people watching DVDs. I think two other noteworthy developments are the increase in the use of cell phones, some of which have some contacts with ethnic Koreans living in China, for example. And the other important vehicle may be medium-wave radio broadcasting and—

Mr. ROYCE. And RFA and VOA, we need to do more in terms of medium-wave and we need to be a little more provocative, because if you will notice, we changed our approach in Eastern Europe when we decided it was time to really let people know the truth about what was going on and to try to change those regimes.

And with all the information we are getting from defectors now about conditions in the concentration camps, or work camps, whatever you want to call them, getting that information about the regime in real time, and the mistakes being made by the regime, as kind of a surrogate news broadcasting service, is really crucial in terms of waking people up about the conditions they are living under, and the opportunity to change those conditions.

I am not just talking about people who are farmers. It has a marked impact on civil service and on the military. I have talked to colonels who have defected and senior civil service who have defected as a result of listening to these broadcasts. But it takes a certain change in attitude about what we are going to be willing to push and it takes using ex-pats from North Korea and getting them, like Mr. Shin, up on the air talking about what they have experienced and contrasting that with what they are seeing with their eyes in China and South Korea today in order to get people to recalibrate their thinking. Could more of that be done?

Mr. ZUMWALT. I think you point out a very good opportunity, both government broadcast, like VOA, but also, as you point out, they are in South Korea. There are many non-governmental organizations who are also doing broadcasts about information from North Korea. And so I think both of those avenues are very important and things that we should continue to support.

Mr. ROYCE. And how could you help advance that?

Mr. ZUMWALT. I think, obviously, that is a very important area that we need to consider how we can advance more because I do think that radio broadcasting is one of the most promising channels for getting more information to people inside North Korea.

Mr. ROYCE. Yes. Maybe we can talk later about some additional ideas. Maybe you all could come up with some. Maybe go back and talk to some of the people that handled Eastern Europe, and see how they did it, and come up, maybe, with a little bit more aggres-

sive plan for communication with people, and for more DVDs; ways to get those into the country in order to enlighten people in North Korea. Thank you very much, Mr. Chairman. I yield back.

Mr. MANZULLO. Thank you, Mr. Royce. Thank you, Secretary Zumwalt; I appreciate it.

If we could have the staff get the next three witnesses and while they are being seated I am going to read their biographies. Dr. Victor Cha is Director of Asian Studies, holds the D.S. Song Chair in the Department of Government and School of Foreign Service at Georgetown University. In 2009, he was named as senior advisor and the inaugural holder of the new Korea Chair at the Center for Strategic and International Studies in Washington.

He left the White House in May of 2007 after serving as Director for Asian Affairs at the National Security Council since 2004. At the White House, he was responsible, primarily, for Japan, the Korean Peninsula, Australia, New Zealand, and the Pacific Islands national affairs. Dr. Cha is also the Deputy Head of Delegation for the U.S. at the six-party talks in Beijing and received two outstanding service commendations during his tenure at the NSC.

Mr. Dan Lipman assumed his position in September 2009 as senior vice president of operation support at Westinghouse Electric Company. He's responsible for corporate operating groups, which includes the global supply chain, quality assurance, and continuous improvement, IT, corporate strategy, risk management, environmental health and safety, sustainability, and anything else that has to be done at Westinghouse. From 2005 to 2009, Mr. Lipman served as senior V.P. of nuclear power plants, responsible for managing the global deployment of new power plants. He has served as president of Westinghouse Asia, with regional duties for China, South Korea, and Taiwan.

Dr. Mark Peters is the deputy laboratory director for programs at Argonne National Laboratories. His responsibilities include management and integration of the lab's science and technology portfolios, strategic planning, the Laboratory Directed Research and Development program, and technology transfer. His duties also include technical support to the Department of Energy Fuel Cycle R&D Program, where he was previously national technical director for used fuel disposition.

Prior to his current position, Dr. Peters served as the deputy associate lab director for the Energy Sciences and Engineering Directorate. The responsibilities of this position included the management and integration of the lab's energy R&D portfolio.

We are going to start with Dr. Cha. Dr. Cha, I understand you have a train that leaves at 4 o'clock, and so any time that you want to leave to catch that train you can feel free to get up and leave. How does that sound? Go ahead.

**STATEMENT OF VICTOR CHA, PH.D., SENIOR ADVISER, CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES (FORMER DIRECTOR FOR ASIAN AFFAIRS, NATIONAL SECURITY COUNCIL)**

Mr. CHA. Thank you, Mr. Chairman. Mr. Chairman, Mr. Faleomavaega, members of the committee, it is an honor to be here with you today. I have submitted a statement for the record and

I will offer a brief summary of my remarks. I have testified before this committee before, and I would say without hesitation, the challenges of dealing with Korea remain quite difficult. But in terms of the alliance, which we are here to talk about today, as you have said, it is at an all-time high. The relationship between the Presidents could not be any better.

The tone in the relationship is very good, but it is not just the personalities that are involved, it is the issues. South Korea has really stepped up to be a global player, whether the issues have to do with climate change, or non-proliferation, or overseas development assistance. Korea has really become a big player and that has been very important for the overall relationship. The North Korea threat has also brought the two leaders much closer together and the two governments much closer together.

With regard to the future, I would hazard a guess as to say that, you know, with elections, we have elections here, but there are also elections in Korea. Congressman, you were there a couple of weeks ago and saw what the atmosphere was like over there; quite intense politically. But I think in terms of the overall alliance relationship, it is going to be okay. I think the outer bounds, whether it is the progressives or the conservatives that get elected, the outer bounds of the agendas in which the two sides could go, I think, has narrowed quite a bit and moved much more to the center.

The tone won't be as superlative as it is today and I think that is just politics. As a new administration comes in they are going to want to distance themselves from the previous administration, so the tone will go back to normal, but overall, I think it will be okay. Having said this, I do think we need to think about a new framework for the alliance as we go forward.

I was in Seoul a couple of weeks ago, as you were in Seoul a couple of weeks ago, and the South Koreans were pressing on issues, but they are outside of a broader framework. And I think we really need to think about the broader framework as we contextualize these different negotiations. So what I would offer; three things.

The first is, I think we need to think about this alliance in terms of its global scope. The U.S. and Korea not only deal with issues on the Peninsula, they operate in the world globally, and both of them contribute to the public goods of the international system, whether that is climate change, G-20, nuclear security, proliferation security initiative, all these sorts of things, Korea and the United States are working together. And I think it is in this context that they should work together and think about how they can, together, help to promote a global civil nuclear energy regime that is transparent, that is accountable, but one in which South Korea can be a leading supplier of global nuclear energy.

Second would be the regional role. And here, the alliance and its main mandate is try to shape a region in which China will make the right choices. South Korea, in many ways, is the frontline state. It is the only real ally of the United States that is connected to the continent and Asia has always been a maritime relationship and a continental relationship. And Korea has always been sort of the frontline continental state for us. In that sense, it is critical. And so I think in this regard, it is very important for the United States

and Korea to work with Japan, the three countries together, in terms of shaping an environment that helps to make China make the right choices.

Specifically here, more cooperation between Japan and Korea on certain security agreements that they are now working on, a military information sharing agreement, and a couple of other agreements that should be finished, because I think that is good for both countries as well as good for the United States.

Finally, the third aspect would be the Peninsula scope of the alliance. And here, the critical issue, of course, is how the alliance deals with a nuclear North Korea. It is a U.S. responsibility that as it goes through military transformation on the Peninsula, to create a force presence and an alliance that fits with dealing with the new challenge of a nuclear North Korea. And again, it is in this context that I think the United States and Korea should look at the NMG, the new missile guidelines, and come up with a solution that will help to enforce and ensure deterrence on the Peninsula to deter a nuclear North Korea. Thank you very much.

[The prepared statement of Mr. Cha follows:]

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TESTIMONY OF DR. VICTOR D. CHA  
 PROFESSOR OF GOVERNMENT, GEORGETOWN UNIVERSITY  
 SENIOR ADVISER, CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES  
 BEFORE THE UNITED STATES HOUSE OF REPRESENTATIVES, COMMITTEE  
 ON FOREIGN AFFAIRS, SUBCOMMITTEE ON ASIA AND THE PACIFIC  
 JUNE 6, 2012

Chairman Manzullo, Congressman Faleomavaega and members of the committee, it is a distinct honor to appear before this committee to discuss the challenges on the Korean peninsula.

I have testified before this committee in the past and I can say without hesitation that the challenges of dealing with North Korea, while advancing our alliance with South Korea, are more multifaceted and more complex. Allow me to offer some thoughts on how to strengthen the U.S.-ROK alliance.

*How do we strengthen the U.S.-ROK alliance?*

There is no denying that the U.S.-ROK relationship is at an all time high. At a personal level, the chemistry between the two leaders, Barack Obama and Lee Myung-bak is very good. One can never underestimate the influence that this has on the overall tone of a relationship. When I worked at the White House, Presidents Bush and Roh Moo-hyun did not share the same chemistry, and while we probably reached more agreements during that period than any other in the history of the alliance (e.g., Iraq/Afghanistan deployments, KORUS, Visa Waiver, WEST program, NATO-plus-three status), the tone of the relationship was always a bit discordant as the two leaders had differing ideologies and incompatible personalities.

But it is not only personalities that have contributed to the relationship. The Lee Myung-bak government's globally-oriented outlook has mattered greatly to an Obama administration that has been looking for allies to step up and to burden-share. When European countries shied away from the U.S. calls for help with the surge in Afghanistan, Korea sent a provincial reconstruction team of 100 civilians and 35 police officers and a military detachment of 320 troops (currently 336<sup>1</sup>) to Parwan Province in June 2010.<sup>2</sup> When others balked at the U.S. agenda for climate change at Copenhagen, Korea supported the American position and unilaterally voluntarily pledged to reduce its own

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<sup>1</sup> ROK, Ministry of Defense, International Peacekeeping Operations  
[http://www.mnd.go.kr/mndEng\\_2009/DefensePolicy/Policy12/Policy12\\_2/index.jsp](http://www.mnd.go.kr/mndEng_2009/DefensePolicy/Policy12/Policy12_2/index.jsp).

<sup>2</sup> ROK, Ministry of Defense, Q&A: Troop Deployment to Afghanistan, 3 Mar 2010.  
 <[http://www.mnd.go.kr/mndMedia/mndNew/foreignDispatch/20100303/1\\_11640.jsp?topMenuNo=1&leftNum=7](http://www.mnd.go.kr/mndMedia/mndNew/foreignDispatch/20100303/1_11640.jsp?topMenuNo=1&leftNum=7)> ROK, Ministry of Defense, International Peacekeeping Operations  
[http://www.mnd.go.kr/mndEng\\_2009/DefensePolicy/Policy12/Policy12\\_2/index.jsp](http://www.mnd.go.kr/mndEng_2009/DefensePolicy/Policy12/Policy12_2/index.jsp).

carbon emissions 30 percent by 2020.<sup>3</sup> When the financial crisis led countries to question whether the U.S. model should be replaced by the “Beijing model,” Korea was one of the first economies to recover and trumpet the virtues of an open market economic model. The ROK has hosted the G20 summit, the nuclear security summit, and in 2018, it will host the Winter Olympics – the first Asian country to do so since Japan in February 1998. The ROK is the first international aid recipient to become a major provider of overseas development assistance, with Afghanistan as its top aid recipient. Like the United States, it has created a Peace Corps of over 4,000 young men and women serving everywhere from Central Asia to Southeast Asia. The platitudes go on. A White House reporter once asked for my input on a story she wanted to write about how Obama admired Korea so much that his constant references to the country in his domestic policy speeches meant that he secretly wanted Americans to adopt the Korean work ethic (I do not know if this reporter ever managed to get her editor to approve such a piece).

Other external factors have contributed to the strength of U.S.-ROK ties. North Korea’s belligerence – in the forms of the missile and nuclear tests of 2009, the Cheonan sinking and artillery shelling of 2010, and the missile test of April 2012 – has helped to bring the two allies closer. Japan’s inward turn as a result of domestic political changes and the March 2011 triple disaster constituted the biggest strategic surprise for the U.S. in Asia, and this unforeseen stepback by the traditionally key U.S. ally in Asia has also helped upgrade the U.S.-ROK relationship.

#### *The Next Korean Presidency*

Contrary to popular expectations, I do not think the presidential elections in South Korea (or here for that matter) will have a dramatic impact on the U.S.-ROK alliance. Whether the Korean people elect a conservative or progressive to occupy the Blue House, we can expect to see two trends with regard to the alliance. First, the tone of the relationship, while positive, will “normalize” to an extent, absent the string of superlatives used to describe the relationship today. This is the natural course of politics as the successor in Seoul will want to show a degree of distance from the predecessor’s policies. A little more talk about a balanced relationship. Perhaps a little more outreach to China, but not a major turn in strategy that we saw, for example, under Roh Moo-hyun. Even progressives in Korea are aware of the public’s general affinity for the alliance. Recent polls by the Asan Institute show 7 out of 10 Koreans holding a favorable view of the United States and 75 percent believing the alliance must remain even after reunification.<sup>4</sup> Moreover, they have learned from the examples of Roh in Korea and Hatoyama in Japan to strike a more centrist course. Thus, we may see a change more in tone than in strategy.

Second, a new administration in Korea is likely to attempt a bit more outreach to North Korea than the perceived hard line position of Lee government. This is not a return to

<sup>3</sup> Johnson, Toni. “Copenhagen’s Many Agendas. Council on Foreign Relations. 4 Dec 2009. <<http://www.cfr.org/climate-change/copenhagens-many-agendas/p20906#p13>>

<sup>4</sup> Karl Friedhoff, *South Korea 2011: The Asan Institute’s Annual Survey* (Asan Institute, 2012), pp. 12-13.

unconditional engagement of the sunshine policy, but even the conservative candidate, Park Guen-hye, has evinced a shade more flexibility in her approach to the North. But these sorts of changes are manageable as long as there is adequate consultation between Washington and Seoul immediately after the elections and through the transition periods in both capitols.

*A New "Next-Level" Strategic Framework*

What is missing today from the alliance, however, is a broader strategic framework. This is understandable because when one reaches the end of an administration, as we have in both Seoul and Washington, the relationship boils down to issues and tactics, not strategy. Thus, during my trip to Seoul last week, senior ROK officials, as well as presidential candidates, incessantly pressed their points on specific issues including missile range guidelines and the 1-2-3 negotiations. These are difficult negotiations. They have been out of the public eye here in the United States. And up until recently, the same had held true in Korea. However, after the North's April 2012 missile launch, President Lee publicly stated that the ROK needs its own longer-range missiles. National Assembly members have called for the same, as well as the reintroduction of tactical nuclear weapons to Korea. A surprising 63 percent of South Koreans support the indigenous development of nuclear weapons in response to North Korea's nuclear weapons status.<sup>5</sup>

The missile guidelines and 1-2-3 negotiations have the potential to inflame anti-American sentiments in Korea, particularly if they are framed by wily politicians as "sovereignty" issues in which the U.S. is portrayed as heavy-handedly trying to stop the ROK from acting in its own self-defense. Yet, trying to bulldoze through on such negotiations will meet with strong resistance on both sides as working-level U.S. and ROK officials stand nose-to-nose refusing to yield an inch and essentially waiting for the other's time in office to run out. Meanwhile, resentments on both sides grow and leave the incoming governments to be elected in November and December 2012 respectively with a depleted reservoir of good will upon which to build.

One cannot make progress on these or other issues unless we embed them in a broader strategic framework designed to take the U.S.-ROK alliance to the next level. Some on the ROK side argue that Seoul has been a good ally of the U.S. on everything from Afghanistan to climate change, and therefore is deserving of some reciprocal treatment. Some on the U.S. side argue that these negotiations are of such consequence that they cannot be simply traded as chips for an ally's good behavior, and instead must be treated with the strictest objective guidelines. The gap will not narrow unless we conceive of a broad strategic framework in which to think about the future U.S.-ROK alliance. In my opinion, three broad propositions inform such a framework.

**Global Scope – Public Goods providers**

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<sup>5</sup> Ibid., p. 10.

The first proposition to take the alliance to the next level would be to conceive of it as having a global role. What this means is that the U.S. and ROK must continue to expand the scope of this relationship by joining forces as public-goods providers in the international system. Whether the issue is overseas development assistance, peacekeeping, climate change, G20, nuclear security, PSI, or missile defense, the U.S.-ROK alliance plays or could play prominently in all of these issue-areas. On more issues than not, Seoul stands squarely with Washington, and is a critical Asian player operating with the U.S. on a global stage. While it has not displaced Japan, Seoul has been an extremely relevant, active, and ambitious actor that could handsomely complement Japan's role.

What does this public goods role for Korea mean for the United States? It suggests that with Korea, we can help to ensure compliance with existing international norms as well as to create new ones concordant with our national interests.

One example of this might be in civil nuclear energy. As CSIS President John Hamre has argued, the United States increasingly will recede as a global player in the nuclear energy field. As we reduce our footprint in this area, China, Russia, and other countries in Asia are likely to become the dominant actors. If we are to have any impact on the rules governing safeguards, transparency, and nonproliferation in the future commercial nuclear energy regime, then it is in our interest to find partners to work with like Korea. Japan was one of those partners, but after Fukushima, its future role in global nuclear energy will dissipate. One way to accomplish this might be to have countries like Korea stand as shining examples of full-nuclear fuel cycle states that meet the highest nonproliferation standards of international transparency and compliance. Otherwise, the future of nuclear energy will be left to suppliers like China and Russia who will not hold the same standards of compliance. While this would be a controversial decision on the U.S.-side, it would require a decisional framework that steps out of the reflexive counterproliferation mode, and looks to partner with Korea and others to define the rules of the future civil nuclear regime. On Korea's part, this would require a more realistic negotiating position, rather than the current demands for unconditional reprocessing rights. It would also require much greater international transparency from the nuclear agencies in Korea.

### **Regional Scope – Shaping China's Rise**

The second proposition that informs a new strategic framework would be to view the alliance as a critical cornerstone of democracy and peace in Asia. The U.S.-ROK alliance is an indispensable, indeed, critical piece that plays in the shaping of China's peaceful rise. In one sense, Japan's role is presumed to be with the U.S. in such an effort as a fellow maritime power in Asia (with the U.S. and Australia). But Korea, as a continental state, is the critical case. As Nick Eberstadt once aptly noted, Korea is the cockpit of Asia -- the way in which it aligns will shape the geostrategy of the region.

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How does this broad notional thinking impact current policies? Koreans are always wary of becoming entrapped in a Sino-American competition, and therefore they balk at concepts like “strategic flexibility” which allow U.S. forces to flow off the peninsula to other contingencies in the region. But one area where the regional shaping concept suggests better policies on the part of Seoul is on security ties with Japan.

*U.S.-Japan-ROK Trilateralism*

The Korean Supreme Court’s ruling two weeks ago on the legality of claims by Korean victims of Japan’s labor conscription policies during World War II is certain to complicate the already complex relations between the two East Asian neighbors. But before every politician on the peninsula jumps on the “bash-Japan” bandwagon, serious thought must be given to the importance of stable Seoul-Tokyo relations for the ROK’s well-being.

Japan comprises a critical part of any answer to the strategic question of how South Korea should deal with the rise of China. This is because China’s treatment of Korea will always be determinative of Korea’s relations with its two key regional partners, Japan and the United States. Contrary to the popular view that Korea must avoid too close a relationship with its two democratic friends in Asia for fear of alienating China, Beijing’s respect and treatment of Seoul heightens when the latter is not feuding with its traditional allies. To put the algorithm simply: Strong US-Japan-ROK ties enhance Seoul’s leverage in dealing with China. Weak ties only give China more leverage in dealing with its smaller neighbor to the South.

Opportunities to improve relations are truly afoot. Seoul and Tokyo have completed negotiations on two key security agreements: the General Security of Military Information Agreement (GSOMIA), and the Acquisition of Cross-Servicing Agreement (ACSA). GSOMIA would allow Seoul and Tokyo to systematically share intelligence on DPRK. ACSA would promote the sharing of military supplies and services between the two countries.

These agreements undeniably benefit Korea, but they are being held up in part because of concerns about historically-motivated political opposition to Seoul’s conclusion of security agreements with its former colonial oppressor. Delaying these further is ill-advised. The current government cannot run for office again, so the domestic politics of these agreements, though painful, have no lasting political consequence. And both agreements would help to enhance deterrence against future North Korean provocations. Seoul should also drop its opposition to establishing a trilateral secretariat for U.S.-Japan-ROK relations. Such a secretariat would not be simply to copy the creation of the Korea-Japan-China office, but would represent an important institution for furthering coordinated trilateral alliance cooperation that builds on GSOMIA and ACSA. Moreover, with OPCON transfer approaching in three years, coordinated trilateral relations will become more important to formalize.

Koreans will dislike Americans pushing these recommendations, but the Japanese bureaucracy's incredibly incompetent ability to finesse, even a little, historical irritants like textbooks, Tokdo, or comfort women should not stand in the way of a rational calculation of U.S. and South Korean interests.

### **Peninsular Scope: Enhancing Nuclear Deterrence**

So two legs of the U.S.-ROK strategic alliance are global (public goods provision) and regional (shaping China's rise). The third leg relates to defense and security on the peninsula. Here, the new operational strategic concept should be to adjust the military alliance such that it can deter a nuclear North Korea. With Pyongyang's announcement last week in their constitution that the DPRK is now formally a nuclear weapons state, the alliance can no longer live with the fiction that denuclearization is within reach once we get back to the Six Party talks. The last round of these multilateral talks was in 2008, effectively rendering them not dormant, but dead. While diplomatic efforts should continue, the real task in the alliance is retooling the relationship to ensure effective and stable nuclear deterrence.

One element of this would be to engage in serious discussions about extending ROK missile ranges. The ROK has been pushing hard to extend their missile ranges beyond a U.S.-ROK 2001 bilateral agreement to adhere to the MTCR guidelines of 300 km or 183 miles. Given the DPRK's efforts to develop missiles ranging as far as 2500 miles, the Lee government wants a revised agreement that would permit development of longer-range (800-1000 km) missiles. Such an agreement solely on missile ranges would not, however, enhance deterrence without a ROK commitment to strengthen intelligence surveillance and command and control systems as the alliance prepares for OPCON transition in 2015. Seoul's comprehensive commitment to missile defense as well as an agreement on joint operational guidelines for a new missile force would also be critical to enhancing deterrence.

There are other unorthodox elements of a new deterrence strategy. One would be to engage the DPRK in a serious discussion about nuclear deterrence. The point here would be to convince the North that they are in the worst of two worlds with their handful of weapons. First, this cache, absent a demonstrated long-range missile reentry capability, and any evidence of warhead miniaturization, does not come close to the definition of a credible nuclear deterrent. So they get no added security from these weapons. And second, Pyongyang's mistaken belief that they have a credible deterrent can get them into deep trouble. The recent string of unprecedented provocations against the South in 2010 gives one the uneasy feeling that Pyongyang may believe that they are invulnerable to retaliation given their nuclear capabilities. This erroneous belief is a recipe for escalation as Seoul is determined to respond militarily and lethally to the next provocation. Responsible parties need to sit down with the North and explain the ABCs of nuclear deterrence, just as we did with the Soviet Union at the beginning of the nuclear era.

Another area of engagement with the DPRK might be on nuclear safety. The nuclear meltdown that took place in Fukushima, Japan was at an old but relatively safe complex by international standards. By contrast, the Yongbyon nuclear complex in North Korea is anything but safe. The IAEA almost one decade ago deemed North Korea nuclear facilities, radiation shielding systems, cranes, and waste disposal sites as seriously defective, but has been unable to implement any safeguards measures in recent years. Construction practices at both the old plutonium complex and at the modern centrifuge enrichment facility revealed by the North Koreans in November 2010 are not compatible with international reactor safety standards, according to an American scientist who visited the site. One nuclear expert, who now serves in the Obama administration, stated after a 2007 visit to Yongbyon that the levels of radioactive contamination leaking at the site because of past operations and poor upkeep would force its closure in any state in the United States. North Koreans admit to South Korean nuclear experts that their design team for the new LWR is composed of young engineers trained in the DPRK who learned by “trial and error.” Experts at the Nautilus Institute cite the locating of spent fuel rods near the reactor cores or inside reactor secondary containment buildings as an incredibly dangerous design flaw and contributing factors to a possible meltdown scenario. North Korea’s unreliable power grid has also been shown to be an identified pathway that could lead to accidental crash shutdowns for nuclear power generation.

Engaging in a discussion on nuclear safety would be in the interests of all parties. Reactors and their related facilities in North Korea need to be made safe before they can be safely dismantled. The last safety management training session for DPRK officials by international experts took place in July 2002. Disasters, either man-made or natural, of much lesser magnitude than the Fukushima tsunami and earthquake, could result in an unstable nuclear complex. A meltdown at Yongbyon, though smaller than the Fukushima-Daiichi complex, would have broader implications by virtue of the plant’s proximate location to the Asian mainland.

Finally, a third avenue of engagement relates to energy. What the DPRK has wanted in the past two nuclear agreements is light water nuclear reactors. The 1994 agreement promised them two and started a process to build them. The 2005 agreement followed the spirit of the previous agreement. In the aftermath of Fukushima, light water reactors should not be in North Korea’s future. They were never a viable energy source for the North (it would take two decades to build the necessary power grids to avoid a meltdown), and after Fukushima, it would be hard to sleep at night knowing Pyongyang were operating these things safely. It would be in everyone’s interests to find an alternative energy quid pro quo for denuclearization. When I participated in the Six Party talks, one alternative put forth by the South Koreans was conventional electricity. The recent talks between Russia and the DPRK about gas pipelines might be another. But nuclear energy for the DPRK should be off the table.

These ideas are admittedly out of the box. But the point is that advancing any of these issues outside a strategic framework for the alliance is unlikely to reach resolution. Whether in the remainder of the two administrations’ terms or as a start to the next administrations’ tenures, both sides must do a “step-back” and devise the broader

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strategic objectives they have for the alliance. Only then can Seoul and Washington address the specific alliance issues on the table in a way that strengthens rather than weakens the overall relationship.

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Mr. MANZULLO. Congressman Faleomavaega. Oh, I am sorry. Forgive me.

Mr. Lipman.

**STATEMENT OF MR. DANIEL S. LIPMAN, SENIOR VICE  
PRESIDENT, WESTINGHOUSE ELECTRIC COMPANY**

Mr. LIPMAN. Thank you, Mr. Chairman, Mr. Faleomavaega, members of the subcommittee, and of course, subcommittee staff. I am pleased to be here today. Unlike Dr. Cha, this is my first time testifying before Congress, so forgive me in advance if I am a little tense. I would say that I am not at all anxious, however, in forthrightly testifying in support of the U.S.-Korean 123 Agreement. I consider it a vital part of the strategic relationship with benefits that, of course, relate to jobs, but also, in the areas of nuclear safety and strategic partnership.

It is important that we allow this 30-year technical cooperation to continue uninterrupted. I think commercial nuclear trade between our two countries has been very significant. Nineteen of the 23 reactors in Korea are based on Westinghouse technology. I find it helpful to characterize the nuclear trade in, sort of, three main areas. The first would be exports that come directly from the United States to Korea. That has been a very healthy export trade.

The second area that has really emerged, only in the last decade, have been Korean exports into the American nuclear program. I know you are aware of nuclear power plants being built now in South Carolina and the State of Georgia. Those do have many manufactured goods, large nuclear components, that are fabricated in Korea. A very important part of the nuclear renaissance is our partnership with Korea and Korean companies.

And the third aspect is something that was touched on before, it is kind of new twist in the relationship, and it involves third countries. So this would be countries other than Korea and the United States where we partner with Korean companies to take advantage and derive value out of those export markets. Deputy Assistant Secretary Zumwalt mentioned the United Arab Emirates. That was a contract won by KEPCO, but there is very significant American scope in that contract in the United Arab Emirates.

There are approximately 1500 full-time jobs in 14 different states involved in manufacturing, and engineering, and other technical jobs that will continue for 6 or 7 years. To me, that is a trade and a value worth keeping.

Finally, I think one other impact well beyond the trade agenda has to do with nuclear safety. This is a non-partisan issue. Certainly, in the post-Fukushima environment, nuclear safety is on the top of everyone's agenda. And really, allowing Korea, but also other markets, access and continued access to American nuclear technology, which in my view, is the most advanced, the safest, with the best operating practices, is something that is very important to continue to reinforce.

In summary, I think the 123 Agreement is something that needs to be focused on, that needs to be expeditiously negotiated in Korea, and of course, I think this subcommittee will hear, in the

coming months and year, about other nuclear cooperation agreements in the region as well. Thank you very much.

[The prepared statement of Mr. Lipman follows:]

**Testimony for the Record**

**Daniel S. Lipman  
Senior Vice President  
Westinghouse Electric Company**

**Hearing: What's Next for the U.S.-Korea Alliance?  
June 6, 2012**

**House Committee on Foreign Affairs  
Subcommittee on Asia and the Pacific  
Washington, D.C.**

Chairman Manzullo and Ranking Member Falcomavaega, thank you for the opportunity to testify today. My name is Dan Lipman. I am a Senior Vice President at Westinghouse Electric Company, headquartered near Pittsburgh, Pennsylvania. Westinghouse's 15,000 employees (9,000 in the U.S.) work around the world and around the clock to provide fuel, services, technology, plant design and equipment to electric utility and industrial customers in the worldwide commercial nuclear electric power industry.

Westinghouse has played a leading role in nuclear plant design for six decades. Sixty percent of the 104 commercial reactors in America are Westinghouse designs and four of the five new reactors under construction in the U.S. today are Westinghouse AP1000™ designs.

Globally, Westinghouse is recognized as a leader in safe and reliable nuclear energy and has been at the forefront of the U.S.-South Korea partnership in nuclear energy for nearly four decades. Since the start-up of South Korea's first commercial nuclear energy facility in 1978 (Kori-1), Westinghouse technology has formed the foundation of the South Korean nuclear energy program. Today, Westinghouse's commercial relationships with South Korea have grown beyond reactor supply for the Korean market.

To ensure the continuation of these relationships, Westinghouse strongly supports the early renewal of the U.S.-South Korea Agreement for Peaceful Nuclear Energy Cooperation. The 30-year term of this pact, also known as a Section 123 agreement, will expire in 2014. Much is at stake in its timely renewal.

Korea is a significant part of our country's extensive trade and investment relationships. The economic benefits of U.S.-South Korea commercial nuclear trade include U.S. exports to South Korea, U.S. exports to third countries to supply South Korean projects and U.S.-South Korean joint ventures, imports of materials from South Korea to supply projects in the United States, and a variety of joint R&D projects. The deep links between our nuclear energy sectors contribute significantly to the U.S. economy, supporting tens of thousands of American jobs.

**U.S. Exports to South Korea**

South Korea is one of the major nuclear energy countries of the world – and a large market for U.S. suppliers. Twenty-three reactors with 20,700 megawatts of plant capacity provide one-third of South Korea's electricity. Nineteen of these reactors – and all under construction, on order or planned – are

based on U.S. technology.<sup>1</sup> South Korea's licensing of U.S. technologies has earned billions for Westinghouse and other U.S. suppliers.

Although the percentage of U.S. content in South Korean nuclear power projects has declined over the years, as Korean content has increased, Westinghouse and other U.S. suppliers still supply South Korea with significant content, including instrumentation and control, pumps, and other major components. U.S. suppliers have also provided South Korean reactors with nuclear fuel and fuel services. For example, since the inception of the South Korean civil nuclear program, a facility in Metropolis, Illinois, has provided uranium conversion services to Korea Electric Power Company (KEPCO). Such exports help support 400 jobs at the sole U.S. conversion plant in Illinois and the ConVerDyn headquarters in Colorado.

The South Korean nuclear energy market continues to grow. South Korea plans to increase its nuclear generating capacity by 56 percent to 27,300 megawatts by 2020, and to 43,000 megawatts by 2030. Three reactors are under construction and another six are planned or on order.<sup>2</sup>

#### **U.S. Exports Supply South Korean Joint Ventures and Projects in Third Countries**

South Korea's national nuclear power plant supplier, KEPCO, is a major supplier to international markets, with power generation projects in eight countries.<sup>3</sup> KEPCO's successful \$20.4 billion<sup>4</sup> bid to build four APR-1400 reactors in U.A.E. was a major win for the South Korean nuclear energy industry. The APR-1400 design is Westinghouse-based, and as such, is subject to U.S. export controls. Due to significant U.S. content in the APR-1400 reactor and other U.S.-Korea supply relationships, the United States will benefit significantly from the U.A.E. projects.

As a result of U.S. supply relationships with South Korea, U.S. exports to the U.A.E. projects will exceed \$1.5 billion. For example, Westinghouse's scope includes design, technical support services, consulting on licensing issues and providing control equipment, instrumentation and major components. This work will create and sustain U.S. jobs in California, Connecticut, New Hampshire, Ohio, Pennsylvania, South Carolina, Texas and other states home to Westinghouse sub-suppliers.

In addition, multiple U.S. firms have provided a range of services to the U.A.E., including engineering, construction management, training, legal, regulatory, environmental and other services.

#### **South Korea Supplies Components for Westinghouse AP1000™ Projects**

Beyond U.S. exports to South Korea and U.S. participation in South Korean-led nuclear projects in third countries, South Korean firms are significant suppliers to the eight Westinghouse AP1000™ reactors under construction in the United States and in China. For example, the two Westinghouse AP1000™ reactors currently under construction in South Carolina will use reactor vessels and steam generators from Changwon, condensers from Sacheon, demineralizers and heat exchangers from Ansan-City, and valves from Chconan.

<sup>1</sup> World Nuclear Association, April 2012.

<sup>2</sup> Ibid.

<sup>3</sup> Korea Industry and Technology Times, June 23, 2011.

<sup>4</sup> World Nuclear Association, April 2012.

### **Strategic Benefits of Continued Cooperation**

Extensive cooperation in nuclear energy between the United States and South Korea is a pillar of our countries' strategic partnership. The U.S.-South Korea alliance is exemplified by our collaboration in nuclear energy R&D, safety and security.

In nuclear safety, security and nonproliferation, South Korea has assumed the responsibilities expected of one of the world's leading nuclear energy countries. South Korea in March demonstrated its partnership with the United States by hosting 53 heads of state and government for the second Nuclear Security Summit, a major U.S.-led initiative. South Korea has also supported other U.S. nonproliferation initiatives, including signing the IAEA Additional Protocol, supporting the Nuclear Suppliers Group objective criteria for transfers of enrichment and reprocessing technologies, and joining the Proliferation Security Initiative.

Safety has always been of paramount importance for the nuclear industry, and the global industry is committed to enhancing safety based on lessons learned from the accident at Fukushima Dai-ichi. South Korea's use of U.S.-based technology and the continued involvement of U.S. personnel in South Korea's growing nuclear industry will help assure that nuclear safety in South Korea continues to meet the highest standards. Further, KEPCO's nuclear operating subsidiary is an active participant in the World Association of Nuclear Operators, which promotes the highest standards of nuclear safety globally. Along with Westinghouse, KEPCO is one of eleven global suppliers that have adopted the "Nuclear Power Plant Exporters' Principles of Conduct." Sponsored by the Carnegie Endowment for International Peace, the principles set high standards of practice for companies in the areas of safety, security, nonproliferation, environmental protection, ethics and liability insurance.<sup>5</sup>

### **Timely Renewal of the U.S.-Korea Section 123 Agreement**

Many of these economic and strategic benefits of U.S.-South Korea commercial nuclear cooperation would be put at risk by unnecessary delaying the renewal of a Section 123 agreement with South Korea, which expires in 2014. In the commercial nuclear industry – where long-lead items are commonplace and long-term contracts are standard – it is critical that a supplier be stable and reliable.

Serious concerns about the reliability of the United States as a partner and supplier would be raised if the United States allows the expiration of the U.S.-South Korea Section 123 agreement to draw near. Under those circumstances, South Korea – and other countries – might reduce their reliance on U.S. sources of nuclear components, technology and services. The deep links between the U.S. and South Korean industries could be disrupted even before the agreement expires.

Today's global commercial nuclear market is highly competitive. Other countries understand that being a stable and reliable supplier is necessary to the commercial success of their domestic suppliers. Similar consequences could befall the cooperation between our governments, if South Korea concludes that the U.S. commitment to our partnership in nuclear energy is unstable and prone to unilateral change.

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<sup>5</sup> Nuclear Power Plant Exporters' Principles of Conduct, Carnegie Endowment, September 15, 2011.

### **United States Must Conclude 123 Agreement Negotiations Promptly**

Although South Korea's Section 123 agreement does not expire until 2014, the administration must take prompt action on renewing the agreement. Bringing a new or renewed Section 123 agreement into force requires many months, even after the negotiation is completed.

Under the Atomic Energy Act, Congress requires the Executive Branch to follow a lengthy and rigorous process after negotiating a Section 123 Agreement, including a series of presidential findings and a Nonproliferation Assessment Statement from the State Department. After the agreement is submitted to Congress, the law provides Congress with 90 continuous session days to consider the agreement and hold hearings. This typically requires most of a year. In 2010, an agreement renewing the U.S.-Australia Section 123 agreement was submitted to Congress on May 5, but did not achieve the requisite 90 days of continuous session until mid-December – more than seven months later.

The U.S.-South Korea agreement is not the only renewal Section 123 agreement that will demand attention from this committee. Eight other Section 123 agreements – including agreements of major commercial importance with China, Taiwan, and the IAEA – will lapse by 2015 unless they are renewed. While renewal of some agreements will entail little more than changing the date of expiration, others will require substantial renegotiation. Unless the United States expedites negotiations on the South Korea agreement and others, the nation will face severe implications to commercial trade due to a backlog of agreements that expire in the 2012-2015 timeframe.

### **Benefits of Section 123 Agreements**

The global expansion of nuclear energy offers the United States the opportunity to promote several national interests at once, but only if the government concludes new and renewal Section 123 agreements. These agreements include significant commitments from countries to safeguard materials, prevent material diversion for non-peaceful purposes and provide security for materials. They can also require consent rights over the enrichment, reprocessing and retransfer of U.S. materials exported under the agreement.

Section 123 agreements must be in place for the United States to export America's advanced reactor designs and world-class operational expertise. Only with these agreements can we ensure the highest possible levels of nuclear power plant safety and reliability around the world, and maintain U.S. leadership in nuclear energy technology and policy.

Foregoing these agreements puts at risk tens of thousands of American jobs at a time when we can least afford to squander job creation. The global commercial nuclear market is large and growing. Worldwide, 66 commercial nuclear reactors are under construction and an additional 160 are planned or on order. The Commerce Department estimates the commercial opportunity over the next decade at as much as \$740 billion. U.S. companies compete across the breadth of the commercial nuclear supply chain, from nuclear power plant design, to component and fuel manufacturing, architect/engineering services and more. During operation of nuclear energy facilities, U.S. firms will remain engaged in operational support, training, supply of fuel and other services for several decades.

**Conclusion**

The U.S.-South Korea Section 123 agreement is the basis for a robust U.S. partnership in nuclear energy cooperation. Swift renewal of this and other Section 123 agreements is critical for the United States to compete in the growing global marketplace and maintain its influence over global nonproliferation policy and international nuclear safety, while creating and sustaining tens of thousands of American jobs.



Mr. MANZULLO. Thank you.  
Dr. Peters.

**STATEMENT OF MARK PETERS, PH.D., DEPUTY LABORATORY  
DIRECTOR FOR PROGRAMS, ARGONNE NATIONAL LABORA-  
TORY**

Mr. PETERS. Thank you, Chairman Manzullo, Ranking Member Faleomavaega, and the distinguished members of this subcommittee for your invitation to testify here today. My name is Mark Peters and I am the Deputy Laboratory Director for Programs at Argonne National Laboratory, however, today I am speaking on behalf of the American Nuclear Society. Mr. Chairman, I ask that my full written testimony be entered into the record and I will summarize it briefly here.

I appreciate this opportunity to present the views of the American Nuclear Society, or ANS, on used nuclear fuel recycling as a means to achieve an integrated solution to energy and waste management policy. The ANS is a not-for-profit international scientific and educational organization with nearly 12,000 members worldwide; our core purpose being to promote awareness and understanding of the application of nuclear science and technology.

We also wish to acknowledge our longstanding professional collaboration with the Korean Nuclear Society. For more than 40 years, our two organizations have worked together to promote the safe and secure use of nuclear technology and materials. For decades, the United States has grappled with the multiple challenges of crafting a long-term solution for the management of used nuclear fuel. These persistent challenges have taken on new urgency in the wake of the accident at Japan's Fukushima Daiichi Nuclear Power Plant, which has focused international attention on used nuclear fuel storage.

Although the challenges of waste management require close scrutiny, these issues are most effectively considered within the context of a integrated policy for nuclear energy and nuclear waste management. Unfortunately, the United States is unique in its lack of such an integrated policy. Most other nations that rely on nuclear energy, including France, Russia, China, Japan, and the Republic of Korea, have policies in place, or a plan, that promote development of used fuel recycling and advanced fast reactors in order to ensure the long-term sustainability of their nuclear investments.

We must consider our nuclear energy technology collaborations and partnerships within this global context. At present, the United States' strategic investments in advanced nuclear energy technologies are lagging. As a result, we rely increasingly on collaborative arrangements with foreign research institutions to conduct research in these areas. These collaborations provide advantages to both parties and the United States has benefitted from them.

However, close alignment between the government and nuclear industries in these nations speeds the international deployment of these cooperatively developed technologies, such as used fuel recycling and fast reactor technologies, while the United States has moved much slowly in its option. The Republic of Korea has publicly expressed its interest in incorporating electrometallurgical reprocessing technology, commonly known as pyroprocessing, into its

long-term nuclear fuel cycle plans. Pyroprocessing offers several potential benefits over current aqueous recycling techniques, such as the PUREX process being used in France and Japan today.

These include the ability to recover minor actinides, which otherwise contribute significantly to long-term radiotoxicity in used nuclear fuel, fewer releases of fission gases in tritium, and the lack of production of pure plutonium, which, with proper integration of safeguards, helps to address proliferation concerns. Clearly, there will be engineering challenges inherent in the development of pyroprocessing technology, as there are with any advanced manufacturing process. However, these challenges can be addressed through joint research and development activities, and solving these challenges will have important implications for the United States as well as the Republic of Korea.

The American Nuclear Society believes that nuclear fuel recycling has the potential to reclaim much of the residual energy in used fuel currently in storage as well as used fuel that will be produced in the future, and that recycling offers a proven alternative to direct disposal of used fuel in a geologic repository. In other nations, recycling nuclear fuel with proper safeguards and materials controls, under the auspices of the IAEA, has demonstrated that high-level waste volumes can be reduced safely and securely while improving the sustainability of energy resources.

It is the opinion of the ANS that the United States should begin planning a thoughtful and orderly transition to nuclear fuel recycling in parallel with the development of a geologic repository. Recycling would enhance the repository's efficiency, eliminating the need for more complex and expensive engineering barriers, and reducing the time frame of concern from more than 100,000 years to a few hundred years. The ANS also believes that the United States should accelerate development of fast spectrum reactors, which are uniquely capable of generating energy while consuming long-lived waste.

Six decades ago on December 20, 1951, scientists and engineers from Argonne National Laboratory started a small electrical power generator attached to an experimental fast reactor, creating enough energy to power four 200 watt electrical bulbs. That historic achievement demonstrated the peaceful use of nuclear energy and launched today's global commercial nuclear industry. It should not be overlooked that the first electricity generated through nuclear energy was produced using a fast reactor.

In closing, let me reiterate that the ANS believes that nuclear energy has a significant role to play in meeting the global energy demands of the 21st century and the global expansion of nuclear energy can be achieved safely and securely. And I look forward to your questions. Thank you.

[The prepared statement of Mr. Peters follows:]

**Recycling Used Nuclear Fuel: Balancing Energy and Waste Management Policies**

**Testimony to U.S. House of Representatives  
Committee on Foreign Affairs  
Subcommittee on Asia and the Pacific**

**Mark T. Peters, American Nuclear Society  
June 6, 2012**

My name is Mark Peters, and I am the Deputy Laboratory Director for Programs at Argonne National Laboratory. However, today I am speaking on behalf of the American Nuclear Society; my remarks should not be considered as an official statement from Argonne or the Department of Energy.

I appreciate this opportunity to present the views of the American Nuclear Society (ANS) on used nuclear fuel recycling as a means to achieve an integrated solution to energy and waste management policy. The ANS is a not-for-profit, international, scientific, and educational organization with nearly 12,000 members worldwide. The core purpose of ANS is to promote awareness and understanding of the application of nuclear science and technology. The ANS also wishes to acknowledge its longstanding professional collaboration with the Korean Nuclear Society (KNS). For more than 40 years, our two organizations have worked together to promote the safe and secure use of nuclear technology and materials.

For decades, the United States has grappled with the multiple challenges of crafting a long-term solution for the management of used nuclear fuel. These persistent challenges have taken on new urgency in the wake of the accident at Japan's Fukushima Daiichi nuclear power plant, which has focused international attention on used nuclear fuel storage. Although the challenges of waste management require close scrutiny, these issues are most effectively considered within the context of an integrated policy for nuclear energy and nuclear waste management. Unfortunately, the United States is unique in its lack of such an integrated policy. Most other nations that rely on nuclear energy, including France, Russia, China, Japan, and Republic of Korea, have policies in place that promote development of used fuel recycling and advanced fast reactors, in order to ensure the long-term sustainability of their nuclear investments. We must consider our nuclear energy technology collaborations and partnerships within this global context.

At present, the United States' strategic investments in advanced nuclear energy technologies are lagging; as a result, we rely increasingly on collaborative arrangements with foreign research institutions to conduct research in these areas. These collaborations provide advantages to both

parties, and the United States has benefited from them. However, close alignment between government and nuclear industries in these nations speeds the international deployment of these cooperatively developed technologies, such as used fuel recycling and fast reactor technologies, while the United States has moved much more slowly in its adoption of them.

The Republic of Korea has publicly expressed its interest in incorporating electro-metallurgical reprocessing technology, commonly known as “pyroprocessing,” into its long-term nuclear fuel cycle plans. Pyroprocessing offers several potential benefits over current aqueous recycling techniques, such as the PUREX process being used in France and Japan today. These include the ability to recover minor actinides, which otherwise contribute significantly to the long-term radiotoxicity of used nuclear fuel; fewer releases of fission gases and tritium; and, the lack of production of pure plutonium, which helps to address proliferation concerns. Clearly, there will be engineering challenges inherent in the development of pyroprocessing technology, as there are with any other advanced manufacturing processes. However, these challenges can be addressed through joint research and development activities, and solving these challenges will have important implications for the United States as well as the Republic of Korea.

The American Nuclear Society believes that nuclear fuel recycling has the potential to reclaim much of the residual energy in used fuel currently in storage as well as used fuel that will be produced in the future, and that recycling offers a proven alternative to direct disposal of used fuel in a geological repository. In other nations, recycling of nuclear fuel with proper safeguards and material controls, under the auspices of the International Atomic Energy Agency (IAEA), has demonstrated that high-level waste volumes can be reduced safely and securely while improving the sustainability of energy resources.

It is the opinion of the ANS that the United States should begin planning a thoughtful and orderly transition to nuclear fuel recycling in parallel with the development of a geologic repository. Recycling would enhance the repository’s efficiency, eliminating the need for most complex and expensive engineered barriers and reducing the timeframe of concern from more than 100,000 years to a few hundred years.

The ANS also believes that the United States should accelerate development of fast spectrum reactors, which are uniquely capable of generating energy while consuming long-lived waste. Six decades ago, on December 20, 1951, scientists and engineers from Argonne National Laboratory started a small electrical power generator attached to an experimental fast reactor, creating enough energy to power four 200-watt electrical bulbs. That historic achievement demonstrated the peaceful use of nuclear energy and launched today’s global commercial nuclear energy industry. But it should not be overlooked that the first electricity generated through nuclear energy was produced using a fast reactor.

In closing, let me reiterate that the ANS believes that nuclear energy has a significant role to play in meeting the global energy demands of the 21<sup>st</sup> century, and that a global expansion of nuclear energy can be achieved safely and securely. I look forward to your questions. Thank you.

## BACKGROUND

### Current Recycling Technologies

**PUREX:** Current commercial used nuclear fuel reprocessing technologies are based on the PUREX process, a solvent extraction process that separates uranium and plutonium and directs the remaining minor actinides (neptunium, americium, and curium) along with all of the fission products to vitrified waste. The PUREX process has more than 50 years of operational experience. For example, the La Hague reprocessing facility in France treats used fuel from domestic and foreign power reactors. The plutonium recovered is recycled as a mixed-oxide fuel to generate additional electricity. This technology also is used for commercial applications in the United Kingdom and Japan.

There are a number of drawbacks to the PUREX process. PUREX does not recover the minor actinides (neptunium, americium, curium, and heavier actinide elements), which compose a significant fraction of the long-term radiotoxicity of used fuel. Advanced fast reactors can transmute and consume minor actinides if they are separated from other fission product elements, but incorporation of minor actinide separations into existing PUREX facilities adds complexity and is outside commercial operating experience. Moreover, existing international facilities do not capture fission gases and tritium; these are discharged to the environment within regulatory limits. Although plutonium is recycled as mixed oxide fuel, this practice actually increases the net discharge of minor actinides. Finally, the production of pure plutonium through PUREX raises concerns about materials security and proliferation of nuclear weapons-usable materials.

**Pyroprocessing:** Pyroprocessing is currently being used at the Idaho National Laboratory to treat and stabilize used fuel from the decommissioned EBR-II reactor. The key separation step, electrorefining, recovers uranium (the bulk of the used fuel) in a single compact process operation. Ceramic and metallic waste forms, for active metal and noble metal fission products respectively, are being produced and qualified for disposal in a geologic repository. However, the demonstration equipment used for this treatment campaign has limited scalability. Argonne National Laboratory has developed conceptual designs of scalable, high-throughput equipment as well as an integrated facility for commercial used fuel treatment, but to date only a prototype advanced scalable electrorefiner has been fabricated and successfully tested. Additionally, work is underway at Argonne to refine the fundamental understanding of pyrochemical processes to achieve greater control of the composition of the recovered materials, which will facilitate developing safeguards consistent with U.S. non-proliferation goals.

### Fuel Cycle Research in the United States

In the United States, the primary organization with responsibility for the research and development of used fuel recycling technologies is the Department of Energy's Office of Nuclear Energy (DOE-NE), through its Fuel Cycle Research and Development program. This program supports research to develop and evaluate separations and treatment processes for used nuclear fuel that will enable the transition from the current open fuel cycle practiced in the United States to a sustainable, environmentally acceptable, and economic closed fuel cycle. Ongoing projects related to reprocessing and waste management include:

- Using advanced modeling and simulation coupled with experiments to optimize the design and operation of separations equipment.
- Exploring an innovative one-step extraction process for americium and curium, radionuclides that are major contributors to nuclear waste toxicity, to reduce the cost of aqueous-based used-fuel treatment.
- Further developing pyrochemical processes for used fuel treatment. These processes enable the use of compact equipment and facilities, treatment of used fuel shortly after discharge from a reactor, and reduction of secondary waste generation.
- Developing highly durable and leach-resistant waste forms of metal, glass, and ceramic composition for safe, long-term disposal.

However, it must be noted that the United States increasingly relies on collaborative arrangements with foreign research institutions and universities to conduct research in these areas. For example, Argonne, Idaho, and other U.S. national laboratories are working with the Korea Atomic Energy Research Institute, in a series of joint studies sponsored by the United States and Republic of Korea, to study disposition options for used nuclear fuel, including pyroprocessing, in order to develop economic, sustainable long-term solutions, consistent with non-proliferation objectives, for nuclear energy production and waste management. The state of U.S. nuclear research facilities is declining compared to steady investments being made in countries such as France, Russia, Japan, and Republic of Korea. More importantly, those governments, as part of their national energy policies, have committed to the development and deployment of advanced fast reactor technologies, which are an important element of an integrated energy and waste management policy.

#### **Advanced Fast Reactor Technology**

The American Nuclear Society believes that the development and deployment of advanced nuclear reactors based on fast-neutron fission technology is important to the sustainability, reliability, and security of the world's long-term energy supply. Nearly all current nuclear reactors are of the "thermal neutron" design, and their capability to extract the energy potential in the uranium fuel is limited to less than 1% of that available. The remainder of the energy potential is left unused in the discharged fuel and in the uranium, depleted in U-235, that remains from the process of enriching the natural uranium in the isotope U-235 for use in thermal

reactors. With known fast reactor technology, this unutilized energy can be harvested, thereby extending by a hundred-fold the amount of energy extracted from the same amount of mined uranium.

It is the opinion of the ANS that fast reactors in conjunction with nuclear fuel recycling can diminish the cost and duration of storing and disposing of waste. These cost savings may offset cost increases in the fuel cycle due to reprocessing and fuel re-fabrication. Virtually all long-lived heavy elements are eliminated during fast reactor operation, leaving a small amount of fission product waste that requires assured isolation from the environment for only hundreds of years. The design and construction of a geologic repository would be substantially less complex and costly. Just as importantly, a repository of this type could be located in a very broad range of areas, increasing the likelihood of multiple host locations.

#### **Summary**

The American Nuclear Society endorses development of used nuclear fuel recycling in fast neutron spectrum reactors in parallel with a geologic repository to secure an integrated, sustainable nuclear energy system for the United States. This initiative should balance the needs of the nuclear energy production sector with those of the waste management sector to achieve an integrated system that increases resource utilization for energy production, disposes waste in an environmentally acceptable manner, and is economic. The global nature of nuclear energy production and waste management encourages the continuation of U.S.-foreign collaborations to develop and demonstrate recycling and fast reactor technologies. In this regard, the relationship between the United States and Republic of Korea is of mutual benefit and of strategic importance to our nuclear energy and waste management policies.

Mr. MANZULLO. Thank you.

Now we are ready for Mr. Faleomavaega.

Mr. FALEOMAVAEGA. Thank you, Mr. Chairman. Dr. Cha, I noted with interest you made a very interesting observation about thinking outside the box as you had suggested. And you mentioned three areas about global scope of the U.S.-Korean alliance, the importance of, also, the regional geopolitical impetus of this whole thing, am I correct in reading that, currently, our South Korean neighbors are only allowed to fire missiles that can go only a distance of 123-something miles, and in the meantime, North Korea is capable now of firing missiles that can 2500 miles?

Our we willing to help South Korea to give a deterrent capability in that regard or is South Korea totally dependent on the U.S. for its security as well? I am a little fuzzy on this.

Mr. CHA. Well, thank you for the question. I think that it is a difficult issue between the two countries. It is a difficult negotiation right now. And I think the South Koreans do feel like, as you said, with the North Koreans pushing for missiles in ranges of 2000, 3000 kilometers, the South Koreans are limited by MTCR guidelines and seek some sort of exception to that, not that they would export, but for their own defense and deterrence. And so it is a problem in the sense that South Korea wants a credible deterrent. As they move to OPCON transition in 2015, they want a credible deterrent against North Korea.

You know, I think the problem right now is that the issue is just, we are at the end of two administrations, and so the two sides are fighting over issues without putting them in a broader contextual frame work, and I think that is what we really need right now if we are going to move forward on NMG guidelines between the two countries.

Mr. FALEOMAVAEGA. I had raised the question earlier with Secretary Zumwalt about the idea that sometimes we have become a little paternalistic, or what is another word, patronizing, that we don't really share in a way that our Asian allies feel that we are truly co-partners rather than just someone lesser. The idea that we tend, sometimes, to talk down to these people and not say, hey, you are just as important as we are. And am I correct in, right now, the sense of the Korean people that, if I am correct, 63 percent of the people said they are sick and tired of the intimidations they get from North Korea and just, somehow, they are not able to return the favor, so to speak, if they keep making this intimidating conduct against the people of South Korea. What do you think of that?

Mr. CHA. Well, I think at a military level, if there is another North Korean provocation there is no doubt in my mind that this time the South Korean military will respond kinetically, point of origin, supporting systems and maybe even command systems. I mean, I think after the events of 2010, it is pretty clear that is what they are going to do. And so they have a response to the next North Korean provocation, but for various reasons, they feel the need to do things new on the Peninsula that enhances their deterrence as the North Koreans continue to push for more nuclear capabilities and more long-range missile capabilities.

So in that sense, it is an understandable demand on the part of the South Koreans. I think that one of the problems is, is that,

from a U.S. perspective, we want to see them, if they want to have this capability they have to also have some of the bridging capabilities in terms of intelligence, ISR, C4I, command and control capabilities that would allow them to efficiently operate these systems, and that if they were to have such systems, they should be under some sort of joint, sort of, command and control guidelines between the U.S. and ROK within the alliance.

Mr. FALEOMAVAEGA. Mr. Lipman, I am interested that you mentioned something about nuclear safety, and I am very curious, how many nuclear reactors has Westinghouse built for Japan as well as with South Korea; if there is that data available?

Mr. LIPMAN. The earliest Japanese nuclear power plants that were pressurized water reactors were built by Westinghouse directly. Soon thereafter, that would be in the 1970s and '80s, the Japanese began to take a Westinghouse design, Kansai Electric Power Company—

Mr. FALEOMAVAEGA. I hate to interrupt you, but my time is killing me. I just wanted to make an observation. We are concerned about nuclear safety if we are to export in South Korea, but isn't it just as important an issue that we can't even find a place to put our own nuclear waste? Yucca Mountain in Nevada and all the issues that we spent a \$100 billion in setting up this Yucca Mountain that we can't even export nuclear waste to. Isn't that a very serious issue even within our own country?

Mr. LIPMAN. I think, certainly, the U.S. domestic nuclear program would benefit greatly if there were a waste repository in America, sir. Yes, sir.

Mr. FALEOMAVAEGA. And I am sorry, Mr. Chairman, I just wanted to mention to Dr. Peters, you have Three Mile Island, you have got Chernobyl, you got Fukushima, and I wanted to ask ten more questions about that, but I will forego my time. Thank you, Mr. Chairman.

Mr. MANZULLO. Mr. Kelly.

Mr. KELLY. Thank you, Chairman. And I want to direct most of my questions to Mr. Lipman because I am very familiar with Westinghouse. In fact, I have some slides that I would like people to take a look at. This is an area in Western Pennsylvania. I think the footprint is about 104 acres, 105 acres, Mr. Lipman, and if you were to see it today, and I think we can show it today, what the end product was, this is the new Westinghouse facility in Cranberry Township just north of Pittsburgh.

And so my point is, we talk about the global economy, we talk about global opportunities, we talk about our energy strategy, we talk about all these things, but I think to the average American, they don't understand what we are talking about because opportunity is only there for so long and you either win the prize or you come in second, and nobody gets an award for second place. So, Mr. Lipman, I have watched Westinghouse over the years, and the impact that it has had, and the global opportunities. And in a country that now is so desperately looking for jobs and looking for opportunities.

Maybe you can just take a few minutes to tell people the importance of our relationship with the Republic of Korea, and the expiration of Section 123, and the fact that it takes so long for us to

get things done, and time is of the essence. And I would agree that, you know, it is good to talk about it, and it is good to vet it, and it is good to get it out there for everybody to have a chance to talk, but in the meantime, you don't compete—I am an automobile dealer, so I compete against the guy next door to me, or the guy down the street, you compete against countries.

Your company, Westinghouse, competes against Russia, competes against France, and until we begin to understand the relationship that we better start to have, and understand who it is that we are competing against, because quite frankly, I don't want to be in a fair fight with anybody. I want to make sure that we win and we have everything right now at our disposal. If you could just talk a little bit about Westinghouse, and what Westinghouse has done, and the tremendous global opportunities for a country that is aware and has a strategy to aggressively go after what is out there.

Mr. LIPMAN. Thank you, Congressman. And in fact, those pictures you saw, it dawned on me that, we built that headquarters because we beat the Russians and we beat the French in an open competition in China, okay? We would not have built that facility, we would not have moved, and we would not have hired several thousand new employees, both young folks and mid-career folks, had we not won in China. And the point that you make is germane, not just to Westinghouse, Congressman, but to all of the nuclear industry, which is, we can never forget that, as private companies in America, this is, what I would simply call, smashmouth international competition.

We are against the Russians. We are against the French. We will be against the Chinese some day. And everything that we can do as a country to coordinate our international export policies, to put in place concerted government effort for advocacy in these export markets, to leverage our technology, to put in place these agreements, not just this Korea agreement, but the other agreements to which I referred, which may be coming up in front of this subcommittee for Taiwan, for Malaysia, for Vietnam, the latter two being new markets, getting in place an export control policy, which is the purview of the Department of Energy, that is not as complex, that makes it easy for American companies to participate, and also, supporting nuclear liability regimes for insurance and so forth.

This is a global nuclear industry. This is not like the Cold War where two countries had nuclear power and basically could sell and stipulate conditions whenever and to whomever they wished. This is a highly dynamic market. If this agreement is allowed to lapse, or if we cannot conclude agreements with other countries for one reason or another, other countries will step in and take that. It will be like taking food out of our mouths.

And so the kinds of policies that we need involve significant U.S. Government coordination, the use of financing and other strategies, and the best advocacy that we can put together or we won't be having that kind of economic development in this country. Thank you.

Mr. KELLY. I appreciate your comments, but listen, we are in a battle, globally, and would you want to just explain the global market to Westinghouse. Where is your market right now; percentage-wise?

Mr. LIPMAN. Sure. We have gone from being a, what I would say, purely domestically-oriented company where 80 percent of our work was derived here in the United States to we are approaching just the converse. That is to say, three quarters to 80 percent of our business come from outside the United States, by the way, not all in new plants, but we sell nuclear fuel. We provide nuclear services and engineering in Europe, and Latin America, and in other parts of Asia, and frankly, that is where the growth is going to be.

The growth in electricity demand is much more outside the United States, sir, than inside. And any company wants to position itself to where the market growth is. So this is really about international competition and international growth driving the health of American companies.

Mr. KELLY. Okay. Thank you. And we are much too close to midnight to debate this much longer. We have got to get this taken care of, and get the 123 back on the board and ready to go. Thank you so much. Could I have time? Is that possible?

Mr. MANZULLO. I will recognize Mr. Burton then you can yield.

Mr. BURTON. I would be happy to yield some time to my colleague.

Mr. KELLY. Well, I appreciate that because, again, and I apologize to the other two witnesses, but a lot of times we talk down here. And the talk that we have may make sense to very few people in the room because that is what you do every day, but the American people are looking for jobs right now. And we are looking for jobs everywhere possible and we are looking for markets that are open to us and that we can lead in. And I really think when you talk about nuclear safety, when you set the pace, you also set the standard. And so the rest of the world has to keep pace with you.

They can't come out with an inferior product and say, well, we are going go ahead and push this out. So I think the criticalness of everything that we are doing right now and the alliance that we have, right now, with South Korea is so critical both from a business standpoint and a geopolitical standpoint, and my worry, constantly, is that sometimes we miss the bigger picture. We concentrate on one small thing and we think, this is the thing that really is the driver behind it and we forget about where our success would be, and it is the world. It is the world.

And domestically, I think we have kind of looked beyond that, but we do have an opportunity right now in this relationship that we have had with the Republic of South Korea is so strong and so important. And I think that this opportunity is like this, when you can shed a light on that and the American people can understand, and when you bring that together, you know, American innovation and American leadership, the upside of this is so phenomenal. There is no reason for this country, ever, to be in second place to anybody, anywhere in the world.

So again, I thank you for your leadership and I thank you for the aggressiveness of your company. And any way that I think that we can be helpful, just let us know. I think sometimes we get caught up in the minutia. We forget about, at the end of the game, we want to win. So thank you again. And I yield back. Thanks, Mr. Burton.

Mr. BURTON. Mr. Kelly, I like the way you talk. A kinetic response. You know, a lot of people in the audience are wondering, what in the hell is he talking about? So why don't you define a kinetic response?

Mr. CHA. Well, as you know very well, in 2010, the North Koreans sunk a South Korean Naval Vessel—

Mr. BURTON. Oh, I know all that. Yes.

Mr. CHA [continuing]. On a South Korean island.

Mr. BURTON. Yes.

Mr. CHA. And the South Koreans have basically done a complete bottom-up review of how they respond militarily to these things. And basically, they are going to strike back.

Mr. BURTON. Well, I know, but I want you to define the kinetic response. I mean—

Mr. CHA. They are going to blow up stuff.

Mr. BURTON. There you go. There you go. We appreciate that. I just want to make sure everybody understood what you were talking about.

Mr. KELLY. And I like the way you talk, Mr. Burton.

Mr. BURTON. Some of these people around here don't have a Ph.D. in physics and stuff, so you know. Let me ask you this, about a week ago, I was up at Panmunjom on the 38th Parallel up there, and the Communist soldiers came out of that building up there, and came sticking their nose in the window, and trying to take pictures of all of us. I don't know why. I don't think I look that good anyhow. But nevertheless, they were taking pictures, and glaring at us, and making signs, and everything, and we understood we couldn't make a sign back. We might start a war. So it was kind of interesting.

But what do mean by a credible deterrent? They are 40 miles from Seoul and by the time Seoul could respond, they could have half the city destroyed and those people are crammed together in that city in these high-rise apartments like you wouldn't believe. It is very densely populated. What I would like to know is, how can South Korea defend itself and respond if there is another movement like we saw with the ship and the other land?

Mr. CHA. Well first, the core of deterrents has been the U.S.-ROK alliance and in that sense, the North Koreans have attempted these small-scale provocations, but they have not, since 1950, tried another all-out invasion. And I think that is largely because they know that if they tried an invasion like that, they could do a great deal of damage to Seoul, but this would be a war they would lose.

Mr. BURTON. Yes. Well, but, you know, you talk about a credible deterrence, and I am not sure you can answer this, but I would like to know what you think, and that is, you know, they attacked the ship, they have made a couple of attacks, they have killed a number of people, and there hasn't been much of a response other than, you know, if you do it again we are going to poke you in the nose. And that usually doesn't sit well with those people. Like I said before, tyrants like that only react to strength. And we had a peace through strength under Reagan.

And I just wondered, you know, what would be something that would deter them from doing that again? They have done it twice. They have got this new young guy up there who is 20-something

years old. I would just like to know what, in your opinion, would be a credible deterrent to really stop them from doing that sort of thing that would provoke and cause another exchange?

Mr. CHA. Well, I think the most credible deterrent would be to punish them for the next time that they do it. Short of that, I think very credible deterrents are things like ASW exercises, anti-submarine warfare exercises, in that part of the region, better counterfire artillery on the part of the South Koreans, and all these things have been developed between the U.S. and the ROK since the provocations of 2010.

Ultimately, the test of deterrence, really, is their behavior. And if they don't do anything, then we can say deterrence succeeded. But if they do take another action, the only way to uphold deterrence is to punish them.

Mr. BURTON. Well, okay. I think that at least was an attempt to answer my question, so I appreciate it. Thank you.

Mr. MANZULLO. Punish them kinetically.

Mr. CHA. Kinetically.

Mr. MANZULLO. Kinetically. Mr. Sherman from Sherman Oaks, California.

Mr. SHERMAN. It is, indeed, America's best named city. I am hearing reports of goods being manufactured in Kaesong in North Korea, and being shipped to South Korea for relabeling, and then designed for export to the United States. What systems do we have in force that would even catch that? I don't know if any of our witnesses has a response.

Mr. CHA. Congressman Sherman, you know the KORUS agreement better than I do. I think what was intended by the KORUS agreement was if there are activities related to Kaesong that are being sent to the United States, that would have to come under review as a part of the deliberation mechanism if either of us have problems with the implementation of KORUS. My understanding is that there may be—I mean, in Kaesong, there may be some packaging that is done by these workers in Kaesong of South Korean products, but I don't know where the ultimate export destination for those products go.

Mr. SHERMAN. Would they be eligible for favorable treatment under the trade agreement if the packaging work, or any other work on the product, was done in Kaesong?

Mr. CHA. I don't have an answer to you for that question.

Mr. SHERMAN. Got you. There is a lot of press coverage of this, but which gentleman here can describe how powerful is the current arsenal of nuclear weapons of North Korea according to unclassified information, and the weapons they have tested, how do they compare with the two weapons that were used in anger; Hiroshima and Nagasaki?

Mr. CHA. I think the unclassified's assessment is that they have enough plutonium for, maybe, 8 to 12 weapons. The first test, October 2006, was, I think, technically described as a fizzle.

Mr. SHERMAN. There was a detectable explosion. I don't know enough about nuclear physics to know how you have a nuclear explosion that is a fizzle, but that is the description I have had.

Mr. CHA. That is the description. Yes. And the second one was more than a fizzle. I mean, there are aspects of this that we can talk about. We can't talk about it in this forum.

Mr. SHERMAN. Got you.

Mr. CHA. But the second one was more than a fizzle and was determined to be a nuclear test as well.

Mr. SHERMAN. Do you see North Korea as developing its nuclear weapons for its national security or as a lever to get aid and benefits from the Western World?

Mr. CHA. I don't think North Korea is building weapons to give them up. I think they are building them to keep them and to use them for coercive bargaining purposes. And we have been engaged, really, since Ronald Reagan, in a dialog with North Korea to try to get them to give up their nuclear weapons and I don't think they are going to give them up.

Mr. SHERMAN. Now, one thing that the North Koreans had wanted was a non-aggression pact with the United States. I think they were rebuffed on the theory that the U.S. doesn't sign non-aggression pacts. Is that something they still want and why in the hell didn't we put that on the table as a possibility in the negotiations?

Mr. CHA. In the last round of six party talks, we did put on the table something called a negative security assurance, in which we put in writing that the U.S. would not attack North Korea with nuclear conventional weapons. A non-aggression pact really doesn't solve any problems because, that negative security assurance was the first time the United States has ever given a negative security assurance to a country, and it got us nowhere. The North Koreans simply pocketed that and moved on to the next thing that they wanted.

Mr. SHERMAN. We didn't give it to them. We indicated we might give it to them, so they weren't able to put it in their pocket.

Mr. CHA. Well, it was in the text of the 2005 joint statement, not a non-aggression pact, but the negative security assurance.

Mr. SHERMAN. Yes, but a negative security assurance, with all due respect to the Executive Branch of Government, is pretty meaningless without it being a treaty. With that, I yield back.

Mr. MANZULLO. Mr. Royce.

Mr. ROYCE. Yes, for Mr. Lipman. A South Korean consortium recently signed a contract that will provide for commercial nuclear reactors to the UAE and that consortium includes Westinghouse. What factors helped South Korea win the UAE deal, if I could ask?

Mr. LIPMAN. In other words, Congressman, why did they win it?

Mr. ROYCE. Correct.

Mr. LIPMAN. Okay. And there was a bit of a discussion before you walked in. They have a very aggressive commercial diplomacy which puts nuclear exports at the forefront of their foreign commercial policy. And that included visits by the President of Korea to the United Arab Emirates to discuss this deal with the Emirates. It included a very good financing package, which the Korea Electric Power Company were able to offer. I would also say that the Koreans have been very active in the Middle East in conventional construction and desalination. In other words, they have big footprint in the region. Korean companies are very active, not just in energy, but non-energy too.

So you put those things together and they had, also, U.S.-origin technology. As I said earlier, their commercial reactor offering is an older type of Westinghouse nuclear power plant. And all things put together, it was a pretty powerful commercial package which they were able to offer the Emirates, which the Emirates took.

Mr. ROYCE. I see. I see. I was going to ask, also, Dr. Cha a question. Thinking back to the time that you spent at the White House in looking at this issue of trying to engage North Korea, would you say more time was spent in negotiations, or planning negotiations, with the North Koreans, or more time spent trying to figure out how to get information into the country that would change the regime? I am just trying to figure out on the top of the to-do list, how much pure energy is spent thinking outside the box in order to change the equation versus how much time is just managing the crisis and figuring out how to continue the negotiations?

Mr. CHA. Congressman, I would probably put the balance at 90 percent negotiations and 10 percent thinking out of the box in terms of information input.

Mr. ROYCE. Because, since the '94 framework agreement, and we were here for the '94 framework agreement, the same strategy has been deployed, and yet, the reports that I hear from defectors coming out of North Korea that indicate some hope for change in the calculus, really, to go to some of the quotes that we received from some of them.

One North Korean defector said,

“I like the dramas that we are now watching in North Korea, because they depict everyday life in South Korea. It is not that I am curious, but it is more that you can see how much South Korea has developed. It is easy to compare the living standards of North and South Korea when watching these dramas. And this then, causes people to rethink their support for the regime.”

Another quote we had from another North Korean defector,

“North Korea only shows beautiful images, but in South Korean dramas, there is fighting and I think this is realistic.”

I think he is talking about in a family setting here.

“This is realistic. There is also poverty. But in North Korea, they only show you good things so it is not real. It does not seem real.”

So there is a disconnect for people between what their government is telling them about the society they are in and they are now realizing the reality of what is happening outside.

And yet, the amount of effort that I have ever been able to uncover being invested in this, when we look at non-proliferation, I just remember how effectively the North Koreans managed to build that reactor on the Euphrates River and attempt to give Syria nuclear weaponry. And that all went on without us—we were sitting there in negotiations not even understanding that, not only were they breaking their agreement on that accord, but also, they were dual-tracking their weapons program, and we were late to pick up to any of that.

But the fundamental answer would seem, to me, to be the one deployed in Eastern Europe and in the former Soviet Union in Russia. It is to think outside the box and change the equation. Would you say in retrospect that, going forward, that might be where we want to put more of our energy?

Mr. CHA. I think that very well may be, Congressman. You know, I think back now and I think I was maybe in a 100 meetings on six party related to de-nuclearization and maybe two on getting information into the country. I think one of the operational problems that we had is that, this has to be something that your body and others push upon the agencies that are responsible for this in the U.S. Government to take as a serious issue rather than as a side project, because, when it is a side project, the agencies that are in power to do these things keep wanting to push it off of one another because they don't want to handle it.

Mr. ROYCE. Well, if I could close, that is one of the things that was communicated to me by some who were involved during Reagan's tenure in the effort to have this impact in public diplomacy. There was a single-minded focus from the administration on down that we were going to get people the information that changed their attitudes and changed the balance in those societies. And it seemed to work like clockwork.

Once the communication began to deliver the message that really resonated. Once they got the pulse of Eastern Europeans, and I was over there in Eastern Europe. I remember interviewing people. I was in Eastern Germany. I remember the way that caught on. I mean, in the polling, it shows how quickly the society's attitudes changed. I would hope that we could rethink some of this. Thank you very much to the panel.

Mr. MANZULLO. I have a question. Mr. Cha, your train leaves at 4 o'clock.

Mr. CHA. There are other trains.

Mr. MANZULLO. All right. Thank you. I didn't want to be responsible for you missing your train. I would call, Mr. Lipman, your attention to Page 4 of your testimony, if you want to take a quick look at it, where it talks about benefits of the 123 Agreements, and ask you the question, what happens if the United States and Republic of Korea do not come together on an agreement? What is the impact?

Mr. LIPMAN. So I was very heartened to hear Deputy Assistant Secretary Zumwalt say that they were committed to closing the agreement, more or less, on time.

Mr. MANZULLO. They have had one round.

Mr. LIPMAN. Yes. So I am a nuclear guy, so we always think about what goes wrong. So on the assumption that the agreement goes on, what could go wrong? What would happen? My view, even if he indicated that it won't go uninterrupted, I thought he said, but my response would be this. Many of the things that are subject of nuclear trade are long-lead items. What does that mean? That means you have to identify them, and order them, and put a contract in place, often, a few years in advance.

So I worry, I could be concerned that as the deadline approaches, that there could be lost business opportunities. There could be contracts which are under negotiation, or could be under negotiation,

that might not be consummated based on this agreement not being renewed.

As I mentioned, one of the most fruitful parts of our cooperation with Korean companies has been in third markets. So when, as there are right now, potential deals out in the international marketplace, it could be that there is a desire to move away from American companies, not just Westinghouse, but away from American companies because we don't have an overarching treaty which would govern commercial nuclear trade. Those are some of the things that, potentially, could go wrong.

I also wonder, I mentioned the importation of Korean nuclear equipment to U.S. projects, I actually don't know what the absence of a treaty would do to those imports. That would be something I would be keen to look at. So the bottom line is, there could be, as you say in this town, unintended consequences of this treaty not being renewed, and so I urge its rapid conclusion.

Mr. MANZULLO. Dr. Cha or Dr. Peters, do either of you want to comment on that?

Mr. CHA. I will speak about it from the perspective of the alliance. I think it would be a disaster for the alliance, because it would send the message, one, that we, the U.S., don't trust the Koreans, and it would cause the Koreans to feel like they are a second-class ally when they have been stepping up all over the world; hosting the G-20, hosting the Nuclear Security Summit, sending troops to Afghanistan, really, in many ways, replacing Japan as sort of the key country in the region.

So I think, from an alliance perspective, it would be a real disaster, and although this is not my area, I think it would also, basically, leave the field open to China, and Russia, and other countries, to basically, define the terms of the global civil nuclear energy regime, which we don't want to happen.

Mr. MANZULLO. Dr. Peters?

Mr. PETERS. I can't comment on the policy aspects, but I would stress the importance of the cooperative R&D that we are talking about between the Republic of Korea and the United States, and that—

Mr. MANZULLO. Could you expand upon that, please?

Mr. PETERS. Yes. So there is currently a cooperative project in pyroprocessing, which is a particular kind of reprocessing where you actually are looking at taking spent fuel that comes out of a reactor and reprocessing it using an electrochemical process where you have molten salt, you chop up the fuel, it goes into the solution in the salt, and you do chemistry, and you are actually able to extract uranium, plutonium, and higher actinides, and make new fuel for recycling in reactors, and then take the residual waste and dispose of it in a repository.

And the Koreans have been interested in exploring pyroprocessing, as I said in my summary, and there is a joint study between the United States, DOE, and the laboratories in the United States, Argonne and Idaho in particular, and KAERI, within the Republic of Korea, on a joint fuel cycle study. So that started, but the sensitive nuclear technology agreements and associated things with the renewal of the 123 would impact that if it didn't continue.

Mr. MANZULLO. So there are two tracks going on. One is the diplomatic track with the 123 and the other one is, what would be the outcome of the 10-year study with the Republic of Korea and the U.S.; the study being carried by Argonne and the Idaho nuclear lab? The Koreans obviously want to be in the same position as the Japanese, with the ability to reprocess their spent nuclear rods. My understanding is that it is possible there could be a diplomatic agreement restructuring the 123 with an open door for a possible change in the event that the 10-year study comes up with a new method of disposing of the fuel. Would that be correct, Dr. Peters?

Mr. PETERS. I can't speak to that directly, because I am just not in the know on the—

Mr. MANZULLO. That is a diplomatic question. Dr. Cha, did you want to answer that?

Mr. CHA. I think that has been the U.S. proposal.

Mr. MANZULLO. Is that viable? Is that acceptable to the Koreans?

Mr. CHA. As far as I understand it, it is not acceptable to the Koreans. The Koreans are pushing very hard, basically, for advanced consent for ENR, uranium enrichment and reprocessing. They want it; we don't want to give it to them. And that is where we are deadlocked.

Mr. MANZULLO. But yet, are we not dependent upon South Korea with regard to certain components? Is that correct, Mr. Lipman?

Mr. LIPMAN. It is. There are components for nuclear plants here in the United States which could be impacted, I don't know the legalities, frankly, to comment completely, if the treaty goes into abeyance or goes away, but Dr. Cha mentioned something very critical, which is, you really lose leverage. You lose market opportunities, which countries such as France, and Russia, and eventually China, are going to fill with—by the way, I think, you know, much less emphasis on areas of nuclear safety and nuclear security of the type that we have and is covered in these agreements.

Mr. MANZULLO. Dr. Peters?

Mr. PETERS. Mr. Chairman, one thing on the technical aspects, you correctly pointed out that the fuel cycle study that I referred to is looking at options. So it is looking at a variety of different options within the pyroprocessing flowsheet, I will call it, for different ways of treating the waste. And so there will be a technical outcome at the end of 10 years that will provide some options for policy consideration.

Mr. MANZULLO. Okay. Well, very interesting and very fruitful discussion this afternoon. I want to thank each of you for coming. As I said before, your entire written statements will be made part of the permanent record and this subcommittee is adjourned.

[Whereupon, the subcommittee was adjourned at 3:50 p.m.]



# A P P E N D I X



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 Asia and the Pacific**  
**Donald A. Manzullo (R-IL), Chairman**

June 1, 2012

You are respectfully requested to attend an OPEN meeting and hearing of the Committee on Foreign Affairs, Subcommittee on Asia and the Pacific, to be held in **Room 2172 of the Rayburn House Office Building (and available live, via the Committee website at <http://www.hcfa.house.gov>)**:

**DATE:** Wednesday, June 6, 2012  
**TIME:** 1:30 p.m.  
**SUBJECT:** What's Next for the U.S.-Korea Alliance?  
**WITNESSES:** Panel I

Mr. Jim Zumwalt  
Deputy Assistant Secretary  
Bureau of East Asian and Pacific Affairs  
U. S. Department of State

Panel II

Victor Cha, Ph.D.  
Senior Adviser  
Center for Strategic and International Studies  
(Former Director for Asian Affairs, National Security Council)

Mr. Daniel S. Lipman  
Senior Vice President  
Westinghouse Electric Company

Mark Peters, Ph.D.  
Deputy Laboratory Director for Programs  
Argonne National Laboratory

**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 Asia and the Pacific HEARING

Day Wednesday Date June 6, 2012 Room Rayburn 2172

Starting Time 2:15 p.m. Ending Time 3:48 p.m.

Recesses 0 ( to ) ( to )

Presiding Member(s)

*Chairman Donald Manzullo*

Check all of the following that apply:

Open Session  Electronically Recorded (taped)   
Executive (closed) Session  Stenographic Record   
Televised

TITLE OF HEARING:

*"What's Next for the U.S.-Korea Alliance?"*

SUBCOMMITTEE MEMBERS PRESENT:

*Congressman Mike Kelly, Congressman Eni Faleomavaega, Congressman Dan Burton, Congressman Steve Chabot, Congressman Brad Sherman, Congressman Edward Royce*

NON-SUBCOMMITTEE MEMBERS PRESENT: *(Mark with an \* if they are not members of full committee.)*

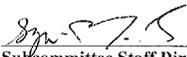
HEARING WITNESSES: Same as meeting notice attached? Yes  No   
*(If "no", please list below and include title, agency, department, or organization.)*

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

- 1. Chairman Manullo - Opening Statement*
- 2. Ranking Member Faleomavaega - Statement for the record*
- 3. Prepared testimony of the Deputy Assistant Secretary Jim Zumwalt, Dr. Victor Cha, Mr. Daniel Lipman, and Dr. Mark Peters*
- 4. Three pictures of a Westinghouse facility in Cranberry Township, Pennsylvania submitted by Congressman Kelly*

TIME SCHEDULED TO RECONVENE \_\_\_\_\_

or  
TIME ADJOURNED 3:48 p.m.

  
Subcommittee Staff Director

MATERIAL SUBMITTED FOR THE RECORD BY THE HONORABLE MIKE KELLY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA



