
QUESTIONS SUBMITTED BY MEMBERS POST HEARING

NOVEMBER 2, 2011

QUESTIONS SUBMITTED BY MR. TURNER

Mr. TURNER. At the House Armed Services Committee's October 13 hearing, Secretary of Defense Panetta said, "With regards to reducing our nuclear arena, I think that is an area where I don't think we ought to do that unilaterally—we ought to do that on the basis of negotiations with the Russians and others to make sure we are all walking the same path." To ensure we are not reducing unilaterally, will we retain nuclear forces that are at—or very near—the limits on strategic forces imposed by the New START Treaty? Otherwise, wouldn't it by definition be "unilateral" reductions?

a. Would you support reductions if they were a part of a non-binding agreement with Russia?

b. At what force levels do we need to start bringing the "others" Secretary Panetta mentions, particularly China, into the picture?

Dr. MILLER. The Administration has not made a final decision on the specific mix of forces to be deployed under the New START Treaty. DOD continues to plan on 240 SLBM launchers, up to 420 ICBM launchers, and up to 60 nuclear-capable heavy bombers. It is important to note that the U.S. retains the flexibility to modify the mix of delivery systems under the Treaty.

a. As stated in the Nuclear Posture Review (NPR), because of our improved relations, the need for strict numerical parity between the United States and Russia is no longer as compelling as it was during the Cold War. But large disparities in nuclear capabilities could raise concerns on both sides and among U.S. Allies and partners, and may not be conducive to maintaining a stable, long-term, strategic relationship, especially as nuclear forces are significantly reduced. Therefore, we will place importance on Russia joining us as we move to lower levels.

b. Maintaining strategic stability with both Russia and China will remain a critical challenge in the years ahead. China is estimated to have only a few hundred nuclear weapons and to be modernizing its nuclear arsenal; a Chinese "sprint to parity" has not materialized. That said, the overall lack of transparency surrounding China's nuclear programs and capabilities raises questions about China's future strategic intentions. We continue to pursue high-level, bilateral dialogues with both Russia and China that seek to promote more stable, resilient, and transparent strategic relationships. It is impossible at this time to pinpoint an exact force level at which the United States and Russia would want to bring other nations into a binding agreement. However, given that the United States and Russia will still account for 90 percent of the world's nuclear weapons after New START is implemented, there is a clear opportunity for future bilateral reductions—including of tactical nuclear weapons, which the Russians have in much larger numbers.

Mr. TURNER. Dr. Miller, you noted that the NPR stated that "strict numerical parity between the United States and Russia is no longer as compelling as it was during the Cold War," but that "we will place importance on Russia joining us as we move to lower levels." In my mind, "placing importance on" is not the same as "we won't do this." Will the administration make reductions without reciprocal and proportionate reductions from Russia?

Dr. MILLER. The Administration is conducting a Nuclear Posture Review (NPR) implementation study to determine the nuclear force size and structure needed to support U.S. national security requirements and meet international obligations in a dynamic security environment. The ongoing study was directed by the President as part of the 2010 NPR. The analysis from this study will provide options for the President's guidance to the Departments of Defense and Energy on nuclear planning with respect to the force structure, force posture, and stockpile requirements needed to protect the United States and its Allies and partners, and to inform plans for the employment of nuclear weapons in the event that deterrence fails. As stated in the NPR, the United States intends to pursue further reductions in nuclear weapons with Russia. When complete, the analysis of deterrence requirements and force postures will inform the development of any future arms control objectives.

Mr. TURNER. How many military and civilian personnel in the executive branch have full or partial access to nuclear employment and targeting guidance issued by the President, the Secretary of Defense, the Chairman of the Joint Chiefs of Staff,

and the Commander of U.S. Strategic Command? Please break down this information by the numbers of personnel with access to each level of guidance. How many personnel in the legislative branch have full or partial access to each level of guidance?

Dr. MILLER. A very small group of personnel in the executive branch have access to the nuclear employment guidance issued by the President, the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, and the Commander, U.S. Strategic Command. Even within the Department of Defense (DOD), access to this sensitive material is tightly controlled. Within the Department of Defense, fewer than twenty copies of the President's guidance are distributed in the Office of the Secretary of Defense, the Joint Staff, and U.S. Strategic Command. Fewer than 200 copies of the most recent amplifying guidance issued by the Secretary of Defense were produced, and distribution was limited primarily to Office of the Secretary of Defense, the Joint Staff, U.S. Strategic Command, and other Combatant Commanders. The Chairman's guidance is distributed more widely within DOD (fewer than 200 copies), as the document assigns responsibilities to several defense agencies and the intelligence community. Commander, U.S. Strategic Command must issue guidance to his planners and forces in the field, so distribution is somewhat wider because of that need.

There is a long history of debate about providing the legislative branch access to this material. As a result, instances of providing access to a member of Congress and senior staff personnel have been quite limited and under restrictive terms.

This Administration is committed to working with Congress and supporting effective congressional oversight on nuclear policy and modernization issues. To this end, the Secretary of Defense has invited the Chairmen and Ranking Members of the House and Senate Armed Services Committees and the Strategic Forces Subcommittees, and the relevant staff directors, to participate in a set of classified briefings that the Office of the Secretary of Defense would provide, in conjunction with the Joint Staff and U.S. Strategic Command. The provision of such information would be subject to strict safeguards given its extremely sensitive nature.

Mr. TURNER. The House Appropriations Committee reported a Defense Appropriations bill that contains a 1% reduction from the President's budget request for DOD. The House Appropriations Committee reported an Energy and Water appropriations bill that contains a 10% reduction for NNSA and all of its defense activities. This came after strong and vocal support from Secretary Gates and senior military leaders for NNSA's full budget request. How do these discrepancies affect planning, budgeting, and coordination between NNSA and DOD on the overall nuclear security enterprise? Should all aspects of the nuclear security enterprise be consolidated into a single budgetary and appropriations authority?

Dr. MILLER. The modernization program was closely coordinated between the Department of Energy and the Department of Defense to ensure that modernization efforts are funded, but also to manage costs wisely. If Congress makes reductions without context and without thoroughly examining the long-term effects on the national interest, such actions could undermine our plans to ensure a safe, secure, and effective nuclear deterrent.

It is essential to look across the complete nuclear security enterprise to review budgetary impacts fully, particularly in light of our current fiscal situation and the new constraints imposed by the Budget Control Act of 2011; however, this does not necessarily require a single budgetary and appropriations authority. As you know, the Nuclear Weapons Council (NWC), established in Title 10, Section 179, of the U. S. Code, has responsibility for coordinating programming and budget matters pertaining to nuclear weapons programs between the Department of Defense and the Department of Energy. The NWC has been active in this role, and the Departments of Defense and Energy will continue to consider any steps that could further improve effective planning and oversight.

Fulfilling the President's commitment to modernize the nuclear enterprise will require full and sustained congressional support. As we review our defense budget for the most cost-effective means to secure our Nation, I look forward to working with Congress to ensure funding for the critical activities within the Department of Defense and Department of Energy that are necessary to sustain the most effective nuclear deterrent.

Mr. TURNER. You said the 1251 Report shows that the total cost of sustaining, operating, and modernizing our nuclear forces, nuclear weapons, and their supporting infrastructure over the next ten years—for both DOD and NNSA—is on the order of \$214 billion. What percentage of the defense budget is this? What percentage of the full federal budget is this? How does this compare to historical trends, including the Cold War? Please be as specific as possible.

Dr. MILLER. The \$214 billion is about 3 percent of the 10-year defense base budget of \$6.3 trillion (including the Department of Defense (DOD) and the National Nuclear Security Administration) and is about 2 percent of the Federal budget of \$12.2 trillion (excluding Overseas Contingency Operations).

The following are some historical trends based on the DOD budget:

- Funding for Strategic Forces (\$0.6 trillion) as a percent of the DOD budget (\$12.7 trillion) from FY 1962 to FY 2011 was about 4 percent.
- Funding for Strategic Forces (\$0.4 trillion) as a percent of the DOD budget (\$4.4 trillion) during the Cold War (based upon data from FY 1962 to FY 1991) was about 8 percent.
- Funding for Strategic Forces (\$.2 trillion) as a percent of the DOD budget (\$8.3 trillion) after the Cold War (from FY 1992 to FY 2011) was about 2 percent.

Note: The source for the historical data was from Table 6.4, Department of Defense TOA by Program, in DOD's "National Defense Budget Estimates for FY 2012" book (commonly referred to as the "Green Book." This historical data includes all supplementals and Overseas Contingency Operations/Global War on Terrorism funding.

Mr. TURNER. We have heard that within the Deterrence and Defense Posture Review (DDPR) process, some NATO allies might be encouraging several changes to NATO's nuclear posture, possibly including: (1) consolidation of U.S. nuclear forces in Europe to one or more centralized bases, (2) decreasing the number of dual-capable aircraft our allies are required to maintain, (3) relaxing or eliminating requirements for pilots from allied nations to be trained and exercise in the nuclear mission, and (4) potential removal of U.S. nuclear weapons from Europe.

- a. Are any of these actions being considered by the DDPR? Which ones?
- b. Would NATO and the U.S. consider taking any of these steps unilaterally, without reciprocal and proportionate action on the part of Russia?
 - i. What actions would we consider taking unilaterally, and what actions would we only undertake bilaterally with Russia?
 - ii. What reciprocal actions would the U.S. look for from Russia in exchange for any of these four actions?

Dr. MILLER. The DDPR process is still in the deliberative stages. However, in keeping with the Strategic Concept, any future reductions will be made on the basis of reciprocity with Russia, not unilaterally. We have not determined what reciprocal actions from Russia would be sufficient for future changes.

Mr. TURNER. Some subset of F-35 joint strike fighters are intended to be nuclear-capable, replacing the nuclear-capable F-16s that will be retired due to age. Can you affirm that there will be nuclear-capable F-35s? This decision has been made and is being implemented?

- a. How many F-35s will be nuclear-capable?
- b. Based on the current F-35 program plan, when will the first nuclear-capable F-35s be deployed?
- c. When will the first nuclear-capable F-35s be deployed to Europe?

Dr. MILLER. Yes, the 2010 Nuclear Posture Review confirmed the need to retain a dual-capable fighter to ensure that the United States retains the ability to forward deploy non-strategic nuclear weapons in support of Alliance commitments. The Air Force plans to replace current DCA-capable aircraft with the F-35 Joint Strike Fighter and intends to program, develop, and integrate nuclear capability as part the Joint Strike Fighter's Block 4 upgrade planned to be released to the field in the early 2020s.

a. The Air Force plans to purchase 1,763 F-35As. The Air Force remains committed to deliver the DCA capability with the Block 4 upgraded F-35As in the early 2020s.

b. The Air Force will be prepared to deploy nuclear-capable F-35As after the Block 4 upgrade in the early 2020s.

c. The first nuclear-capable U.S. Air Force F-35As will be available for Europe in the early 2020s.

Mr. TURNER. How does the deployment of the B61-12 warhead align with deployment of nuclear-capable F-35s? Is deployment of the two systems linked? Can one deploy without the other, while still retaining our nuclear capability in Europe?

Dr. MILLER. The B61-12 will sustain the U.S. extended deterrence commitment to our Allies through life extension of the aging B61 family of bombs. As part of this life-extension effort, compatibility with the F-35 will be preserved; however, the B61 and F-35 programs are not dependent on one another. Until the F-35 becomes nuclear-capable, non-strategic deployment of the B61-12 will, if required, occur through the use of existing Dual-Capable Aircraft.

Mr. TURNER. Are our NATO allies still planning to purchase dual-capable F-35s to replace their aging dual-capable aircraft? How many do they plan to purchase

and when? Please describe the plans for NATO countries to replace or modernize their nuclear-capable aircraft, including numbers of aircraft and timelines for purchase. How are these plans being reflected in the DDRP?

Dr. MILLER. Although the specific dates and quantities are classified, some Allies are still planning to purchase F-35 aircraft. The DDRP process is still in the deliberative stage.

Mr. TURNER. When NNSA conducts a life extension program on a particular weapon type, will NNSA extend the life of all warheads of that type, including those in the non-deployed “hedge” part of the stockpile? Or will it only extend those weapons in the active, deployed part of the stockpile?

Dr. MILLER. Each nuclear weapon life extension is unique to its type and the hedge required to support operational requirements. Total quantities for each life extension are determined by accounting for operational needs, reliability and surveillance testing, spares, and hedge needs. Hedge quantities are affected by geopolitical and technical requirements to support each leg of the triad. The Administration is reviewing hedging requirements and their implication for stockpile size and status as part of the Nuclear Posture Review implementation study.

Mr. TURNER. Would you please elaborate on your statement that “To date no decisions have been made with respect to future force sizing or the modernization plans for nuclear delivery systems; such decisions will be informed by the Administration’s ongoing review of deterrence requirements”? Do the commitments made for modernization in the 1251 Report still hold? Does the President’s commitment to the Senate during New START consideration still hold? In a message to the Senate on New START, the President said: “I intend to (a) modernize or replace the triad of strategic nuclear delivery systems: a heavy bomber and air-launched cruise missile, an ICBM, and a nuclear-powered ballistic missile submarine (SSBN) and SLBM.”

Dr. MILLER. To date, no final decisions have been made with respect to the specific future force sizing or the modernization plans for nuclear delivery systems—i.e., the exact mix of delivery systems and warheads under the New START Treaty. Such decisions will be informed by the Administration’s ongoing review of deterrence requirements. I can assure you, however, that these decisions will be consistent with the goals of the NPR, including to maintain strategic stability, provide assurance to our Allies and partners regarding the credibility of the U.S. nuclear umbrella and other security commitments, and to maintain a safe, secure, and effective nuclear deterrent.

The Administration is committed to making the investments necessary to recapitalize the nuclear enterprise and ensure we have the highly skilled personnel needed to maintain our nuclear capabilities. These are large investments that must be made over an extended period, but are essential to U.S. national security.

Mr. TURNER. The 2010 Nuclear Posture Review (NPR) says that “the presence of U.S. nuclear weapons—combined with NATO’s unique nuclear sharing arrangements under which non-nuclear members participate in nuclear planning and possess specially configured aircraft capable of delivering nuclear weapons—contribute to Alliance cohesion and provide reassurance to allies and partners who feel exposed to regional threats.”

a. Please explain how the presence of nuclear weapons in Europe contributes to NATO cohesion, reassurance, and stability.

b. In particular, which NATO allies value these nuclear weapons and “feel exposed to regional threats”?

c. Will unanimity among NATO members be required before any major changes are made to our nuclear posture in Europe? What sorts of changes to our nuclear posture in Europe might we undertake without unanimity of NATO members?

Dr. MILLER. The Strategic Concept reinforced that the Alliance will maintain an “appropriate mix” of nuclear and conventional forces, and that the Alliance would “remain a nuclear Alliance as long as nuclear weapons exist.” As such, nuclear weapons contribute to overall cohesion and stability of the Alliance. The Strategic Concept also lays out the threats to which all members are exposed, including conventional threats, proliferation threats, terrorism, and cyber attacks. No major changes to nuclear posture would be expected without consensus from Alliance members.

Mr. TURNER. Dr. Miller, you recently told a reporter that DOD might be willing to contribute more funding to NNSA’s nuclear modernization efforts, but would not be willing to transfer any more budget authority if the Energy and Water appropriators do not use it for the intended modernization purpose. Were you referring to some of the \$8.3 billion in budget authority DOD has already pledged for NNSA, or were you referring to additional funds beyond this \$8.3 billion?

Dr. MILLER. The approximately \$8.3B pledged for NNSA consisted of two separate transfers—the first was \$5.7B during Fiscal Year (FY)11–FY15 and the second was

\$2.5B during the FY12–16 period. This second transfer was intended to be distributed annually. It is the annual distribution of this second transfer that I believe should be reconsidered if funding is not appropriated as it was intended.

Mr. TURNER. Dr. Miller, you recently said that you haven't seen anything to suggest that \$7.6 billion for NNSA Weapons Activities is not the correct figure for FY12. Would you please elaborate?

Dr. MILLER. The Fiscal Year (FY)12 Presidential Budget Request for NNSA Weapon Activities was \$7,629,716,000, which is the amount required to meet DOD nuclear weapons requirements. This figure was arrived at after careful consideration of the need to implement the policies of the Nuclear Posture Review and the requirements of the New START Treaty. This funding request is in alignment with the ten-year funding profile in the report pursuant to Section 1251 of the National Defense Authorization Act for Fiscal Year 2010; this profile was provided to Congress in February 2011. It also includes a transfer of funds from the DOD to the NNSA to ensure weapon life extension programs and nuclear facility modernization efforts are funded appropriately.

Mr. TURNER. The 2010 NPR states that nuclear force reductions are possible because of overwhelming conventional military superiority. Since the NPR was written, \$330 billion in weapons systems have been cancelled and \$489 billion has been taken out of the defense budget. And now we have the specter of sequester looming ahead with the promise of an additional half trillion in cuts. Is this premise in the 2010 NPR still valid? At what point is it not? Where is the break-point in terms of our conventional military superiority as we see both China's large buildup in conventional military capability and asymmetric capabilities and China and Russia's major nuclear modernization programs?

Dr. MILLER. Under the funding levels required by the Budget Control Act, the United States will continue to possess overwhelming conventional capability against any conceivable adversary for the foreseeable future. If sequestration occurs, the scale and arbitrary nature of the required cuts to defense spending would inflict severe damage on the U.S. military. In this case, the United States would need to reconsider all elements of its defense strategy.

Mr. TURNER. After implementation of the New START Treaty and the NPR, what percentage of our strategic forces will be deployed on submarines?

a. Has the U.S. ever deployed so much of its deterrent on a single platform before? In other words, on one leg of the triad and on one type of submarine, ICBM, or bomber? What risks does the U.S. accept by doing so?

Dr. MILLER. Final decisions on specific force mix under New START have not yet been made, but more than half of our operational strategic warheads will be deployed on submarines.

The United States since the end of the Cold War, has deployed a large portion of our forces on SSBNs. The percentage of warheads deployed aboard SSBNs today is very similar to what we would expect after full implementation of the New START Treaty.

There are both operational and technical risks associated with strategic submarines. The operational risk is that these submarines could become vulnerable—a scenario that appears highly unlikely for the indefinite future. The technical risk is that a problem with the type of warheads carried on the submarines, or with our submarine-launched ballistic missiles, or the submarines themselves, could result in that portion of the force becoming unavailable. A massive technical failure is also highly unlikely. However, because of the importance of the nuclear deterrence mission we mitigate these risks by maintaining the capability to upload other legs of the Triad in response. To be well-hedged against a technical surprise remains a key priority, and is one of the metrics we use when evaluating force structures.

Mr. TURNER. The NPR concluded that “the current alert posture of U.S. strategic forces . . . should be maintained for the present.” Please explain why the NPR reached this decision. What are the benefits of our current alert posture? Do you anticipate changes in this decision?

Dr. MILLER. The Nuclear Posture Review (NPR) considered the possibility of reducing alert response requirements for ICBMs and at-sea response requirements of SSBNs, and concluded that such steps could reduce crisis stability by giving an adversary the incentive to attack before “re-alerting” was complete. At the same time, the NPR concluded that returning heavy bombers to full-time nuclear alert was not necessary, assuming the other two Triad legs retain an adequate alert posture.

The current alert posture supports strategic stability through an assured second-strike capability. It ensures that, in the calculations of any potential opponent, the perceived gains of attacking the United States or its Allies and partners would be far outweighed by the unacceptable costs of the response.

At this time, I do not anticipate any major changes in the alert posture for U.S. strategic forces.

Mr. TURNER. Germany and Norway have put forward ideas in the DDPR process to increase transparency in NATO's nuclear mission and NATO's nuclear forces. What transparency measures are being considered?

a. What NATO transparency measures are the U.S. comfortable with NATO doing unilaterally (i.e., without reciprocal and proportionate action by Russia)?

b. What NATO transparency measures would we only consider doing bilaterally based on agreements with Russia? Would you anticipate such bilateral agreements being based on non-binding agreements or through some sort of binding treaty or agreement?

c. How does the administration define "transparency"? How does it define "verification"? How are the two concepts related?

Dr. MILLER. The Deterrence and Defense Posture Review (DDPR) process is still in the deliberative stages. We have not determined what constitutes "transparency measures" and which ones will be considered.

Transparency and verification are closely related concepts. The New START Treaty, for instance, provides significant transparency regarding the strategic nuclear relationship between the United States and Russia through its extensive verification regime. The Treaty's verification measures include extensive notifications, prohibitions on interference with National Technical Means (NTM), unique identifiers, inspections, and exhibitions. These measures allow each side to gain important insights into the other side's strategic forces. They also reduce uncertainty about the future direction of Russian strategic forces and assist in improved planning for our future defense needs. On the whole, this shared knowledge is valuable for maintaining strategic stability between the two major nuclear powers.

Mr. TURNER. How does the B61 Life Extension Program (LEP), which would consolidate several different versions of the B61 into a single B61-12 version, link to our extended deterrent in Europe?

a. What are the implications, both to our extended deterrent and more broadly, of delay in the B61 LEP?

b. Why is it important to increase surety in B61 warheads during the LEP?

Dr. MILLER. The intent of the B61 LEP is to consolidate four current versions of the B61 family of bombs into one single version that will continue to sustain both our strategic and extended deterrence missions. NNSA, in coordination with the Department of Defense (DOD), identified the Initial Operating Capability (IOC) and Full Operating Capability (FOC) to ensure that a seamless transition between the B61-12 and the earlier versions that it is replacing is achieved without any loss in operational capability. The NNSA and DOD will continue to address any delay in meeting these dates that could potentially jeopardize those missions and the extended deterrence commitment to our Allies and friends.

As part of any life extension program, NNSA considers options for enhancing the safety, security, and use control features of a weapon system as part of the Phases 6.1/2/2A process. Policy directives require an assessment of the warhead to meet safety and security objectives for the future. This process ensures that viable weapon surety features are identified and evaluated against all other design requirements and balanced against cost and schedule risks to assure our commitment to a safe, secure, and effective nuclear deterrent.

Mr. TURNER. When will a decision be made regarding how specifically our nuclear forces will be structured to comply with the New START Treaty? When will de-MIRVing of our ICBM forces begin to occur?

Dr. MILLER. To date, no final decisions have been made with respect to force structure under the new START Treaty; such decisions will be informed by the Obama Administration's ongoing review of deterrence requirements. I can assure you that these decisions will be consistent with the goals of the Nuclear Posture Review (NPR), including to maintain strategic stability, provide assurance to our Allies and partners regarding the credibility of the U.S. nuclear umbrella and other security commitments, and to maintain a safe, secure, and effective nuclear deterrent.

Partial "de-MIRVing" (MIRV, Multiple Independent Reentry Vehicle) of our ICBM forces began in the 1990s as part of our reductions under the START Treaty. The Air Force has also begun the complete de-MIRVing of the rest of the ICBM force, as directed in the NPR, in conjunction with previous commitments and Air Force-established maintenance plans. This minimizes disruption to our operational forces and is the most cost-effective method for carrying out the NPR guidance to de-MIRV the ICBM force.

Mr. TURNER. Dr. Miller, in your remarks, you said "The U.S. nuclear arsenal included 5,113 weapons as of September 30, 2009, at the time of our last unclassified release of stockpile totals." How many of those weapons were in the various cat-

egories of active, inactive, deployed, non-deployed, etc.? Is there any intention to make such detailed numbers public?

Dr. MILLER. The specific numbers associated with the deployed/non-deployed, active/inactive stockpile remain classified and, as such, are not to be made public. However, the United States declared an aggregate 1,790 warheads on deployed ICBMs, deployed SLBMs, and counted for deployed heavy bombers to the Russian Federation as part of the New START Treaty on September 1, 2011. There is no current plan to make public the specific numbers of deployed/non-deployed, active/inactive stockpile weapons.

Mr. TURNER. How many nuclear warheads does Russia make each year? What is our estimate for how many it can make? How does this compare to actual U.S. production and our potential production capacity?

Dr. MILLER. [The information referred to is classified and retained in the committee files.]

Mr. TURNER. Dr. Miller, when you said “unclassified estimates suggest that Russia has 4,000 to 6,500 total nuclear weapons, of which 2,000 to 4,000 are non-strategic tactical nuclear weapons,” are those numbers active warheads or all Russia warheads (including those in storage or non-deployed status)?

Dr. MILLER. [The information referred to is classified and retained in the committee files.]

Mr. TURNER. Are you concerned about reports about China potentially increasing the MIRVing of its land- and sea-based ballistic missiles? How might this trend affect the nuclear balance and our nuclear policies 10 or 20 years from now? Are you concerned about reports of Russia developing and deploying new heavy, highly-MIRV'd, silo-based ICBMs? How would deployment of this system affect strategic stability and U.S. nuclear policies and strategies? Did the U.S. seek to ban such systems during New START negotiations?

Dr. MILLER. We are concerned about the pace and scope of the modernization of China's nuclear capabilities, both quantitatively and qualitatively. We are also concerned about the lack of transparency regarding the strategy and doctrine guiding this effort. Moreover, the overall lack of transparency surrounding China's nuclear programs and capabilities raises questions about China's future strategic intentions and makes it difficult to assess the future nuclear balance.

A Russian deployment of a new heavy, highly MIRVed, silo-based ICBM would reduce our strategic stability. The United States is taking steps to enhance strategic stability, including de-MIRVing ICBMs and sustaining a robust at sea presence of strategic submarines. These U.S. steps reduce first-strike incentives for both sides, thereby enhancing stability.

These questions and potential concerns illustrate why we continue to pursue high-level, bilateral dialogues with China and Russia that seek to promote a more stable, resilient, and transparent strategic relationships.

Mr. TURNER. The NPR mentions “strategic stability” more than a dozen times, but never defined it. How does the administration define “strategic stability”? How does it relate to force structure, numbers, and modernization? How do nuclear modernization programs in Russia and China affect strategic stability? How is strategic stability affected in the long-term if other countries continue their nuclear modernization efforts but our own modernization effort stalls or is greatly reduced in scope?

Dr. MILLER. Strategic stability exists when no side has incentives or believes the other side has incentives to attempt to conduct a disarming first-strike, whether in a day-to-day situation (“bolt-from-the-blue” scenario) or in a severe crisis (“pre-emption in crisis” scenario). Survivable nuclear forces and command and control are critical to strategic stability, and other factors including the de-MIRVing of silo-based ICBMs contribute to stability. Modernization that sustains or improves the survivability of nuclear forces and command and control can be stabilizing. Increased transparency and discussions on strategic doctrine, which the United States would like to expand with Russia and initiate with China, can also improve stability by reducing the prospects for miscommunication or misperception.

Mr. TURNER. General Kehler, you cautioned against cutting the budget or size of our nuclear forces too deeply, resulting in what you called a “hollow force.” For each of the three legs of the triad, what are the breakpoints or red-lines in the size of the force or budget that would result in a “hollow force” for that leg?

a. What analysis has been done to examine these questions?

b. Would cutting one wing of ICBMs—leaving us with two wings—potentially result in a hollow force in that leg of the triad?

General KEHLER. A hollow force is a force giving the appearance of readiness when, in fact, the capability is not there. The force may be hollow if it is too small for the job, is inadequately supported, or lacks an adequate industrial base. There-

fore, any discussion and assessment on “hollow force” or breakpoints must be preceded by a thorough analysis of the strategy, its objectives, force composition, and the level of budgetary support.

A. Resources and force structure identified in the President’s Budget and the updated 1251 Report are adequate to support today’s strategic deterrent strategy and policy goals as we move forward to implement New START.

B. Eliminating a wing of ICBMs would not necessarily create a hollow force, provided the remaining wings can meet national strategic deterrent requirements, and are properly trained, equipped, maintained, sustained, and led.

Mr. TURNER. At the House Armed Services Committee’s October 13 hearing, Secretary of Defense Panetta said, “With regards to reducing our nuclear arena, I think that is an area where I don’t think we ought to do that unilaterally—we ought to do that on the basis of negotiations with the Russians and others to make sure we are all walking the same path.” To ensure we are not reducing unilaterally, will we retain nuclear forces that are at—or very near—the limits on strategic forces imposed by the New START Treaty? Otherwise, wouldn’t it by definition be “unilateral” reductions?

a. Would you support reductions if they were a part of a non-binding agreement with Russia?

b. At what force levels do we need to start bringing the “others” Secretary Panetta mentions, particularly China, into the picture?

General KEHLER. As specified in the 1251 report, we are presently looking at New START implementation plans that are “at or very near the limits imposed by the New START Treaty.” Any recommendations to depart from that approach would have to be based on the international situation and our deterrence, assurance and stability needs.

Regarding bringing states other than Russia into negotiated nuclear arms reductions, the New START negotiating position took into account our total force requirement involving all potential threats. As discussed in the Nuclear Posture Review, we should bring others into the “picture” now. But the “picture” is not necessarily limited to negotiated arms reductions. Rather, the nature and objectives of our interactions with others should be tailored to the countries involved.

Mr. TURNER. Would you support unilateral reductions in our nuclear forces, below the levels prescribed by New START? Would you support reductions if they are part of a non-binding agreement with Russia?

General KEHLER. I support the 13 October statement of Secretary of Defense Panetta: “With regards to reducing our nuclear arena, I think that is an area where I don’t think we ought to do that unilaterally—we ought to do that on the basis of negotiations with the Russians and others to make sure we are all walking the same path.” We are currently looking at New START force structures that are at or very near the limits contained in New START.

Mr. TURNER. General Kehler, your predecessor at U.S. Strategic Command, General Kevin Chilton, said in June 2010 that, with regards to the size of our nuclear arsenal, “I do not agree that it is more than is needed. I think the arsenal that we have is exactly what is needed today to provide the deterrent. And I say this in light of—when we talk about the non-deployed portion of the arsenal, it is sized to be able to allow us to hedge against both technical failures in the current deployed arsenal and any geopolitical concerns.” Do you agree?

General KEHLER. The nuclear arsenal is sized to meet current policy and strategy objectives and manage technical and geopolitical risks. The non-deployed stockpile provides considerable flexibility to respond to operational issues, technical failures or breakthroughs, and geopolitical uncertainty. We annually review stockpile requirements to seek the most cost efficient force mix to provide deterrence capabilities and manage risk.

Mr. TURNER. How many military personnel have full or partial access to STRATCOM’s OPLAN 8010? How many must have knowledge of its contents to fulfill their jobs and missions?

General KEHLER. Full access to all portions of OPLAN 8010 is limited to our most senior leadership. OPLAN 8010 is built on a full spectrum of missions (nuclear, conventional, and non-kinetic) that involve all levels of USSTRATCOM and its components. Because the majority of the base plan and supporting annexes are classified SECRET, military members with at least a SECRET clearance and need-to-know can be granted access. However, those portions of the plan do not include the details of our nuclear employment planning. Some portions of the plan contain data which are classified at a higher level, including those portions that include the details of our nuclear employment planning, and access to those portions is limited accordingly.

Mr. TURNER. When does our current force of Minuteman III ICBMs start aging out? What life extension programs are currently underway for the ICBMs?

a. What assessments or surveillance are we doing related to aging in the ICBM force?

b. What are our plans or programs to extend the life of our Minuteman III ICBMs? When must the decision be made to proceed with life extension?

c. What are our plans or programs to replace the Minuteman III ICBM force? When must the decision be made on a replacement program?

General KEHLER. We are confident Minuteman is sustainable through mid-2020s and are engaged with the Air Force to identify any additional steps required to sustain Minuteman through 2030. The Air Force is refurbishing the propulsion system rocket engines and warhead fuzes, making improvements to depot and field support equipment, and security and C2 sub-systems.

A. The Air Force conducts a comprehensive aging and surveillance program and reports the results to USSTRATCOM. The surveillance and testing program includes ground and flight testing. Results are used to assess performance of the weapon system and provide insights on the need for refurbishment and replacement programs.

B. The current Air Force plan is to extend Minuteman through component replacement. This program is ongoing and reflected in the PB12 budget. Major sub-systems being refurbished include the propulsion system rocket engine and warhead fuzes. Guidance and propulsion sub-systems require attention in the very near future to ensure performance through 2030. Additionally, the Air Force is making investments in advanced technology to support these future efforts.

C. Analysis is underway to support the Minuteman recapitalization. The Air Force plans to conduct a Ground Based Strategic Deterrent (GBSD) Analysis of Alternatives (AoA) to examine the full range of alternatives including mobile options, as directed by the NPR. The decision on investment for a Minuteman replacement depends on AoA findings. Early investments may be required in the FY14 budget. The goal is to ensure current and future investments on sub-systems are leveraged in the recapitalization solution.

Mr. TURNER. How do we support the industrial base for ICBMs and submarine launched ballistic missiles? Please compare and contrast our approach to maintaining the industrial base for these two programs.

a. The committee has been informed that there is a low-rate production program in place for the D5 SLBM program. Is a similar program in place for Minuteman III?

b. Do you have any concerns related to the rocket motor industrial base, now that NASA has canceled so many of its human spaceflight programs? Is DOD shouldering too much of the burden in this area now?

General KEHLER. Various DOD solid rocket motor investments support the industrial base. DOD Director of Defense Research and Engineering (DDR&E) conducts science and technology (S&T) activities in propulsion in the Technology for Sustainment of Strategic Systems Program. The Air Force conducts propulsion Research Development Testing and Evaluation (RDT&E) activities in the Demonstration and Validation Program. The Navy D5 Life-Extension Program executes ongoing production of the D5 missile.

A. The Air Force conducts ongoing RDT&E efforts which could support a future low-rate production activity, if funded by the Air Force.

B. In order to support strategic systems, the DOD will bear an increased proportion of the industry's overhead costs. These increases will be reflected in ongoing production and future development programs. In addition, the U.S. needs to ensure the complete design-to-production industrial capability and suppliers are sustained. Loss of these capabilities would require numerous years and significant cost to reconstitute.

Mr. TURNER. General Kehler, your predecessor as commander of Strategic Command, General Kevin Shelton, said the following in June 2010: "The reason we have to maintain this large inventory is because we no longer have the ability to produce nuclear weapons in this country. The infrastructure has been allowed to decay and get to a point where we cannot do that. The Russians, on the other hand, have an ability to produce nuclear weapons. That is how they hedge. And so, this is why it's—I think, the NPR findings and the investments in the nuclear infrastructure and the personnel and expertise that is required to sustain the stockpile are so important so that by the time we get to next decade, we'll be in a position to look at our non-deployed arsenal and consider future reductions to that. But today, I think we have what we need to support the deterrent." Earlier this year, Administrator D'Agostino testified before this subcommittee that NNSA's new plutonium and uranium facilities—the Chemistry and Metallurgy Research Replacement (CMRR) facil-

ity in New Mexico and the Uranium Processing Facility (UPF) in Tennessee—need to be “up and running” before we make substantial cuts to the non-deployed stockpile. General Kehler, do you agree with these statements by General Chilton and Administrator D’Agostino?

a. Should “up and running” mean the facilities are being built, or should they have demonstrated actual production capability? What metrics should we be using to judge that the infrastructure is robust enough to support reductions in the non-deployed stockpile without undue risk?

b. General Kehler, would you please provide the military’s perspective on the link between nuclear modernization and the ability to reduce non-deployed weapons?

c. Do DOD and NNSA have a clear plan on what reductions in the non-deployed stockpile are possible or planned for the future, and how those reductions align with infrastructure and stockpile modernization milestones?

d. Has STRATCOM provided NNSA input regarding how many non-deployed weapons the military requires kept in the stockpile as a “hedge”? Please provide this information to the committee.

e. If nuclear modernization is delayed or postponed, can we reduce the size of the non-deployed stockpile? How many non-deployed nuclear weapons would STRATCOM want to see retained as a risk mitigation measure or “hedge”? If one or both of UPF and CMRR are delayed in getting “up and running,” what levels and types of non-deployed warheads would you recommend keeping in the stockpile as a risk mitigation measure or “hedge”? Please be specific.

General KEHLER. NNSA’s uranium and plutonium facilities are vitally important, but are not the only considerations associated with reductions in non-deployed weapons. There is a broader set of considerations including the stockpile’s condition, progress on life extension programs, and demonstrated infrastructure capabilities (existing or modernized). The current non-deployed stockpile’s purpose is to manage risk and we continuously assess and look for cost-efficient opportunities to mitigate risk.

A. For the infrastructure to have a significant role in risk mitigation there needs to be demonstrated production capabilities. Again, there is a broader set of considerations beyond capacity that influence non-deployed stockpile composition. For example, NNSA needs to demonstrate the ability to conduct surveillance, perform maintenance and execute weapon life extension programs on schedule.

B. As the U.S. currently has a limited production capacity, we rely on the non-deployed stockpile for the following reasons: 1) mitigate technical risk in our aging stockpile; 2) provide logistics spares to ensure efficient operations; 3) provide risk management for geopolitical uncertainty. The link is the ability of the infrastructure to assume some of these functions.

C. The SSMP reflects our current estimate of planned reductions in the non-deployed stockpile. Considerations that went into the development of the SSMP included alignment with stockpile modernization milestones and projected infrastructure capabilities. We conduct an annual process to evaluate and adjust stockpile size and composition to meet strategic deterrence requirements and manage risk.

D. We participate in an annual interagency process that proposes stockpile composition and is reviewed by the Nuclear Weapons Council and submitted to the President for approval. A document produced in support of this process contains a detailed breakdown of non-deployed weapons including those retained as a hedge. Release authority resides with the Chairman, Nuclear Weapons Council.

E. I consider three important elements of nuclear modernization: 1) sustainment activities needed to ensure a safe, secure, and effective stockpile and annual stockpile certification; 2) progress on longer-term life extension activities; and, 3) the infrastructure’s capacity to support the stockpile and assume some of the functions of the non-deployed hedge. An assessment of these elements is necessary to make informed recommendations on further reductions. It may be possible to make prudent reductions of the non-deployed stockpile without incurring operational risk. Again, from my perspective, the facilities are important, but are not the only considerations associated with non-deployed reductions.

Mr. TURNER. What are STRATCOM’s requirements for the Chemistry and Metallurgy Research Replacement (CMRR) facility and Uranium Processing Facility (UPF) in terms of capacity at each facility? When does STRATCOM need the facilities to be fully operational?

a. General Kehler, are you familiar with NNSA’s Stockpile Stewardship and Management Plan (SSMP), which projects a 20-year plan for NNSA facilities and assumes further reductions in the number of total warheads? Has STRATCOM fully endorsed that plan for the entire 20-year timeframe it covers? If not, up until when are NNSA and STRATCOM in agreement? As NNSA’s customer for the nuclear

weapons it produces and sustains, is STRATCOM in full agreement with NNSA's SSMP plan?

General KEHLER. NNSA's uranium and plutonium facility capacity is important to sustain the stockpile, dismantle retired weapons, and support non-proliferation efforts. These facilities represent a national capability and they need to be updated. USSTRATCOM's requirement is for a capability to conduct surveillance, maintenance and life extensions in sufficient capacity to sustain our deployed and non-deployed stockpile.

A. I am familiar with the SSMP and was consulted during development through the Nuclear Weapons Council. The FY12 SSMP captures the planned activities needed to sustain a safe, secure and effective stockpile. There is DOD and NNSA consensus on the need to modernize the complex and agreement on projected stockpile quantities through FY2030. The stockpile requirements are reviewed annually by an inter-agency process to maintain stockpile effectiveness and manage risks. The plan's execution is dependent on a long-term commitment of funding.

Mr. TURNER. If we continue reducing the total number of nuclear weapons and delivery vehicles, there will naturally be a drive to reduce the number of types of weapons and delivery vehicles. We are already seeing this with consolidation of several B61 variants into a single variant, and the drive to study a common ICBM and SLBM warhead. Are we increasing technical risk by this consolidation—that is, are we increasing the consequences and likelihood of a technical failure that puts a large portion of the stockpile out of action? How are we dealing with this problem as we move towards a smaller stockpile?

General KEHLER. Reducing the total number of nuclear weapon types can allow us to cost effectively sustain capabilities without necessarily increasing technical risk. The principal technical risk is age related degradation. Therefore, comprehensive life extension programs that consolidate variants and improve reliability are more important than multiple weapon types. For example, today there are five aged B61 weapon types in stockpile. Upon completion of the planned B61 life extension there will be single B61 variant with improved long-term reliability. This reduces stockpile resource requirements needed for sustaining this air delivered capability. Likewise, introduction of commonality for multiple ballistic missile warheads increases operational flexibility and allows the reduction of non-deployed warheads retained as a hedge. Consolidation and commonality risk are further managed through acquisition strategies, comprehensive surveillance, and increased component testing over the life cycle.

Mr. TURNER. General Kehler, what are your views on warhead diversity? In what cases would you be comfortable going down to a single warhead or bomb for a leg of the triad or a particular delivery system? For example, why is it helpful to have a B61 and a B83 in terms of failure of one warhead type? Does your view change at smaller stockpile sizes?

General KEHLER. Warhead diversity and condition of the stockpile are important factors in our ability to mitigate the risk of technical failure. Given the "aged" condition of our nuclear weapons and limited production capacity of our complex, diversity becomes significant as we strive to maintain a credible deterrent over a range of potential risk scenarios. However, there is inherent flexibility in our Triad as we can mitigate risk of warhead failure in one leg with a warhead from another. We assess diversity and condition of the stockpile during our annual stockpile planning process.

Mr. TURNER. How would cutting a wing on ICBMs—150 missiles in total—affect STRATCOM's nuclear targeting? Could STRATCOM fulfill the nuclear targeting and employment guidance that exists today, if a wing of ICBMs were eliminated?

General KEHLER. ICBMs remain a valuable component of our nuclear deterrent force. They provide a prompt response option to the President and complicate an adversary's decision calculus in many ways. We are presently looking at a variety of force mixtures that would meet our deterrence objective and fulfill current nuclear targeting and employment guidance. Any decision by the President to reduce the ICBM force, or any other leg of the Triad, could require adjustments to the rest of the strategic force.

Mr. TURNER. Is STRATCOM involved in setting requirements for surveillance activities needed for sustainment and monitoring of the stockpile? How? Is STRATCOM comfortable with NNSA's current surveillance program—does it meet STRATCOM's needs and requirements?

General KEHLER. NNSA establishes the detailed surveillance requirements to ensure data is available to support annual stockpile certification. USSTRATCOM annually assesses the safety, security and military effectiveness of the stockpile based on surveillance findings. Our annual assessment process highlighted the need for the increased surveillance investment contained in the FY11 and FY12 budgets.

These funding levels need to be continued to address the backlog of surveillance activities and improve understanding of our aging systems.

Mr. TURNER. After implementation of the New START Treaty and the NPR, what percentage of our strategic forces will be deployed on submarines?

a. Has the U.S. ever deployed so much of its deterrent on a single platform before? In other words, on one leg of the triad and on one type of submarine, ICBM, or bomber? What risks does the U.S. accept by doing so?

General KEHLER. Current plans detailed in the 1251 Report reflect a ~10% increase in accountable weapons on submarines over current levels.

A. In the early years of the Triad, bombers carried a significant percentage of our nuclear deterrent. As Triad systems developed, distribution of the deterrent became more balanced. The risk of technical failure or technological breakthrough on one leg of the Triad is mitigated by the unique and complimentary attributes of the Triad. Retaining all three legs is the best method to mitigate risk and maintain strategic stability.

Mr. TURNER. The NPR concluded that “the current alert posture of U.S. strategic forces ... should be maintained for the present.” Please explain why the NPR reached this decision. What are the benefits of our current alert posture? Do you anticipate changes in this decision?

General KEHLER. In the NPR’s comprehensive review assurance, deterrence, non-proliferation, ability to respond to technical and geopolitical challenges and the unlikely event of deterrence failure were considered when examining the nation’s nuclear force posture. The posture today provides a responsive and survivable capability day-to-day to the President and it provides an ability to change the posture as necessary in response to a changed environment or crisis. We constantly review our force posture and will adjust it as needed to meet our strategic needs and the operational circumstances.

Mr. TURNER. How does the B61 Life Extension Program (LEP), which would consolidate several different versions of the B61 into a single B61-12 version, link to our extended deterrent in Europe?

a. What are the implications, both to our extended deterrent and more broadly, of delay in the B61 LEP?

b. Why is it important to increase surety in B61 warheads during the LEP?

General KEHLER. The B61 is critical to extended deterrence because it is the only weapon available for delivery by both heavy bombers and tactical fighter aircraft meeting NATO commitments. The LEP addresses critical components that are reaching end-of-life and require replacement and/or refurbishment. Consolidation into a B61-12 conserves resources and reduces life-cycle costs while enabling us to meet both our strategic and extended deterrence requirements.

A. Delay to the LEP timeline will increase risk in meeting the required number of weapons, with the required capabilities, for both strategic and extended deterrence requirements. In addition, there will likely be a substantial cost increase.

B. It is important to improve safety and security while maintaining the effectiveness of nuclear weapons during life extension. The upcoming planned life extension provides an opportunity to cost effectively make these improvements during a time period the nuclear complex has production capacity. It is a prudent course of action to improve surety given the threat of nuclear terrorism.

Mr. TURNER. When will a decision be made regarding how specifically our nuclear forces will be structured to comply with the New START Treaty? When will de-MIRVing of our ICBM forces begin to occur?

General KEHLER. Discussions regarding final nuclear force structure are ongoing. Force structure changes will be reflected in the annual 1251 Reports to Congress. Air Force plans to begin de-MIRVing in FY12.

Mr. TURNER. The 2010 Nuclear Posture Review (NPR) considered potential elimination of one or more legs of the triad, but ultimately decided to keep the full triad. General Kehler, in an interview two weeks ago, you said, “I continue to stand by the need for a triad.” Please explain the benefits of the triad, and why you believe we still need it.

General KEHLER. I agree with the results of the NPR study that concluded that we should retain a nuclear triad under the New START Treaty. The triad provides an effective, flexible and resilient capability to deter potential adversaries, assure allies and partners, maintain strategic stability, and defend U.S. and allied interests should deterrence fail. Each leg of the triad provides unique capabilities, and presents an adversary with unique problems.

Mr. TURNER. General Kehler, B-52 and B-2 bombers are hardened to protect them from electromagnetic radiation in the event of a nearby nuclear detonation.

a. What will be the added cost to harden the next generation bomber, vs. leave it unhardened?

b. The Air Force has said it can save money by delaying nuclear certification and hardening of the next generation bomber until the current bombers are readying for retirement. When would this nuclear certification take place—what is the expected initial operational capability date for its nuclear role? Would the next generation bomber be hardened from the start, and just not certified initially? How much money would this save, and when would this savings be realized?

General KEHLER. A. The Air Force is not at the point in the development process that would enable a detailed cost estimate of platform hardening.

B. Testing and nuclear certification schedules have not been determined. We are in consultation with the Air Force as requirements are being developed. Certification needs to occur prior to a capability gap in our air leg. Our understanding is the new bomber will be built from the start to support the nuclear mission. Detailed cost comparisons are not yet available; however, it is more cost effective to nuclear harden early in development than trying to add these capabilities later.

Mr. TURNER. Before New START, the U.S. sea-based strategic deterrent mission was carried out with a force of 14 ballistic missile submarines (SSBN) with 24 missile tubes each. DOD has announced that to comply with New START limits, by 2018 we will have at most 14 SSBNs with 20 missile tubes each. The SSBN(X) “Milestone A” decision earlier this year indicates that when the *Ohio*-class replacement is fully deployed we will make do with 12 SSBNs with 16 missile tubes each.

a. General Kehler, if the reductions in the number of missile tubes and submarines proposed by the Navy’s *Ohio*-class replacement “Milestone A” decision take place (from 24 to 16 missile tubes, and from 14 boats to 12), could you still meet the existing targeting and employment guidance that is in place today? Is the “Milestone A” decision anticipating changes in nuclear targeting and employment guidance?

b. To save money, some are proposing that we should further reduce the number of *Ohio*-class replacement submarines we buy, from 12 to 10, or 8, or even lower. General Kehler, given the decreased flexibility we will have by going to a lower number of tubes per boat, what is the minimum number of 16-tube boats we can procure and still meet deterrence and “at-sea” requirements?

c. Documents provided to the committee by the Navy show that the total cost of designing, building, and operating a fleet of 12 *Ohio*-class replacement boats with 20 missile tubes each would have been only 1.75% more (in current year dollars) than the total lifecycle cost of a 12-boat fleet with 16 missile tubes each. General Kehler, are you comfortable with this trade-off in flexibility to save 1.75% of the program’s total lifecycle cost?

General KEHLER. A. The Milestone A decision did not assume any specific changes to targeting or employment guidance. Analyses considered a range of potential security environments, strategy requirements, and submarine force structures.

Contingent on funding, the first *Ohio* replacement submarine will be available for strategic service in 2029. While there is uncertainty about the future strategic environment and policy requirements, I am confident that a plan to procure 12 *Ohio* Replacement SSBNs with 16 missile tubes will meet deterrence requirements. The ultimate number of submarines and tubes will depend on a number of factors including our deterrence needs and funding.

B. The number of available SSBNs for strategic service is as important as the number of tubes. Today, 12 operational SSBNs are required to meet deterrence and at-sea requirements. The minimum number of *Ohio* Replacement SSBNs is based on an assessment of the security environment and requirements of the strategy at a given time. There is sufficient flexibility to adjust future force structure plans across the Triad, or if required, procure additional submarines.

C. Yes, I am comfortable with the cost-capability trade that was made to balance fiscal and operational considerations.

Mr. TURNER. Are you concerned about reports about China potentially increasing the MIRVing of its land- and sea-based ballistic missiles? How might this trend affect the nuclear balance and our nuclear policies 10 or 20 years from now? Are you concerned about reports of Russia developing and deploying new heavy, highly-MIRV’d, silo-based ICBMs? How would deployment of this system affect strategic stability and U.S. nuclear policies and strategies? Did the U.S. seek to ban such systems during New START negotiations?

General KEHLER. We take seriously all reports of Russian and Chinese strategic force modernization. Both countries have ambitious programs. In China’s case, their efforts involve both modernization and expansion of their forces. However, while there is uncertainty regarding the intended scale of their force expansion, our current assessment is that it is unlikely to affect strategic stability. The possible Russian development and deployment of a new ICBM, which would be replacing an existing system, does not result in a significant change in their capabilities. How this

or any new Russian system ultimately affects strategic stability depends on Moscow's success in deploying the new system and whether the Russians continue to honor their commitments under existing arms control regimes. In the New START negotiations, we did not seek to ban such systems.

Mr. TURNER. At the House Armed Services Committee's October 13 hearing, Secretary of Defense Panetta said, "With regards to reducing our nuclear arsenal, I think that is an area where I don't think we ought to do that unilaterally—we ought to do that on the basis of negotiations with the Russians and others to make sure we are all walking the same path." To ensure we are not reducing unilaterally, will we retain nuclear forces that are at—or very near—the limits on strategic forces imposed by the New START Treaty? Otherwise, wouldn't it by definition be "unilateral" reductions?

a. Would you support reductions if they were a part of a non-binding agreement with Russia?

b. At what force levels do we need to start bringing the "others" Secretary Panetta mentions, particularly China, into the picture?

Secretary TAUSCHER. a. Both during and after the Cold War, the United States and Russia have agreed to mutual, legally binding, verifiable limits on their strategic nuclear arsenals in order to prevent an arms race, increase transparency, and mitigate mistrust and surprises. These agreements have contributed to building trust and promoting stability in the relationship between the world's two largest nuclear powers. Unilateral reductions would not provide the same level of predictability and stability as agreed upon treaties because there would be no obligation to make or maintain them. Furthermore, there would be no verification regime associated with the reductions.

b. We are mindful of China's military modernization programs, including its nuclear modernization, and the lack of transparency surrounding them. We monitor carefully these developments and, in concert with our allies and partners, will adjust our policies and approaches, as necessary. However, China does not now appear to be seeking parity with either the United States or Russia, and its nuclear arsenal remains much smaller than the U.S. and Russian arsenals. As a declared nuclear weapon state under the NPT, China's restraint in its nuclear modernization is important to nuclear disarmament and global non-proliferation efforts. As the United States and Russia conduct bilateral negotiations to reduce nuclear arsenals further, the United States will seek to expand dialogue with China on the doctrine, force structure, and strategic modernization programs of our two countries to improve mutual understanding, build trust, and reduce the risk of misperception and miscalculation.

Mr. TURNER. Data exchanges and on-site inspections between the U.S. and Russia under the New START Treaty have begun. What are we learning from these exchanges and inspections? Are we learning anything that might facilitate making a future arms control treaty verifiable—specifically a potential future treaty focused on non-deployed warheads and/or non-strategic warheads?

Secretary TAUSCHER. One of the greatest contributions of the New START Treaty is its strong verification regime. This regime was developed to specifically verify the requirements of the New START Treaty. Negotiators worked very hard to find innovative new mechanisms to aid in the verification of this Treaty and the results from the first year of implementing the Treaty have been positive. On-site inspections are now being conducted routinely, as are the daily notification requirements that help track movements and changes in the status of systems. The New START Treaty data exchanges are providing us with a detailed picture of Russian strategic forces and the inspections give us crucial opportunities that we otherwise would not have to confirm the validity of the data required to support verification of the central limits of the New START Treaty.

As we implement New START, we're preparing for further nuclear reduction negotiations with Russia. To date, no previous arms control agreement has included provisions to limit and monitor nondeployed or nonstrategic warheads. Future limits on such warheads would require monitoring and verification different from those used in New START. While the New START Treaty's verification provisions are not intended to provide the United States or Russia any information on each side's non-deployed warheads and/or nonstrategic warheads, the verification regime will help by creating the foundation for future agreements.

Mr. TURNER. What are some of the technical and procedural challenges associated with verifying a potential future treaty with Russia that limits non-deployed and non-strategic weapons? What must be done to resolve these technical and procedural challenges? Do you believe a treaty that limits non-deployed and non-strategic weapons can be fully verifiable?

Secretary TAUSCHER. The monitoring and verification of any potential future treaty limitations on nondeployed or nonstrategic nuclear weapons will be more difficult due primarily to the relatively small physical size of the items to be limited. Security concerns will pose a significant technical challenge to our ability to confirm that an object being counted during routine inspection is actually what it is declared to be; similarly, we would have security concerns regarding Russian access to U.S. nuclear warheads. The fact that air, sea- and ground-launched nonstrategic nuclear weapons are primarily based on delivery vehicles whose primary mission is non-nuclear adds complexity to designing verifiable limits on these weapons.

Mr. TURNER. We have heard that within the Deterrence and Defense Posture Review (DDPR) process, some NATO allies might be encouraging several changes to NATO's nuclear posture, possibly including: (1) consolidation of U.S. nuclear forces in Europe to one or more centralized bases, (2) decreasing the number of dual-capable aircraft our allies are required to maintain, (3) relaxing or eliminating requirements for pilots from allied nations to be trained and exercise in the nuclear mission, and (4) potential removal of U.S. nuclear weapons from Europe.

a. Are any of these actions being considered by the DDPR? Which ones?

b. Would NATO and the U.S. consider taking any of these steps unilaterally, without reciprocal and proportionate action on the part of Russia?

i. What actions would we consider taking unilaterally, and what actions would we only undertake bilaterally with Russia?

ii. What reciprocal actions would the U.S. look for from Russia in exchange for any of these four actions?

Secretary TAUSCHER. The principle task of the Deterrence and Defense Posture Review (DDPR) is to determine the appropriate mix of political and military instruments including conventional, nuclear, and missile defense forces that NATO will need to meet 21st-century security challenges. Alliance nuclear policy will be a key element of the review and there are no pre-ordained outcomes. NATO Allies agreed in the new Strategic Concept that sharing of nuclear risks and responsibilities is fundamental. We believe it is important to share the burden of the nuclear mission as broadly as possible. How best to accomplish this in the future is an issue we are committed to addressing in the DDPR.

In its Strategic Concept, adopted in November 2010, NATO declared: "In any future reductions, our aim should be to seek Russian agreement to increase transparency of its nuclear weapons in Europe and relocate these weapons away from the territory of NATO members. Any further steps must take into account the disparity with the greater Russian stockpiles of short-range nuclear weapons."

The DDPR consultations will help to inform the appropriate posture for forward-based U.S. nonstrategic nuclear weapons in Europe; however, we do not expect that NATO would take steps to eliminate its nuclear capabilities in the absence of reciprocal steps by Russia.

As National Security Advisor Donilon explained on March 29, 2011: "We will work with our NATO allies to shape an approach to reduce the role and number of U.S. tactical nuclear weapons, as Russia takes reciprocal measures to reduce its nonstrategic force and relocates its nonstrategic forces away from NATO's borders."

Mr. TURNER. Are our NATO allies still planning to purchase dual-capable F-35s to replace their aging dual-capable aircraft? How many do they plan to purchase and when? Please describe the plans for NATO countries to replace or modernize their nuclear-capable aircraft, including numbers of aircraft and timelines for purchase. How are these plans being reflected in the DDPR?

Secretary TAUSCHER. All NATO Allies agreed in the new Strategic Concept that the sharing of nuclear risks and responsibilities is fundamental and we believe it is important to share the burden of the nuclear mission as broadly as possible. Dual-capable aircraft and crews are one of the key ways to share the burden of the nuclear mission and as long as forward-based U.S. nonstrategic nuclear weapons remain in Europe, the Alliance needs to commit the resources necessary to maintain that capability. How best to accomplish this in the future is an issue that will be determined following the completion of the DDPR.

Mr. TURNER. The 2010 Nuclear Posture Review (NPR) says that "the presence of U.S. nuclear weapons—combined with NATO's unique nuclear sharing arrangements under which non-nuclear members participate in nuclear planning and possess specially configured aircraft capable of delivering nuclear weapons—contribute to Alliance cohesion and provide reassurance to allies and partners who feel exposed to regional threats."

a. Please explain how the presence of nuclear weapons in Europe contributes to NATO cohesion, reassurance, and stability.

b. In particular, which NATO allies value these nuclear weapons and "feel exposed to regional threats"?

c. Will unanimity among NATO members be required before any major changes are made to our nuclear posture in Europe? What sorts of changes to our nuclear posture in Europe might we undertake without unanimity of NATO members?

Secretary TAUSCHER. All NATO Allies agreed in the 2010 Strategic Concept that deterrence, based on an appropriate mix of nuclear and conventional capabilities, remains a core element of NATO's overall strategy. Allies also agreed collectively that the circumstances in which any use of nuclear weapons might have been contemplated are extremely remote, but as long as nuclear weapons exist, NATO will remain a nuclear alliance. NATO's unique nuclear burden-sharing arrangements assure each member state of the strength of the U.S. commitment to collective defense, easing fears of exposure to regional threats that may arise. The nuclear burden-sharing arrangements also assure the United States that NATO Allies would be key partners in any future and immensely difficult decisions regarding nuclear employment on behalf of NATO. The role of nuclear weapons in defending Alliance members and the threat environment confronting the Alliance are being discussed as part of NATO's Deterrence and Defense Posture Review. Any changes in NATO's nuclear posture, including forward-based U.S. nonstrategic nuclear weapons in Europe, will be taken after a thorough review within—and decisions by—the Alliance as a whole.

Mr. TURNER. Germany and Norway have put forward ideas in the DDPR process to increase transparency in NATO's nuclear mission and NATO's nuclear forces. What transparency measures are being considered?

a. What NATO transparency measures are the U.S. comfortable with NATO doing unilaterally (i.e., without reciprocal and proportionate action by Russia)?

b. What NATO transparency measures would we only consider doing bilaterally based on agreements with Russia? Would you anticipate such bilateral agreements being based on non-binding agreements or through some sort of binding treaty or agreement?

c. How does the administration define "transparency"? How does it define "verification"? How are the two concepts related?

Secretary TAUSCHER. In advance of a new treaty limiting all types of nuclear weapons, we plan to consult with our Allies on reciprocal actions that could be taken on the basis of parallel steps with Russia. At the NATO Foreign Ministerial in Berlin on April 14–15, Poland, Norway, Germany and the Netherlands submitted a non-paper suggesting ways to increase transparency and build confidence with Russia. After the receipt of this non-paper, NATO's North Atlantic Council (NAC) tasked the Weapons of Mass Destruction Control and Disarmament Committee (WCDC) to provide input into the DDPR on possible options for reciprocal measures to reinforce and increase transparency, mutual trust and confidence with Russia. In the WCDC, NATO is now developing transparency and confidence-building options that could be pursued on a reciprocal basis with Russia. Initially, we would like to increase transparency on a reciprocal basis on the numbers, locations, and types of nonstrategic forces in Europe. Any transparency measures on U.S. NSNW forward-based in Europe would require Alliance agreement.

Transparency builds stability and security by helping to ensure against strategic surprise and by building the necessary confidence for force planning based on a realistic view of the current and likely force levels of others. Verification, the process by which we gather and analyze information to make a judgment about parties' compliance or non-compliance with an agreement, is an integral part of the arms control regime. This Administration, as well as previous Administrations before it, evaluates effective verification of nuclear arms control agreements based on our ability to detect militarily significant violations before they become a threat to our national security. As stated in the 1992 report on START Treaty verifiability to the Senate Foreign Relations Committee:

"A key criterion in evaluating whether a START agreement is effectively verifiable is whether, if the other side attempts to move beyond the limits of the Treaty in any militarily significant way, we would be able to detect such a violation well before it becomes a threat to national security so that we are able to respond. Additionally, the verification regime should enable us to detect patterns of other violations that, while they do not present immediate risks to U.S. security, could, if left unchallenged, encourage actions that would pose such risks."

At least to the extent the parties trust in the information they receive through transparency measures, such measures can help bolster our confidence in the verifiability of a relevant arms control agreement.

Mr. TURNER. How does the B61 Life Extension Program (LEP), which would consolidate several different versions of the B61 into a single B61-12 version, link to our extended deterrent in Europe?

a. What are the implications, both to our extended deterrent and more broadly, of delay in the B61 LEP?

b. Why is it important to increase surety in B61 warheads during the LEP?

Secretary TAUSCHER. The B61 bombs assigned to support NATO are intended to provide for the collective security of all Alliance members. The B61 bombs couple U.S. and NATO security, and tangibly assure the members of NATO that the United States is committed to their national security. NATO is currently in the process of reviewing its nuclear posture as part of the Deterrence and Defense Posture Review and there are no pre-ordained outcomes. However, as long as forward-based U.S. nonstrategic nuclear weapons remain in Europe the Alliance needs to commit the resources necessary to maintain that capability and the B61 LEP is an important element of that.

Mr. TURNER. Mr. Franks asked for several pieces of information, but I wanted to reiterate those requests and add one of my own. Please provide the information requested within two weeks:

a. In your recent remarks at the Atlantic Council, you stated the following, “the Obama Administration’s approach provided more protection sooner against the existing threat, using proven systems, and at a lower cost than the previous proposal.” Your legislative affairs staff was asked to provide this committee the basis for the statement “at a lower cost than the previous proposal.” Please provide the information requested to the committee within two weeks.

b. Please provide this committee, within two weeks, a comprehensive, whole-of-the-federal-government cost for each phase of the EPAA.

c. We understand the Department of State is advocating the return of export control responsibility for commercial satellites and their related components to the Department of Commerce. I also understand the Department of State contracted with the Aerospace Corporation, through Project West Wing, to develop a Counter Space Technology List. Our committee staff has been asking for this list for over a month, with no progress. Please provide a copy of this report to the committee within two weeks.

Secretary TAUSCHER. a. One element of the basis for the statement is that the Standard Missile (SM)-3, at around \$10 million per interceptor, is much cheaper than a GBI, which costs approximately \$60 to \$70 million per interceptor. This means that we can deploy many more SM-3 interceptors than GBIs at the same cost. Since Iran already possesses hundreds of short- and medium-range ballistic missiles, this additional defensive capability is critical. In addition, the EPAA (European Phased Adaptive Approach) relies on capabilities that are mobile and relocatable, so additional capabilities can “surge” into the region in a crisis. Furthermore, the deployment of the AN/TPY-2 radar to Turkey will also greatly improve U.S. and NATO’s capability to protect against the existing threat from short- and medium-range ballistic missiles.

It is important to note that the EPAA is not an acquisition program but a policy framework for delivering capabilities of which the principal attribute is flexibility. By design, it can be enhanced, expanded, and supplemented in each phase.

b. The Department of Defense would be the appropriate organization to provide a cost estimate of the EPAA.

c. The Department of State, after consultation with the Department of Defense, is advocating the return of export control responsibility for commercial satellites and their related components to the Department of Commerce, while retaining State Department jurisdiction over sensitive military and intelligence related satellites, components, and technology. The Counterspace Sensitive Technology List (CSTL) is an ongoing research and analytical project which is projected to be completed in late 2012. In short, there is no finished report or list to provide at this time. We would be pleased to provide a classified briefing to the committees of jurisdiction on the CSTL effort.

Mr. TURNER. What are some of the technical and procedural challenges associated with verifying a potential future treaty with Russia that limits non-deployed and non-strategic weapons? What must be done to resolve these technical and procedural challenges? Do you believe a treaty that limits non-deployed and non-strategic weapons can be fully verifiable?

Mr. D’AGOSTINO. A future treaty that includes limits on non-deployed and non-strategic weapons could pose technical and procedural challenges, depending on the specific terms of the treaty. From the perspective of the National Nuclear Security Administration (NNSA), one of the technical challenges that we are investigating to help inform future decisions is warhead authentication, especially for non-deployed warheads. In particular, we are investigating the technical means to provide confidence that an object declared to be a nuclear warhead is a warhead through radiation and other measurement techniques. This is different from the New START

Treaty, for example, where radiation measurements may be used to confirm that an object placed on a deployed delivery system and declared to be non-nuclear is in fact non-nuclear, and therefore not counted as a warhead. We also are investigating technical and procedural measures to provide warhead chain of custody over time and between different locations. This kind of analysis and capability development is necessary to understand the full scope of the challenges associated with verifying a potential future treaty, and NNSA is accomplishing important work in this regard.

An assessment of the verifiability of a future treaty would need to be made by the U.S. national security community with supporting analysis from the Intelligence Community. Such an assessment can only be made once the specific terms of a treaty are known. From a technical and procedural perspective, I am confident that we will be able to provide the tools necessary for verification.

Mr. TURNER. Administrator D'Agostino, earlier this year, you testified before this subcommittee that NNSA's new plutonium and uranium facilities—the Chemistry and Metallurgy Research Replacement (CMRR) facility in New Mexico and the Uranium Processing Facility (UPF) in Tennessee—need to be “up and running” before we make substantial cuts to the non-deployed hedge force.

a. Please describe the relationship between modernizing our nuclear infrastructure and the potential future ability to reduce non-deployed weapons.

b. What metrics should we be using to judge that the infrastructure is robust enough to support reductions in the non-deployed stockpile without undue risk?

c. Do NNSA and DOD have a clear plan on what reductions in the non-deployed stockpile are possible or planned for the future, and how those reductions align with infrastructure and stockpile modernization milestones? Please provide the committee a timeline showing, side-by-side, the modernization plan with reductions in the non-deployed stockpile deemed possible by the modernization effort.

d. If one or both of UPF and CMRR are delayed in getting “up and running,” what levels and types of non-deployed warheads would you recommend keeping in the stockpile as a risk mitigation measure or “hedge”? Please be specific.

Mr. D'AGOSTINO. a. Implementation of the Stockpile Stewardship Program and appropriate nuclear infrastructure investments will allow the United States to shift away from retaining the large numbers of non-deployed warheads that are kept as a hedge against technical or geopolitical surprise, allowing further reductions in the overall nuclear stockpile. Investment is critical for maintaining a credible deterrent and managing risk as stockpile reductions are made. NNSA works closely with the Department of Defense in the Nuclear Weapons Council to appropriately manage risk.

b. Page 34, Table 2 of the FY 2012 Stockpile Stewardship and Management Plan summarizes the current and future infrastructure capacities for each major NNSA mission function that directly supports the stockpile. These represent the infrastructure improvements needed as of April 2011 to support any future stockpile, which may include reductions to non-deployed weapons. The infrastructure improvement areas include:

- Design Certification, Experiments, and Surveillance
- Plutonium
- Uranium
- Tritium
- High Explosives
- Non-nuclear, and
- Special Nuclear Materials Storage.

Analysis continues on continuing to meet these mission functions under the caps established by the Budget Control Act.

c. Details of stockpile size and composition are classified and are updated annually by the Nuclear Weapons Council and provided to the President for approval. Classified Annex B of the FY 2012 Stockpile Stewardship and Management Plan provides stockpile details as reflected in the Fiscal Year 2011–2017 Nuclear Weapons Stockpile Memorandum and the FY 2011–2024 Requirements and Planning Document. Also included in Annex B is a discussion of potential future stockpiles based on events/assumptions regarding infrastructure improvements and geopolitical environment.

d. The specific effects on stockpile size and composition would need to be addressed in a study in conjunction with the Department of Defense.

Mr. TURNER. The House Appropriations Committee reported a Defense Appropriations bill that contains a 1% reduction from the President's budget request for DOD. The House Appropriations Committee reported an Energy and Water appropriations bill that contains a 10% reduction for NNSA and all of its defense activities. This came after strong and vocal support from Secretary Gates and senior military leaders for NNSA's full budget request. How do these discrepancies affect planning,

budgeting, and coordination between NNSA and DOD on the overall nuclear security enterprise? Should all aspects of the nuclear security enterprise be consolidated into a single budgetary and appropriations authority?

Mr. D'AGOSTINO. NNSA is currently executing the FY 2012 enacted appropriations in coordination with DOD and will continue to work with DOD on the FY 2013 request. NNSA closely coordinates efforts with DOD on identifying programmatic requirements in various reports, such as Annual and Quarterly Reviews conducted by the Nuclear Weapons Council (NWC).

Consolidation of the nuclear security enterprise (NSE) with DOD appropriations would be at odds with the tenets of civilian agency control over the NSE as identified in the Atomic Energy Act and the NNSA Act. As such, NNSA does not believe all aspects of the nuclear security enterprise can, or should be, consolidated into a single budgetary and appropriations authority.

Mr. TURNER. If we continue reducing the total number of nuclear weapons and delivery vehicles, there will naturally be a drive to reduce the number of types of weapons and delivery vehicles. We are already seeing this with consolidation of several B61 variants into a single variant, and the drive to study a common ICBM and SLBM warhead. Are we increasing technical risk by this consolidation—that is, are we increasing the consequences and likelihood of a technical failure that puts a large portion of the stockpile out of action? How are we dealing with this problem as we move towards a smaller stockpile?

Mr. D'AGOSTINO. The Triad provides a sufficiently flexible force structure that allows the U.S. to hedge effectively by shifting weight from one Triad leg to another if necessary due to unexpected technological problems or operational vulnerabilities. The pursuit of a common warhead strategy is intended to provide the opportunity to manage risk while reducing the total size of the stockpile. This approach allows reductions to be made while maintaining the required stockpile hedge, and it is our judgment that this approach may be pursued in a manner that assures technical diversity. Therefore, studies conducted for all future life extension programs will consider the implications, including technical risk, of using the resulting warhead on multiple platforms in order to reduce the number of warhead types.

Mr. TURNER. Do you anticipate having to shift NNSA's budget and priorities to help pay for the B61 life extension? Do you anticipate pushing the W78 LEP further into the future, or reprioritizing funds allotted for the Science Campaign to B61 LEP work? How would such shifts affect future LEPs like the W78? Is NNSA considering making the B61-12 nuclear explosive package compatible with a future air-launched cruise missile; is such a requirement part of the B61 LEP?

Mr. D'AGOSTINO. NNSA is formulating our budget and priorities to balance the Nation's need for modernized weapons against our ability to manage, maintain, and certify the nuclear stockpile without the requirement for underground testing. Activities such as the B61 life extension are being scrutinized to ensure that their costs and benefits are appropriate. Budget changes are being assessed as part of the FY 2013 budget development, to include appropriate alignment of Directed Stockpile Work and campaign activities with the B61 LEP development and certification work. Considering the Department of Defense's broader needs and the throughput of our Nuclear Security Complex, NNSA is finalizing schedules and budgets that realistically include the B61 and W78 life extension programs into the overall NNSA priority matrix.

While there is no current requirement to make the B61 nuclear explosive package (NEP) compatible with the future air launched cruise mission, the Air Force and NNSA are evaluating the B61 NEP as a candidate for the future cruise mission as well as other existing warheads such as the W80 and W84.

Mr. TURNER. Now that we are leaving a period of several decades with minimal nuclear weapons design, engineering, and production work and entering a long period of continual warhead life extension programs, how is NNSA shifting its budget and priorities?

a. Is funding for scientific capabilities, which sustained the human capital and led to dramatically better understanding of nuclear weapon science when we were not actively working on the stockpile, shifting toward design, engineering, and production activities to sustain and modernize the warheads?

b. Given the fiscal environment, is it possible to sustain the current levels of expenditures on science and also successfully execute the LEPs and direct stockpile work, as well as infrastructure modernization?

c. Has NNSA prioritized what science capabilities are critical for stockpile assessment and certification, and which may be secondary for that purpose? What are those priorities?

d. In real dollar terms, how much does NNSA plan to spend in FY12 on LEPs and other activities directly related to design, engineering, and production of nu-

clear weapons (not surveillance or science-based capabilities that enable assessments and certification), as compared to history (e.g., 10, 20, and 30 years ago)?

e. Has NNSA considered a continual low-rate production model for sustaining the stockpile, as opposed to its current approach of discrete and infrequent LEPs? What are the costs, benefits, and risks of such an approach as compared to the current approach? How might this analysis change if the size and diversity of the stockpile decrease?

Mr. D'AGOSTINO. a. No, funding for scientific capabilities is not being shifted to engineering or production, since scientific capabilities are essential to effect the modernization of the stockpile along with stewarding the existing stockpile, as explained in Chapter 3 of the FY 2012 Stockpile Stewardship and Management Plan. Science, engineering, and manufacturing are neither mutually exclusive nor fungible. There was no time in the past when we were not working actively on maintaining the stockpile. Notable stewardship milestones over the past 15 years include certification of the B61-11 in 1997 (the first new modification introduced into the stockpile since the end of testing); the completion of the W87 LEP in 2004; delivery of new pits manufactured in Los Alamos to the stockpile in 2007; and the design, engineering, and ongoing production and delivery of the W76 LEP.

In parallel, we have developed new Stockpile Stewardship facilities, including the Dual Axis Radiographic Hydrodynamic Test (DARHT) facility; the Microsystems and Engineering Sciences Applications (MESA) complex; the National Ignition Facility (NIF); Proton radiography; the Joint Actinide Shock Physics Experimental (JASPER) facility and U1a facilities at the Nevada National Nuclear Security (NNSS); as well as the extraordinarily successful series of the Advanced Simulation and Computing (ASC) platforms.

All of these science and technology tools are being applied today to improve understanding and predictive capability for the stockpile, without recourse to new underground tests. While priorities do change and new problems arise each year, the necessary adjustments and reprioritizations have taken place throughout the history of the program and are reflected in the budget requests for each year in the past and in the future years nuclear security plan (FYNSP).

b. Yes, the President's budget provides a balanced portfolio of infrastructure modernization, stockpile sustainment, and pursuit of the fundamental science, technology, and engineering necessary to maintain a safe, secure, and reliable stockpile, as outlined in the FY12 SSMP. Much of this effort is still in the design phase, and as the designs are completed, NNSA will make adjustments to ensure the portfolio remains balanced.

c. Yes, NNSA has prioritized the science capabilities for Stockpile Stewardship, and this has resulted in the set of capabilities that have been supported and constructed over the past 20 years. These priorities are reflected in the annual budget requests and SSMPs. Any capabilities that are less than essential to Stockpile Stewardship have already had their supporting budgets reduced or eliminated, or are now principally supported by work for other Government agencies.

Every year the science, technology, and engineering community has a summit with the Directed Stockpile Work teams to ensure that the long terms needs for stewardship without underground testing are being optimized to support near-term Life Extension activities, as well. There are a number of great, recent examples of this relating to multipoint safety, high explosives performance, and surety.

d. For FY 2012, the President's Budget request for Directed Stockpile Work is \$1,963,583,000. That includes \$239 million for surveillance. Without surveillance, DSW together with supporting Readiness and Engineering campaigns, are about 26% of the Weapons Activity budget. For the period 2001-2011, a similar comparison is presented in the table below. Due to drastic differences in how nuclear weapons budgets were structured prior to 2001, we cannot provide a meaningful comparison prior to that year. Additionally, a significant portion of the Readiness in the Technical Base and Facilities budget and the campaigns budgets directly support stockpile sustainment outside of the support they provide to stockpile surveillance and that spending is not included in these percentages.

Table 1: Yearly Percentage of Weapons Activities Funding Used for DSW (Without Surveillance) and Readiness and Engineering Campaign

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Percent	25	23	24	28	25	26	26	25	27	25	27

e. NNSA is currently evaluating ways to optimize its life extension program to achieve multiple objectives, including enhanced technology maturation and integration, sustainment of the highly specialized workforce, program affordability, increased interoperability (common technologies), and increased technology insertion opportunities. Costs, benefits and risks are being analyzed as part of this evaluation. Once approved, the updated life extension program will be described in the next Stockpile Stewardship and Management Plan.

Mr. TURNER. How does the deployment of the B61-12 warhead align with deployment of nuclear-capable F-35s? Is deployment of the two systems linked? Can one deploy without the other, while still retaining our nuclear capability in Europe?

Mr. D'AGOSTINO. The deployment of the B61-12 is well aligned with the deployment of the nuclear-capable F-35 Joint Strike Fighter (JSF) program, but they are not linked. The JSF with nuclear capability is planned to be deployed a few years after that the first production unit for the B61.

A key element of the B61-12 Life Extension Program is interoperability with current and planned future aircraft.

Mr. TURNER. When NNSA conducts a life extension program on a particular weapon type, will NNSA extend the life of all warheads of that type, including those in the non-deployed "hedge" part of the stockpile? Or will it only extend those weapons in the active, deployed part of the stockpile?

Mr. D'AGOSTINO. The scope of each life extension program (LEP) is determined by the Nuclear Weapons Council and requirements for quantities are documented in the NWC Requirements and Planning Document (RPD). For each LEP, NNSA plans to replace the existing weapons (i.e., both active and inactive weapons) with life-extended weapons per quantities provided in the RPD. The "hedge" is a portion of the inactive stockpile.

Mr. TURNER. What role did DOE and NNSA play in selection of the new directors of Los Alamos National Lab and Lawrence Livermore National Lab? Specifically, how were you and Secretary Chu involved? Given the critical role the lab directors play in providing the President and Congress independent assessments on the safety, security, and reliability of the nuclear stockpile, do you believe it is important for the lab directors to have extensive backgrounds in nuclear weapons research, design, production, and assessment?

Mr. D'AGOSTINO. Under DOE's contracts with Los Alamos National Security, LLC, and Lawrence Livermore National Security, LLC, the respective Boards of Governors are responsible for the selection of the laboratory directors. As laboratory directors are considered "key personnel," the respective Contracting Officers of the LANS and LLNS contracts must approve the selection of the laboratory directors. The Secretary of Energy and I have no formal role in the selection process, but as a courtesy, the Secretary was asked to concur in the selection of Charles McMillan as the Los Alamos Laboratory Director, and Penrose C. Albright, as the Lawrence Livermore Laboratory Director, which he did.

I believe it is important for laboratory directors to be qualified scientists that understand the complex phenomena that arise as issues in research, design, production and assessment.

Mr. TURNER. Please provide the committee, before December 15, a list and description of the managerial and functional areas (e.g., legal, safety, security, health, human resources, etc.) in which the Department of Energy is involved in NNSA activities, including detailed descriptions of such involvement.

Mr. D'AGOSTINO.

- Legal Functions

Within the Department of Energy, NNSA is managed by the Under Secretary for Nuclear Security, who reports to the Secretary. In accordance with section 3213(a) and (b) of the National Nuclear Security Administration Act (NNSA Act), NNSA employees "shall not be responsible to, or subject to the authority, direction, or control of, any . . . officer, employee, or agent of the [DOE]" other than the Secretary of Energy, acting through the NNSA Administrator, the NNSA Administrator, or the NNSA Administrator's designee within NNSA. 50 U.S.C. 2403(a) and (b). In implementing the mission of NNSA (NNSA Act § 3211(b), 50 U.S.C. 2401(b)), NNSA has 18 functional areas of responsibility, as identified in section 3212 of the NNSA Act; these include, for example: budget formulation, guidance, and execution, and other financial matters; policy development and guidance; program management and direction; safeguards and security, emergency management; environment, safety, and health operations; administration of contracts, including the management and operations of the operations of the nuclear weapons production facilities and the national security laboratories; legal matters; legislative affairs, and public affairs. 50 U.S.C. 2402(b).

As part of the Department of Energy, NNSA is subject to all Departmental regulations, orders, and policies in all functional areas, except that the NNSA Administrator may establish NNSA-specific policies, unless disapproved by the Secretary of Energy. NNSA Act, § 3212(d), 50 U.S.C. 2402(d). *See also* the response to Q73b, below [Appendix page 155].

- DOE'S Involvement in NNSA Security Activities

1. *Rule making and Directives.* The Office of Health, Safety and Security (HSS) has primary responsibility for rule-making, and for developing and maintaining directives in the areas of nuclear safety, worker safety and health, and **security** (the NNSA Act also gives the Administrator authority to develop NNSA policies; this authority has been used for some safety and security requirements).

2. *Inspections.* The HSS Office of Enforcement and Oversight conducts independent external reviews to evaluate the implementation of DOE requirements by DOE contractor and Federal operating organizations, evaluate the oversight of operations by DOE Program offices; and determine the adequacy of DOE requirements to DOE operations..

3. *Enforcement.* The HSS Office of Enforcement and Oversight also administers the enforcement process for the nuclear safety, worker health and safety, and classified information security rules (10 CFR Part 820, 10 CFR Part 830, 10 CFR Part 835, 10 CFR Part 850, 10 CFR Part 851, 10 CFR Part 708, and 10 CFR Part 824). Based on the NNSA Act, the NNSA Administrator is assigned the authority upon which regulatory direction and enforcement is provided to NNSA Contractors.

4. *Technology and Data Sharing.*

- a. *Electronic Data Bases and Transfer of Data between Department of Energy (DOE) and other Federal Agencies*

NNSA personnel security is required to use the DOE's Electronic Integrated Security System (eDISS+) to collect, process, store, and transfer personnel security data into the Central Verification System (CVS) maintained by the U.S. Office of Personnel Management (OPM). CVS is a national database used by all federal agencies for suitability/clearance verifications.

The web-based Central Personnel Clearance Index (WebCPCI), which is one of the many parts of the eDISS+ initiative, tracks security clearance activity for DOE employees, contractors, and associated personnel, and provides report and query capability to Personnel Security, Headquarters, and Departmental offices. Within WebCPCI, individuals are assigned a Case Folder containing information on clearances, investigations, adjudicative codes, administrative reviews, and case folder actions.

WebCPCI's "e-delivery" capability is exclusively used to electronically receive and forward completed background investigations from the Office of Personnel Management (OPM) to the respective Personnel Security Office (PSO). WebCPCI is also the system of record PSO's primarily use to verify that an active facility clearance (FCL) code has been approved and registered into the Department's Safeguards and Security Information Management System (SSIMS) before granting a security clearance. DOE/HSS personnel are responsible for entering FCLs into WebCPCI once notified that an FCL has been approved and registered into SSIMS.

- b. *Data Sharing from external Federal Agency, specifically Intelligence Reform and Terrorism Prevention Action data from OPM regarding timeliness, volume, etc.*

Office of Management and Budget (OMB) is provided the information regarding case timeliness by OPM. HSS has a responsibility to track and trend the case timeliness; however, they are a pass-through organization, not calculating the actual case times. On a monthly and quarterly basis, DOE provides to each Personnel Security Organization an agency roll up for the Personnel Investigation Program in the form of the *OPM Federal Investigative Services' Agency Specific Performance Metrics*. The data identifies the End-to-End Overall Timeliness for the fastest 90% of the access authorizations reported, initiated, investigated, and adjudicated in response to the Intelligence Reform Terrorism and Prevention Act of 2004 requirements.

5. *Budget*

- a. *Payments to Other Federal Agencies for Personnel Security Background Investigations*

Security Investigations are paid via an Intra-Governmental Payment and Collection (IPAC) which is basically a transfer of funds from one Government treasury account to another

- HSS remains the OPM point of contact for all investigation invoices
- HSS receives one invoice from OPM for all of DOE
- HSS breaks down the invoice by DOE organization and forwards to the appropriate DOE Organization for payment instruction

- DOE Organizations send payment information back to HSS
- HSS sends entire invoice to DOE financial POC so that payment can be aligned into the DOE financial system
- b. *Homeland Security Presidential Directive (HSPD)-12 Budget*
 - Process is very similar to approach listed above for Investigations
 - HSS is the point of contact with GSA
 - In fiscal year (FY) 2011, HSS sent NNSA estimated costs and PSD coordinated all NNSA funding back to HSS
 - Process for FY12 will be similar
- 6. *Facility Clearance*: There can be DOE involvement in the registration of security activities which includes the Foreign Ownership Control or Influence (FOCI) element. Within the FOCI program, DOE counterintelligence and legal interactions may be required when making a FOCI determination.

7. *Counterintelligence and Intelligence Support*: The Department's Office of Intelligence and its Office of Counterintelligence, each having been established by the NNSA Act of FY 2000, are now structured as part of the combined DOE Office of Intelligence and Counterintelligence (DOE/IN). NNSA relies upon DOE/IN for the effective conduct of its mission. The support is critical to the success of our core missions in Defense Programs and Nuclear Nonproliferation as well as Security and Nuclear Counterterrorism. Foreign intelligence collection and analyses inform our understanding of other countries' capabilities and Counterintelligence (CI) protects our own assets and capabilities from compromise or sabotage.

The CI directorate has aligned its functional capabilities to address the key mission areas of Insider Threat, Foreign Risk Management (regarding presence in and interaction with National Laboratories), Threat Assessment (to support security and CI objectives), Security (to manage clearances and SCIF's), and Investigations (with oversight of CI investigations and operations across the complex).

The Intelligence Analysis Directorate maintains its focus on foreign energy and nuclear matters, as well as science and technology capabilities more broadly.

The IN Cyber Directorate is composed of four divisions: Strategic Initiatives, Network Architecture and Engineering Service, Information Technology Support, and Cyber Operations. The NNSA Chief Information Officer works in close collaboration with the IN Cyber Directorate to ensure comprehensive protection of NNSA networks and associated information.

The Field Intelligence Elements (FIE's) of DOE/IN located within the NNSA laboratories and at the Nevada Nuclear Security Site (NNSS) have a unique status. The lab FIE members are employees of the laboratory Management and Operating contractors. But, under a narrow exception to the general NNSA Act prohibition of DOE direction and control of NNSA personnel (Sec 3117 of the FY 2007 National Defense Authorization Act) as well as provisions in the updated Executive Order 12333, they are not only subject to direction and control of DOE/IN but they (and the rest of IN) are also part of the U.S. Intelligence Community, subject to the direction of the Director of National Intelligence. NNSA relies upon DOE/IN to help manage the Intelligence Work accomplished at the NNSA labs in support of the Intelligence Community and other national security customers.

Listing of Security Rules and Directives provided as separate attachment [see Appendix page 98]; however, the response to 73.b. should include this information.

Listing of Security Rules and Directives

This listing may not contain all applicable National level policy documents or Departmental Orders.

Directive	Title/Comment
1. 5 CFR 732	National Security Positions
2. 5 CFR 736	Personnel Investigations
3. 10 CFR 30 through 40	Rules of general applicability to domestic licensing of by-product material
4. 10 CFR 72	Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-level Radioactive Waste, and Reactor-related great than Class C Waste
5. 10 CFR 74	Material Control and Accounting of Special Nuclear Material
6. 10 CFR 707	Workplace Substance Abuse Programs at DOE Sites
7. 10 CFR Part 710, Subpart A	General Criteria and Procedures for Determining Eligibility for Access to Classified Matter or Special Nuclear Material
8. 10 CFR Part 712	Human Reliability Program
9. 10 CFR 725	Permits for Access to Restricted Data
10. 10 CFR 824	Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violations
11. 10 CFR Part 860	Trespassing on Department of Energy Property

12. 10 CFR 862	Restrictions on Aircraft Landing and Air Delivery at DOE Nuclear Sites
13. 10 CFR 1016	Safeguarding of Restricted Data
14. 10 CFR 1017	Identification and Protection of Unclassified Controlled Nuclear Information
15. 10 CFR 1044	Security Requirements for Protected Disclosures under section 3164 of the National Defense Authorization Act for fiscal year 2000
16. 10 CFR 1045	Nuclear Classification and Declassification
17. 10 CFR Part 1046	Physical Protection of Security Interests
18. 10 CFR 1046, Subpart B	Protective Force Personnel
19. 10 CFR Part 1047	Limited Arrest Authority and Use of Force by Protective Force Officers
20. 32 CFR 2001	Classified National Security Information
21. DOE O 142.3A	Unclassified Foreign Visits and Assignments Program
22. DOE P 205.1	Departmental Cyber Security Management Policy
23. DOE O 205.1B	Department of Energy Cyber Security Program
24. DOE M 205.1-3	Telecommunications Security Manual
25. DOE N 206.4	Personal Identity Verification
26. DOE O 227.1	Independent Oversight Program
27. DOE P 310.1	Maximum Entry and Mandatory Separation Ages for Certain Security Employees
28. DOE O 452.4B	Security and Use Control of Nuclear Explosives and Nuclear Weapons
29. DOE O 452.6A	Nuclear Weapon Surety Interface with the Department of Defense
30. DOE O 452.7	Protection of Use Control Vulnerabilities and Designs
31. DOE O 452.8	Control of Nuclear Weapon Data
32. DOE O 457.1	Nuclear Counterterrorism
33. DOE M 457.1-1	Control of Improvised Nuclear Device Information
34. DOE O 461.2	Onsite Packaging and Transfer of Materials of National Security Interest
35. DOE P 470.1A	Safeguards and Security Program
36. DOE O 470.3B	Graded Security Protection (GSP) Policy
37. DOE O 470.4B	Safeguards and Security Program
38. DOE O 471.1B	Identification and Protection of Unclassified Controlled Nuclear Information
39. DOE O 471.3	Identifying and Protecting Official Use Only Information
40. DOE M 471.3-1	Manual for Identifying and Protecting Official Use Only
41. DOE O 471.5	Special Access Programs
42. DOE O 471.6	Information Security
43. DOE O 472.2	Personnel Security
44. DOE O 473.3	Protection Program Operations
45. DOE O 474.2	Nuclear Material Control and Accountability
46. DOE O 475.1	Counterintelligence Program
47. DOE O 475.2A	Identifying Classified Information

Within the Department of Energy, NNSA is managed by the Under Secretary for Nuclear Security, who reports to the Secretary. In accordance with section 3213(a) and (b) of the National Nuclear Security Administration Act (NNSA Act), NNSA employees “shall not be responsible to, or subject to the authority, direction, or control of, any . . . officer, employee, or agent of the [DOE]” other than the Secretary of Energy, acting through the NNSA Administrator, the NNSA Administrator, or the NNSA Administrator’s designee within NNSA. 50 U.S.C. 2403(a) and (b).

As part of the Department of Energy, NNSA is subject to all Departmental regulations, orders, and policies in all functional areas, except that the NNSA Administrator may establish NNSA-specific policies, unless disapproved by the Secretary of Energy. NNSA Act, § 3212(d), 50 U.S.C. § 2402(d). The U.S. Office of Personnel Management (OPM) provides oversight with DOE’s Office of Human Capital of NNSA’s human resources systems via a periodic review of efficiency, effectiveness and compliance with regulations and law in the following areas: strategic alignment, leadership and knowledge management, performance culture, talent management, and accountability. Delegated Examining authority (to hire using competitive procedures) flows through the Secretary of Energy from the OPM to NNSA. Employee appointments and removals for Senior Executive Service and other Executive Review Board actions are subject to review or oversight by DOE. Use of the DOE excepted service authorities (EJ and EK) is subject to approval by DOE. Technical Qualifications Program (TQP) Policy is owned by DOE, and DOE provides oversight of NNSA’s management of the TQP. NNSA Diversity and EEO Policy is subject to review and

concurrence by DOE. Personnel recordkeeping systems are owned by DOE and must comply with OPM requirements.

Mr. TURNER. Please provide the committee, before December 15, a comprehensive list of all DOE Orders, Manuals, and any other DOE regulations to which NNSA and/or its labs, plants, and facilities are held or are subject to.

Mr. D'AGOSTINO. A comprehensive list of all current DOE directives (Policy, Orders, and Manuals) can be found at: www.directives.doe.gov.

An excerpt of the current DOE directives from the web site is attached below. Please note the listing includes Guides which are non-mandatory.

Listed below are the DOE Regulations to which the NNSA is subject. [Response to Q73b, for cross-reference—ed.]

List of Applicable DOE Regulations

1. 10 CFR Part 202—Production or Disclosure of Material or Information
2. 10 CFR Part 205—Administrative Procedures and Sanctions
3. 10 CFR Part 600—Financial Assistance Rules
4. 10 CFR Part 601—New Restrictions on Lobbying
5. 10 CFR Part 602—Epidemiology and Other Health Studies Financial Assistance Program
6. 10 CFR Part 603—Technology Investment Agreements
7. 10 CFR Part 605—The Office of Energy Research Financial Assistance Program
8. 10 CFR Part 609—Loan Guarantees for Projects That Employ Innovative Technologies
9. 10 CFR Part 611—Advanced Technology Vehicles Manufacturer Assistance Program
10. 10 CFR Part 622—Contractual Provisions
11. 10 CFR Part 624—Contract Clauses
12. 10 CFR Part 625—Price Competitive Sale of Strategic Petroleum Reserve Petroleum
13. 10 CFR Part 626—Procedures for Acquisition of Petroleum for the Strategic Petroleum Reserve
14. 10 CFR Part 706—Security Policies and Practices Relating to Labor-Management Relations
15. 10 CFR Part 707—Workplace Substance Abuse Programs at DOE Sites
16. 10 CFR Part 708—DOE Contractor Employee Protection Program
17. 10 CFR Part 709—Counterintelligence Evaluation Program
18. 10 CFR Part 710—Criteria and Procedures for Determining Eligibility for Access to Classified Matter or Special Nuclear Material
19. 10 CFR Part 712—Human Reliability Program
20. 10 CFR Part 715—Definition of Non-Recourse Project-Financed
21. 10 CFR Part 719—Contractor Legal Management Requirements
22. 10 CFR Part 725—Permits for Access to Restricted Data
23. 10 CFR Part 727—Consent for Access to Information on Department of Energy Computers
24. 10 CFR Part 733—Allegations of Research Misconduct
25. 10 CFR Part 745—Protection of Human Subjects
26. 10 CFR Part 760—Domestic Uranium Program
27. 10 CFR Part 765—Reimbursement for Costs of Remedial Action at Active Uranium and Thorium Processing Sites
28. 10 CFR Part 766—Uranium Enrichment Decontamination and Decommissioning Fund; Procedures for Special Assessment of Domestic Utilities
29. 10 CFR Part 770—Transfer of Real Property at Defense Nuclear Facilities for Economic Development
30. 10 CFR Part 780—Patent Compensation Board Regulations
31. 10 CFR Part 781—Doe Patent Licensing Regulations
32. 10 CFR Part 782—Claims for Patent and Copyright Infringement
33. 10 CFR Part 783—Waiver of Patent Rights
34. 10 CFR Part 784—Patent Waiver Regulation
35. 10 CFR Part 800—Loans for Bid or Proposal Preparation by Minority Business Enterprises Seeking Doe Contracts and Assistance
36. 10 CFR Part 810—Assistance to foreign atomic Energy Activities
37. 10 CFR Part 820—Procedural Rules for DOE Nuclear Activities
38. 10 CFR Part 824—Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violations
39. 10 CFR Part 830—Nuclear Safety Management
40. 10 CFR Part 835—Occupational Radiation Protection
41. 10 CFR Part 840—Extraordinary Nuclear Occurrences
42. 10 CFR Part 850—Chronic Beryllium Disease Prevention Program
43. 10 CFR Part 851—Worker Safety and Health Program
44. 10 CFR Part 860—Trespassing On Department of Energy Property
45. 10 CFR Part 861—Control of Traffic at Nevada Test Site
46. 10 CFR Part 862—Restrictions on Aircraft Landing and Air Delivery at Department of Energy Nuclear Sites
47. 10 CFR Part 871—Air Transportation of Plutonium
48. 10 CFR Part 950—Standby Support for Certain Nuclear Plant Delays
49. 10 CFR Part 960—General Guidelines for the Preliminary Screening of Potential Sites for A Nuclear Waste Repository
50. 10 CFR Part 961—Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste
51. 10 CFR Part 962—Byproduct Material
52. 10 CFR Part 963—Yucca Mountain Site Suitability Guidelines

53. 10 CFR Part 1000—Transfer of Proceedings to the Secretary of Energy and the Federal Energy Regulatory Commission
54. 10 CFR Part 1002—Official Seal and Distinguishing Flag
55. 10 CFR Part 1003—Office of Hearings and Appeals Procedural Regulations
56. 10 CFR Part 1004—Freedom of Information
57. 10 CFR Part 1005—Intergovernmental Review of Department of Energy Programs and Activities
58. 10 CFR Part 1008—Records Maintained on Individuals (Privacy Act)
59. 10 CFR Part 1009—General Policy for Pricing and Charging for Materials and Services Sold by DOE
60. 10 CFR Part 1010—Conduct of Employees and former Employees
61. 10 CFR Part 1013—Program Fraud Civil Remedies and Procedures
62. 10 CFR Part 1014—Administrative Claims Under Federal Tort Claims Act
63. 10 CFR Part 1015—Collection of Claims Owed the United States
64. 10 CFR Part 1016—Safeguarding of Restricted Data
65. 10 CFR Part 1017—Identification and Protection of Unclassified Controlled Nuclear Information
66. 10 CFR Part 1021—National Environmental Policy Act Implementing Procedures
67. 10 CFR Part 1022—Compliance with Floodplain and Wetland Environmental Review Requirements
68. 10 CFR Part 1023—Contract Appeals
69. 10 CFR Part 1039—Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs
70. 10 CFR Part 1040—Nondiscrimination in Federally Assisted Programs or Activities
71. 10 CFR Part 1041—Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Department of Energy
72. 10 CFR Part 1042—Nondiscrimination On the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance
73. 10 CFR Part 1044—Security Requirements for Protected Disclosures Under Section 3164 of the National Defense Authorization Act for Fiscal Year 2000
74. 10 CFR Part 1045—Nuclear Classification and Declassification
75. 10 CFR Part 1046—Physical Protection of Security Interests
76. 10 CFR Part 1047—Limited Arrest Authority and Use of force by Protective Force Officers
77. 10 CFR Part 1048—Trespassing On Strategic Petroleum Reserve Facilities and other Property
78. 10 CFR Part 1049—Limited Arrest Authority and Use of force by Protective Force Officers of the Strategic Petroleum Reserve
79. 10 CFR Part 1050—Foreign Gifts and Decorations
80. 10 CFR Part 1060—Payment of Travel Expenses of Persons who are not Government Employees

Mr. TURNER. Please provide the committee, before December 15, a comprehensive list of all audits conducted by any DOE office, entity, or personnel on NNSA and/or any of its labs, plants, or facilities in FY11.

Mr. D'AGOSTINO. [The information referred to follows on the next page.]

Start Date	NNSA FY 2011 IG Audits
9/29/2011	Follow-up of DOE's Pollution Prevention Program
8/29/2011	Lawrence Livermore National Laboratory Cost Incurred for Fiscal Years 2009-2010
8/24/2011	Area G - Radiological Waste Operations at Los Alamos National Laboratory
8/12/2011	Y-12 Cost Incurred for Fiscal Year 2010
8/4/2011	MOX Facility Follow-Up
8/8/2011	Los Alamos National Laboratory Cost Incurred for Fiscal Year 2010
7/29/2011	GRTI Molybdenum-99 Program
7/13/2011	Sandia National Laboratories Cost Incurred for Fiscal Years 2009 and 2010
6/30/2011	Fixed Monthly Living Expense Payments (FMLE) at Livermore
6/13/2011	Follow-up Audit of the Stockpile Surveillance Program
5/10/2011	JASPER (Joint Actinide Shock Physics Experimental Research Facility)
5/4/2011	Department's Management of Surplus Nuclear Materials
3/18/2011	DOE's International Offices and Foreign Assignments
3/18/2011	The Department's Implementation of Homeland Security Presidential Directive 12
3/2/2011	Graded Security Protection Policy
2/9/2011	Inspection on Continuity of Operations and intelligence Readiness
2/8/2011	DOE's Energy Savings through Commissioning and advanced Metering of Facilities
2/3/2011	Evaluation of the Department of Energy's Unclassified Cyber Security Program – FY 2011

Start Date	NNSA FY 2011 IG Audits
2/2/2011	Audit of the Department of Energy's Fiscal Year 2011 Consolidated Financial Statements
1/3/2011	Contractor Assurance systems at NNSA Sites
12/21/2010	DOE's Protective Force Training Facilities
12/20/2010	Inspection of Property Accountability and Accounting Controls Under the Cooperative Agreement with the Incorporated County of Los Alamos
12/7/2010	IG NNSA's GTRI Contract Administration
10/8/2010	Audit of the Efforts by the Department to Ensure Energy-Efficient Management of its Data Centers
10/7/2010	Audit of the Department's Configuration Management of Non-Financial Systems
10/5/2010	Advanced Recovery and Integrated Extraction System (ARIES)
10/5/2010	Department's Management of Cloud Computing Services

Date	NNSA FY 2011 IT/Cyber Security Reviews
10/2010	Sandia National Laboratories, Albuquerque, NM
11/2010	Y-12 National Security Complex, Oak Ridge, TN
1/2011	Emergency Communications Network, Washington DC and Nellis AFB, NV
6/2011	Pantex Plant, Amarillo, TX
7/2011	NNSA Information Assurance Response Center, Las Vegas, NV
8/2011	Lawrence Livermore National Laboratory, Livermore, CA
10/7/2010	Audit of the Department's Configuration Management of Non-Financial Systems
10/5/2010	Advanced Recovery and Integrated Extraction System (ARIES)
10/5/2010	Department's Management of Cloud Computing Services

Mr. TURNER. Please provide the committee, before December 15, the number of NNSA personnel assigned to the site offices at each NNSA site (e.g. Los Alamos, Pantex, etc.). Also, the number of NNSA personnel at other NNSA facilities, such as headquarters, that are conducting oversight of the labs and plants. In both cases, how do these numbers compare to 5 years ago and 10 years ago?

Mr. D'AGOSTINO.

	Actual FY 2002	Actual FY 2003	Actual FY 2004	Actual FY 2005	Actual FY 2006	Actual FY 2007	Actual FY 2008	Actual FY 2009	Actual FY 2010	Actual FY 2011	Request FY 2012
Office of the Administrator											
Office of the Administrator	44	42	42	52	66	71	78	78	82	138	107
Defense Programs											
Headquarters	144	188	188	170	165	173	181	173	166	182	177
Livermore Site Office	-	83	88	92	90	95	96	93	96	96	93
Los Alamos Site Office	-	77	91	100	107	102	103	109	104	107	106
Sandia Site Office	-	63	86	86	87	83	82	83	82	82	82
Nevada Site Office	-	114	94	98	97	93	91	90	93	95	91
Pantex Site Office	-	74	72	83	84	83	77	77	79	79	80
Y-12 Site Office	70	73	72	78	81	83	82	81	78	78	81
Kansas City Site Office	-	52	50	49	47	44	43	39	37	42	41
Savannah River Site Office	37	24	22	21	24	27	33	36	31	30	32
Defense Nuclear Nonproliferation	172	206	221	235	241	229	219	212	244	252	264
Emergency Operations	53	42	83	47	77	80	89	89	95	98	102
Infrastructure and Environment	65	65	20	20	28	28	31	38	39	20	0
Management and Budget	85	83	83	79	91	88	84	96	114	121	105
Defense Nuclear Security	-	12	12	18	26	24	23	22	25	40	37
Future Leaders Program	-	-	-	15	40	53	54	57	57	57	57
Albuquerque Operations Office	783	-	-	-	-	-	-	0	-	-	0
Nevada Operations Office	236	-	-	-	-	-	-	0	-	-	0
Oakland Operations Office	247	-	-	-	-	-	-	0	-	-	0
NNSA Service Center	-	631	496	425	446	433	428	458	475	411	473
Subtotal, Office of the Administrator	1,936	1,829	1,720	1,668	1,797	1,789	1,794	1,831	1,897	1,928	1,928
Federal Oversight of Construction Projects											56
Total, Office of the Administrator											1,984

Mr. TURNER. Please provide the committee, before December 15, the number of personnel working in the DOE Office of Health, Safety, and Security.

Mr. D'AGOSTINO. The mission of the Office of Health, Safety and Security (HSS) is to maintain a safe and secure work environment for all Federal and contractor employees, ensure that the Department's operations preserve the health and safety of the surrounding communities, and protect national security assets entrusted to the Department. To accomplish these vital tasks, HSS requested and was authorized a Federal staff of 398 FTEs for FY 2011 and has requested a Federal staffing level of 376 for FY 2012.

Mr. TURNER. Please provide the committee a detailed description of NNSA's approach to managing, overseeing, and coordinating surveillance of the stockpile by the labs and plants, including the name and position of the individual within NNSA with responsibility for this mission. Please also provide the committee with NNSA's requirements for conducting surveillance and the program plan for fulfilling these requirements.

Mr. D'AGOSTINO. In 2011 a new surveillance governance model for management of the surveillance program was instituted in which we selected a Senior Technical Advisor for Surveillance (STAS) to oversee all areas of the program and report directly to the Assistant Deputy Administrator for Stockpile Management. The gov-

ernance model coordinates key surveillance activities to assure that each weapon system maintains a current technical basis to determine its respective requirements; all systems requirements are integrated into an executable plan; appropriate diagnostics are developed and deployed; and the surveillance plan is funded and supported by senior NNSA management.

Surveillance requirements are identified by Sandia, Los Alamos, and Lawrence Livermore National Laboratories and provided to the NNSA production agencies to perform the necessary inspections, testing, and capture of data. The primary goal of the Surveillance Program is to identify any design or manufacturing defects either in newly produced or in stockpiled weapons and weapon components, as well as, detect any issues related to deployment or aging of the weapons. Each weapon system has an integrated weapon evaluation plan that projects out 6 years.

Mr. TURNER. How does the B61 Life Extension Program (LEP), which would consolidate several different versions of the B61 into a single B61-12 version, link to our extended deterrent in Europe?

a. What are the implications, both to our extended deterrent and more broadly, of delay in the B61 LEP?

b. Why is it important to increase surety in B61 warheads during the LEP?

Mr. D'AGOSTINO. The B61-12 LEP plan submitted by NNSA has a central theme of consolidating multiple legacy versions of the B61 that are currently deployed in the U.S. and abroad. As a result, the B61-12 will provide a modernized extended deterrent in Europe. Our planned deployment schedule will ensure that no gap in extended deterrent capability will occur, and will ensure seamless replacement of legacy B61 systems with the modernized B61-12.

The implications of a delay in the B61-12 LEP have been studied by NNSA and DOD as part of our LEP alternatives analysis. NNSA has coordinated mitigation strategies with the Department of Defense for the contingency of a delayed B61 LEP. If the proposed LEP is significantly delayed, several critical and costly activities must be pursued to temporarily stabilize the capabilities of legacy deployed B61 systems. For the time period of the delay, more rigorous surveillance activities must be performed to ensure an adequate state of readiness is maintained for this aging legacy element of the stockpile.

The B61 bomb variants have some of the most advanced safety and use control features in the current stockpile. However, these features are aging and designed for Cold War threats. The life extension program provides the opportunity to improve weapon safety and security especially against new, emerging threats of the 21st century. The B61 LEP will incorporate improvements to the existing surety features without significant risk of schedule delays and will balance the B61 investments with those needed in other weapon LEPs. The design approach will facilitate future surety upgrades as threats to our nuclear deterrent evolve.

Mr. TURNER. How many nuclear warheads does Russia make each year? What is our estimate for how many it can make? How does this compare to actual U.S. production and our potential production capacity?

Mr. D'AGOSTINO. The NNSA is responsible for the warheads in the U.S. nuclear weapons program. Questions about a foreign nuclear weapon program should be answered by the Intelligence Community or the Department of Defense.

QUESTIONS SUBMITTED BY MS. SANCHEZ

Ms. SANCHEZ. General Kehler has stated recently that "We're not going to be able to go forward with weapon systems that cost what weapon systems cost today . . . Case in point is [the] Long-Range Strike [bomber]. Case in point is the Trident [submarine] replacement . . . The list goes on." In addition, Admiral Mullen before he retired as Chairman of the JCS said: "At some point in time, that triad becomes very, very expensive, you know, obviously, the smaller your nuclear arsenal is. And it's—so at some point in time, in the future, certainly I think a decision will have to be made in terms of whether we keep the triad or drop it down to a dyad."

Can the U.S. guarantee its security and that of its allies in a more fiscally sustainable manner by pursuing further bilateral reductions in nuclear forces with Russia and scaling back plans for new and excessively large strategic nuclear weapons systems and warhead production facilities?

Dr. MILLER. I believe that if properly structured, reductions below New START levels with Russia could reduce costs to the United States, while strengthening deterrence of potential regional adversaries, strategic stability vis-à-vis Russia and China, and assurance of our Allies and partners. At the same time, as noted in the Nuclear Posture Review, Russia's nuclear force will remain a significant factor in determining how much and how fast we are prepared to reduce U.S. forces.

Ms. SANCHEZ. Do you have any concerns about the provisions related to nuclear weapons employment and that could limit or delay nuclear weapons reductions, which were included in the House National Defense Authorization bill?

Dr. MILLER. Sections 1055 and 1056 of H.R. 1540 would impinge on the President's authority to implement the New START Treaty and establish U.S. nuclear weapons policy. Moreover, it would set onerous conditions on the Administration's ability to direct the retirement, dismantlement, or elimination of non-deployed nuclear weapons.

This legislation would dictate the pace of reductions under New START Treaty in a way that would bar DOD and DOE from exploring the best means to implement reductions, could preclude DOD from being logistically able to meet New START Treaty timelines, and would add disruptions and costs at a time when our country and the nuclear enterprise can ill afford them. Notably, it would set conditions on New START Treaty implementation and divert resources from stockpile sustainment in ways that tax the very programs that the House Appropriations Committee has just cut drastically.

Further, Section 1056 raises constitutional concerns, as it appears to encroach on the President's authority as Commander in Chief to set nuclear employment policy.

Ms. SANCHEZ. In testimony before the Senate Foreign Relations Committee in June 2010, former National Security Advisor Brent Scowcroft stated: "Some things [nuclear weapons] need to be modernized in order to be safe, secure and reliable. Other things don't need to be. And I would not put modernization itself as a key to what we need to—we need to do."

Do you agree with this statement?

Dr. MILLER. I agree that nuclear weapons need to be modernized (e.g., through warhead life extension programs) in order to be safe, secure, and reliable. This modernization does not require the development of new nuclear weapons.

Ms. SANCHEZ. What are the projected costs of, and associated decision points, related to, development and production of a new nuclear bomber, a new Air-Launched Cruise Missile, and a new ICBM?

Dr. MILLER. The President's Budget for Fiscal Year (FY) 2012 contains \$3.7 billion across FY 12–16 for a new, long-range penetrating bomber. The program would use a streamlined management and acquisition approach to balance capability with affordability by utilizing existing and mature technologies to the maximum extent. Additionally, the Air Force would limit requirements based on affordability using a realistic cost target to inform capability and cost trade-offs. The program plans to hold unit costs to the established targets to ensure sufficient production and a sustainable inventory over the long term for approximately 80 to 100 aircraft. The Air Force estimates an initial capability in the mid-2020s.

The current funding for a new Air-Launched Cruise Missile, also known as Long-Range Standoff, is \$884.3 million across FY 2012–16. The cost of this missile will be further refined when a materiel solution is selected as a product of the ongoing Analysis of Alternatives that is scheduled for completion in FY 2013.

The Air Force will begin a Ground-Based Strategic Deterrence Capability-Based Analysis of Alternatives in FY 2013. This assessment supports development of an Initial Capabilities Document, and will establish a baseline of requirements for a future Inter Continental Ballistic Missile (ICBM) replacement program.

Ms. SANCHEZ. Would the ALCM require a new warhead?

Dr. MILLER. No. The Administration committed in the Nuclear Posture Review to sustaining a safe, secure, and effective nuclear arsenal without developing new nuclear warheads. However, a new ALCM would require a decision regarding how to conduct a life extension program for the ALCM warhead.

Ms. SANCHEZ. Under the data provided by the New START verification regime, Russia's nuclear forces were actually at one point under the New START limits that must be met by 2018, but now have risen slightly. Russia is deploying one new missile, the RS-24—a missile I would note that U.S. inspectors got to examine up close solely because New START came into force—and I believe Russia is also proposing a new 10-warhead missile.

What can we do to discourage Russia from developing and fielding new weapons?

Dr. MILLER. Under the New START Treaty, each country is permitted to shape and modernize its forces to meet their respective strategic requirements. There is little we can do to discourage Russia from developing and fielding new nuclear weapons as long as they remain within the limits of the Treaty. Russia continues to modernize its force to replace aging systems and to meet what it views as its strategic needs. The United States is also modernizing nuclear systems as allowed under the New START Treaty.

Ms. SANCHEZ. In the context of New START negotiations, how many deployed strategic warheads did the U.S. military conclude that it needed to fulfill the exist-

ing targeting requirements established by the Bush administration in their nuclear policies.

And how many deployed strategic warheads are needed following the analysis of the 90-day NPR implementation review based on the different options that will be presented to the President?

Dr. MILLER. I would be glad to brief the committee leadership with a classified briefing to answer the first question. I cannot answer the second question because at this time no options have been finalized for presentation to the President.

[OSD provided briefing to Ranking Member Sanchez on the number of deployed strategic warheads as part of a classified brief by Under Secretary Miller and General Kehler on July 10, 2012.]

Ms. SANCHEZ. The Nuclear Posture Review emphasizes the importance of reducing the role of nuclear weapons in U.S. security policy, an approach that makes sense in a world where such weapons are the only existential threat to the United States.

Can you give us some examples of how the United States can further reduce the role of nuclear weapons?

Can you tell us how and what further reductions in the size of the U.S. stockpile would be possible based on current and foreseeable requirements, and what assumptions about nuclear weapons technology and geopolitics in the next decades factor into these requirements?

Dr. MILLER. The United States continues to explore options to reduce the role of nuclear weapons. In a regional context, continued development of conventional capabilities and missile defenses can strengthen non-nuclear deterrence and so help to reduce reliance on nuclear weapons. In addition, implementation of the Stockpile Stewardship Program and investments in our nuclear infrastructure will allow the United States over time to shift away from retaining large numbers of non-deployed warheads as a hedge against technical or geopolitical surprise, allowing major reductions in the nuclear stockpile. To date, no final decisions have been made with respect to future force structure or the modernization plans for nuclear delivery systems. The Department of Defense is close to concluding the NPR Implementation Study, which will inform future decisions.

Ms. SANCHEZ. What assumptions underlie and inform the options presented to the President?

Dr. MILLER. The key assumption that informs the options being developed is that the goals of the Nuclear Posture Review (NPR) remain valid: to prevent nuclear proliferation and nuclear terrorism; to reduce the role of U.S. nuclear weapons in U.S. national security strategy; to maintain strategic stability and deterrence at reduced nuclear force levels; to strengthen regional deterrence and reassure our Allies and partners of the credibility of the U.S. nuclear umbrella and other security commitments; and to sustain a safe, secure, and effective nuclear deterrent.

Ms. SANCHEZ. What is the cost of forward-deploying tactical nuclear weapons in Europe? Please provide detailed cost break-down (in classified form if necessary).

How are these costs shared between the U.S. and host countries?

Dr. MILLER. DOD estimates the annual operating costs for the United States to support forward deployed nuclear weapons in Europe is approximately \$100 million per year on average, as shown in the below table.

Fiscal Year (FY)(\$M)	FY12	FY13	FY14	FY15	FY16	FYDP
Officer	7.2	7.3	7.5	7.7	7.9	37.6
Enlisted	66.7	68.9	71.1	73.4	76.3	356.4
Operations & Maintenance	2.3	2.4	2.5	2.5	2.5	12.2
Security Investments	0.0	23.0	44.0	0.0	0.0	67.0
Weapon Storage Systems	2.8	2.4	2.4	2.3	2.4	12.3
Transportation Costs	2.9	2.9	2.9	2.9	2.9	14.5
Total	81.9	106.9	130.4	88.8	92.0	500.0

Beyond the above costs, Host Nations fund all facility and installation costs at the Munitions Support Squadrons locations. In addition to facility and installation costs, NATO funded \$14.7M in FY 2011 to develop and procure a replacement weapon maintenance vehicle for all weapon sites and \$63.4M in FY 2011–2012 in security upgrades for munitions storage sites.

Ms. SANCHEZ. General Kehler, you've stated recently that "We're not going to be able to go forward with weapon systems that cost what weapon systems cost today ... Case in point is [the] Long-Range Strike [bomber]. Case in point is the Trident [submarine] replacement ... The list goes on." In addition, Admiral Mullen before

he retired as Chairman of the JCS said: “At some point in time, that triad becomes very, very expensive, you know, obviously, the smaller your nuclear arsenal is. And it’s—so at some point in time, in the future, certainly I think a decision will have to be made in terms of whether we keep the triad or drop it down to a dyad.”

Can the U.S. guarantee its security and that of its allies in a more fiscally sustainable manner by pursuing further bilateral reductions in nuclear forces with Russia and scaling back plans for new and excessively large strategic nuclear weapons systems and warhead production facilities?

General KEHLER. U.S. policy is to maintain strategic deterrence, strategic stability, and assure our allies with the lowest possible number of nuclear weapons. The President has certified to Congress he will seek negotiations with the Russian Federation for an agreement on non-strategic nuclear weapons stockpiles of Russia and the U.S. and to reduce tactical nuclear weapons in a verifiable manner. I believe our triad of strategic nuclear weapons systems and our nuclear weapons infrastructure need to be sustained and modernized and there are opportunities to do so in a cost effective and affordable manner. New START provides the necessary flexibility to examine alternatives while meeting our national security policy objectives.

Ms. SANCHEZ. Do you have any concerns about the provisions related to nuclear weapons employment and that could limit or delay nuclear weapons reductions, which were included in the House National Defense Authorization bill?

General KEHLER. As the combatant commander responsible for managing forces and implementing the New START, I am concerned reporting requirements and waiting periods have the potential to impact New START implementation. Additionally, I am concerned that some provisions could divert resources from critical stockpile sustainment efforts and delay prudent reductions to the non-deployed stockpile. In my view, existing consultative processes (e.g., 1251, Stockpile Stewardship and Management Plan) ensure we work jointly with Congress to implement New START and manage the stockpile.

Ms. SANCHEZ. In testimony before the Senate Foreign Relations Committee in June 2010, former National Security Advisor Brent Scowcroft stated: “Some things [nuclear weapons] need to be modernized in order to be safe, secure and reliable. Other things don’t need to be. And I would not put modernization itself as a key to what we need to—we need to do.”

Do you agree with this statement?

General KEHLER. We need to sustain a safe, secure and effective nuclear deterrent. We have reached a critical point where investment is required to sustain the weapons, perform life extensions for substantial pieces of our deterrent, and modernize the complex. The current plans in the 1251 Report detail our best estimates for actions needed to sustain the stockpile while meeting our deterrence requirements.

Ms. SANCHEZ. What are the projected costs of, and associated decision points, related to, development and production of a new nuclear bomber, a new Air-Launched Cruise Missile, and a new ICBM?

General KEHLER. The 1251 Report contains the most current projected costs for the new bomber, ALCM follow-on, and Minuteman follow-on. These estimates will be refined as the Air Force conducts the requirements and acquisition processes for each platform and future 1251 Reports will be updated accordingly. The current Air Force plan projects a technology development decision for the ALCM follow-on in FY14. Specific plans for the new bomber are in development. The Minuteman follow-on is dependent on the Ground Based Strategic Deterrent Analysis of Alternatives which is scheduled to begin in FY13.

Ms. SANCHEZ. Would the ALCM require a new warhead?

General KEHLER. The current ALCM warhead is sustainable with investments by the Air Force and NNSA until 2030. The next-generation cruise missile will require a life-extended warhead.

Ms. SANCHEZ. Under the data provided by the New START verification regime, Russia’s nuclear forces were actually at one point under the New START limits that must be met by 2018, but now have risen slightly. Russia is deploying one new missile, the RS-24—a missile I would note that U.S. inspectors got to examine up close solely because New START came into force—and I believe Russia is also proposing a new 10-warhead missile.

What can we do to discourage Russia from developing and fielding new weapons?

General KEHLER. The New START Treaty was explicitly designed to permit both countries to shape and modernize their forces to match their requirements as they see fit within the treaty’s limits. In contrast to the United States, Russia is today conducting a modernization of their force in part to serve as replacements for existing systems that have exceeded or are ending their service lives and more generally

to meet their perceived geopolitical needs. To some degree, the United States will be conducting similar modernization efforts in the later half of this decade and the next. As discussed in the NPR, I believe the way forward is to place “importance on Russia joining us as we move to lower levels.”

Ms. SANCHEZ. In the context of New START negotiations, how many deployed strategic warheads did the U.S. military conclude that it needed to fulfill the existing targeting requirements established by the Bush administration in their nuclear policies.

And how many deployed strategic warheads are needed following the analysis of the 90-day NPR implementation review based on the different options that will be presented to the President?

General KEHLER. As part of the Nuclear Posture Review the military conducted extensive studies to inform the U.S. negotiation position for the New Start Treaty. The resultant treaty level reflects the military’s identified requirements. The follow-on analysis directed in the NPR (aka “90 Day NPR implementation review”) is ongoing and thus it would be premature to describe the content of these discussions.

Ms. SANCHEZ. The Nuclear Posture Review emphasizes the importance of reducing the role of nuclear weapons in U.S. security policy, an approach that makes sense in a world where such weapons are the only existential threat to the United States.

Can you give us some examples of how the United States can further reduce the role of nuclear weapons?

Can you tell us how and what further reductions in the size of the U.S. stockpile would be possible based on current and foreseeable requirements, and what assumptions about nuclear weapons technology and geopolitics in the next decades factor into these requirements?

General KEHLER. The ongoing follow-on analysis directed in the NPR is examining these issues in detail and thus it would be premature to describe the content of these discussions.

Ms. SANCHEZ. Do you have any concerns about the provisions related to nuclear weapons employment and that could limit or delay nuclear weapons reductions, which were included in the House National Defense Authorization bill?

Secretary TAUSCHER. The May 24, 2011, Statement of Administration Policy on H.R. 1540 made clear that the Administration had serious constitutional concerns with sections 1055, 1056, and 1230. Sections 1055 and 1056 would impinge on the President’s authority to implement the New START Treaty and to set U.S. nuclear weapons policy. Similarly, section 1230 would limit the president’s ability to address tactical nuclear weapons, a step called for in the Senate’s Resolution of Ratification of the New START Treaty.

Ms. SANCHEZ. Under the data provided by the New START verification regime, Russia’s nuclear forces were actually at one point under the New START limits that must be met by 2018, but now have risen slightly. Russia is deploying one new missile, the RS-24—a missile I would note that U.S. inspectors got to examine up close solely because New START came into force—and I believe Russia is also proposing a new 10-warhead missile.

What can we do to discourage Russia from developing and fielding new weapons?

Secretary TAUSCHER. Under New START, each Party retains the right to determine for itself the structure and composition of its strategic forces within the Treaty’s overall limits. This provides both Parties to the Treaty with the flexibility to deploy, maintain, and modernize its strategic nuclear forces in the manner that best protects its national security interests. However, modernization must occur within the central limits of the Treaty. The Treaty limitations on U.S. and Russian forces, combined with mechanisms to verify compliance, will provide predictability, transparency, and stability in the U.S.-Russian strategic relationship at lower nuclear force levels.

Ms. SANCHEZ. Are we taking the necessary steps to build verification requirements into the CMRR and UPF facility designs to preserve flexibility for future arms control agreements?

Secretary TAUSCHER. While designs for CMRR (Chemistry and Metallurgy Research Replacement) and UPF (Uranium Processing Facility) are flexible, specific verification requirements of future agreements are unknown. The UPF facility design has been evaluated and determined to have an appropriate level of transparency within the ongoing design to accommodate potential activities that could be related to future treaty obligations. UPF can accommodate access, and appropriate areas for monitoring and measuring of fissile material for inspection teams. The CMRR Nuclear Facility is not considered a production facility and is not anticipated to be subject to routine inspections.

Ms. SANCHEZ. Could you further detail the relationship between modernization and reductions?

Does delay in modernization necessarily prevent any reductions? Could the U.S. pursue negotiations for further reductions before CMRR and UPF are operational? Could the U.S. make unilateral reductions, as was done under Presidents George H. W. Bush and George W. Bush, if they can be done without jeopardizing deterrence requirements? Why or why not?

Secretary TAUSCHER. Appropriate investments to improve the capability and responsiveness in our nuclear infrastructure ensure the United States will retain a safe, secure, and effective nuclear arsenal so long as nuclear weapons exist and will help to enable further reductions.

As stated in the Nuclear Posture Review, the President has directed a review of post-New START arms control objectives to consider further reductions in nuclear weapons.

Ms. SANCHEZ. What is the cost of forward-deploying tactical nuclear weapons in Europe? Please provide detailed cost break-down (in classified form if necessary).

How are these costs shared between the U.S. and host countries?

Secretary TAUSCHER. We refer you to the answer below provided by the Department of Defense which outlines the U.S. support for forward based nuclear weapons in Europe as well as the contribution by host countries and the NATO Alliance. The current amount funded by the United States to support forward based nuclear weapons in Europe is:

Fiscal Year (FY)(\$M)	FY12	FY13	FY14	FY15	FY16	FYDP
Officer	7.2	7.3	7.5	7.7	7.9	37.6
Enlisted	66.7	68.9	71.1	73.4	76.3	356.4
Operations & Maintenance	2.3	2.4	2.5	2.5	2.5	12.2
Security Investments	0.0	23.0	44.0	0.0	0.0	67.0
Weapon Storage Systems	2.8	2.4	2.4	2.3	2.4	12.3
Transportation Costs	2.9	2.9	2.9	2.9	2.9	14.5
Total	81.9	106.9	130.4	88.8	92.0	500.0

The Host Nations currently fund all facility and installation costs at the Munitions Support Squadrons (MUNSS) locations. In addition to facility and installation costs, NATO funded \$14.7M (FY11) to develop and procure a replacement weapon maintenance vehicle for all weapon sites and \$63.4M (FY11/12) in security upgrades for the MUNSS storage sites.

Ms. SANCHEZ. Do you have any concerns about the provisions related to nuclear weapons employment and that could limit or delay nuclear weapons reductions, which were included in the House National Defense Authorization bill?

Mr. D'AGOSTINO. Section 1055 of H.R. 1540, the House National Defense Authorization Bill for FY 2012, would impose onerous conditions on NNSA's ability to retire, dismantle, or eliminate non-deployed nuclear weapons. The effect of this section would be to preclude dismantlement of weapons in excess of military needs. Additionally, it would increase stewardship and management costs and divert key resources from our critical stockpile sustainment efforts and delay completion of programs necessary to support the long-term safety, security, and reliability of our nuclear deterrent.

Ms. SANCHEZ. In testimony before the Senate Foreign Relations Committee in June 2010, former National Security Advisor Brent Scowcroft stated: "Some things [nuclear weapons] need to be modernized in order to be safe, secure and reliable. Other things don't need to be. And I would not put modernization itself as a key to what we need to—we need to do."

Do you agree with this statement?

Mr. D'AGOSTINO. Yes, I agree with Mr. Scowcroft's statement. As Mr. Scowcroft stated, NNSA is not pursuing modernization of nuclear weapons or the nuclear security enterprise for the sake of modernization; rather, NNSA is extending the life of systems where necessary, on a case-by-case basis, to ensure the continued safety, security and reliability of the U.S. nuclear deterrent, including assuring the continued capability of the entire nuclear security enterprise.

[Text from the June hearing for context: Mr. SCOWCROFT. Yes, I am. I am comfortable. I did not use the term "modernization" in my comments. I said safe, reliable, assurance. Modernization for the sake of modernization, in light of the comments that Senator Lugar has made about the overall defense budget, is a separate question. Some things need to be modernized in order to be safe, secure, and reliable. Other things do not need to be. And I would not put modernization itself as

a key to what we need to do. We need to be assured that the system will work the way we want it to work.]

Ms. SANCHEZ. Would the ALCM require a new warhead?

Mr. D'AGOSTINO. The Air Force is assessing options to replace the Air Launched Cruise Missile (ALCM) with another long-range standoff (LRSO) capability in the next decade. NNSA is prepared to install new neutron generators to extend the life of the W80 deployed on the ALCM. NNSA will continue to support the Air Force's ongoing Analysis of Alternatives (AoA) to establish requirements for the LRSO. Until the AoA is complete, the warhead options will not be determined.

Ms. SANCHEZ. Under the data provided by the New START verification regime, Russia's nuclear forces were actually at one point under the New START limits that must be met by 2018, but now have risen slightly. Russia is deploying one new missile, the RS-24—a missile I would note that U.S. inspectors got to examine up close solely because New START came into force—and I believe Russia is also proposing a new 10-warhead missile.

What can we do to discourage Russia from developing and fielding new weapons?

Mr. D'AGOSTINO. Russian determinations regarding the development and fielding of weapons will be based on Russian national security considerations, just as the United States will make determinations based on U.S. national security considerations. Looking to the future, the President has made clear his commitment to a step-by-step process for further reducing and eliminating nuclear weapons, while recognizing that this process will take time and must be based on international security conditions that will enable such reductions to occur in a secure, predictable, and stable manner. In this regard, the United States must continue to work with the international community, including Russia, to improve the regional and international security considerations affecting national security decisionmaking.

Ms. SANCHEZ. What assumptions underlie, and what requirements drive, the 50–80 pits and secondaries production capacity for CMRR and UPF? What is the cost comparison for facilities that could produce a lower maximum number of pits/secondaries?

Mr. D'AGOSTINO. NNSA infrastructure is capability-based and will be responsive to changing world demands and have the inherent capacity for uranium processing, plutonium analytical chemistry and material characterization support, and storage to support production of the required pits and canned subassemblies (CSA) per year while sustaining the remaining stockpile. Stockpile life extension plans developed jointly between the Department of Defense and NNSA provide the drivers for the requirements for pits and secondaries production capacity. During the NNSA Critical Decision process that resulted in approval of capability-based designs for both facilities, multiple alternatives were considered for meeting mission needs. Both project teams are currently working to achieve 90 percent design maturity in FY 2012. NNSA will conduct independent cost reviews before setting the performance baselines for cost and schedule in 2013.

Ms. SANCHEZ. What are the projected operation and management costs of CMRR and UPF?

Mr. D'AGOSTINO. *For UPF:* The projected total 50 year operational period cost of operations and maintenance and the average annual costs for the Uranium Processing Facility expressed in 2011 dollars are:

	Total Cost Over 50 Years	Average Annual Cost Over 50 Years
Operations	\$4,693,000K	\$93,800K
Maintenance	\$1,761,000K	\$34,900K

For CMRR: The projected total 50 year operational period cost of operations and maintenance and the average annual costs for the Chemistry and Metallurgy Research Facility Replacement including the radiological laboratory/utility/office building expressed in 2011 dollars are:

	Total Cost Over 50 Years	Average Annual Cost Over 50 Years
Operations	\$4,500,000K	\$90,000K
Maintenance	\$1,800,000K	\$35,000K

Ms. SANCHEZ. What are the costs of decontamination and decommissioning of the CMRR and UPF, and are these costs included in the cost estimates for these facilities? Why/why not?

Mr. D'AGOSTINO. Since CMRR and UPF are planned to operate for 50 years, the future costs of decontamination and decommissioning (D&D) of CMRR and UPF have not been determined.

As reflected in the Construction Project Data Sheet for CMRR in the President's FY 2012 Congressional Budget request, the initial pre-conceptual cost estimate range for D&D of the existing CMR facility is approximately \$200M–\$350M in non-escalated FY 2004 dollars.

As reflected in the Construction Project Data Sheet for UPF in the President's FY 2012 Congressional Budget request, the D&D of Building 9212 is included as part of the Integrated Facility Disposition Project proposed by the Office of Environmental Management to dispose of legacy facilities at Y-12 and Oak Ridge National Laboratory. Buildings 9215, 9998, and 9204-2E are being evaluated for further consolidation of non-Special Nuclear Material manufacturing functions. Since these buildings will not be immediately excess to program needs when UPF becomes operational, NNSA has no near term D&D plans for these facilities.

Ms. SANCHEZ. Are we taking the necessary steps to build verification requirements into the CMRR and UPF facility designs to preserve flexibility for future arms control agreements?

Mr. D'AGOSTINO. While designs for CMRR and UPF are flexible, specific verification requirements of future agreements are unknown. The UPF facility design has been evaluated and determined to have an appropriate level of transparency within the ongoing design to accommodate expected activities related to our treaty obligations. UPF can accommodate access, and appropriate areas for monitoring and measuring of fissile material for inspection teams. The CMRR Nuclear Facility is not considered a production facility and is not anticipated to be subject to routine inspections.

QUESTIONS SUBMITTED BY MR. FRANKS

Mr. FRANKS. Under Secretary Tauscher, during the November 2nd hearing you mentioned the EPAA is based on the SM-3 interceptor, implying the EPAA is comprised of proven systems; as you and I know, Phases II through IV of the EPAA will use new missiles and are experiencing technical difficulties. Indeed, the SM-3 Block IIB missile, slotted for phase IV of the EPAA, was entirely zeroed out by the SAC-D due its technical challenges and to devote more money to the SM-3 IB and IIA since they are also having challenges. It is also perplexing to assert the EPAA will be less expensive than the previous missile defense plan in Europe. The Missile Defense Agency currently does not have an estimate as to how much the EPAA will ultimately cost the U.S.; moreover, if the EPAA fails to deploy an effective SM-3 Block IIB, or GBIs as a hedge in the event Iran succeeds in developing an effective ICBM, the entire plan will fall woefully short of what the original plan was primarily supposed to do—provide added protection of the U.S. homeland. If the EPAA isn't even going to provide the same coverage of the U.S. as the original plan, than it makes no sense to compare their costs. In light of these facts, please provide specific evidence supporting your statement that President Obama's approach to missile defense uses "proven systems at a lower cost than the previous proposal." I have seen no evidence to support your statement, which causes concern for the viability of the entire EPAA.

Secretary TAUSCHER. The EPAA includes a number of elements such as the SM-3 interceptor, the Aegis SPY-1 radar, and the AN/TPY-2 radar. The current version of the SM-3, the SM-3 Block IA, is deployed with the fleet today. The Aegis SPY-1 radar has been deployed on U.S. warships for over 30 years, and AN/TPY-2 radars have been deployed and operated in Japan and Israel for a number of years.

One element of the basis for the statement is that the Standard Missile (SM)-3, at around \$10 million per interceptor, is much cheaper than a GBI, which costs approximately \$60 to \$70 million per interceptor. This means that we can deploy many more SM-3 interceptors than GBIs at the same cost. Since Iran already possesses hundreds of short- and medium-range ballistic missiles, this additional defensive capability is critical. In addition, the EPAA relies on capabilities that are mobile and relocatable, so additional capabilities can "surge" into the region in a crisis.

It is important to note that the EPAA is not an acquisition program but a policy framework for delivering capabilities of which the principal attribute is flexibility. By design, it can adapt to changes in threats and available technologies.

QUESTIONS SUBMITTED BY MR. LAMBORN

Mr. LAMBORN. Dr. Miller, in response to a question during this subcommittee's March 31, 2011 hearing on the budget for missile defense programs, your deputy, Dr. Brad Roberts stated, "The Administration is considering additional steps to strengthen the U.S. hedge posture . . . we are evaluating the deployment timelines associated with fielding additional capabilities . . . we have committed to brief the Committee on the results of this work . . . once it is complete." And, you Dr. Miller, during this subcommittee's March 2 hearing, stated "the Department is in the process of finalizing and refining its hedge strategy, and we will be pleased to brief this subcommittee on the results in a classified setting when it is complete." Dr. Miller, here we are eight months later and the Department has not released its hedging strategy. When can we expect to see it?

Dr. MILLER. The analysis conducted for the hedge strategy is informing the budget decisions under consideration as part of the development of the Department's fiscal year 2013 budget request. The Department will ensure that Congress is briefed on the results of the hedge strategy in early 2013.

Mr. LAMBORN. Do you agree with Secretary Gates who said at the Shangri-La Dialogue in Singapore in June, "With the continued development of long-range missiles and potentially a road-mobile intercontinental ballistic missile and their continued development of nuclear weapons, North Korea is in the process of becoming a direct threat to the United States." And two weeks later he said, "North Korea now constitutes a direct threat to the United States. The president told [China's] President Hu that last year. They are developing a road-mobile ICBM. I never would have dreamed they would go to a road-mobile before testing a static ICBM. It's a huge problem. As we've found out in a lot of places, finding mobile missiles is very tough." Do you concur with Secretary Gates' statements? Was the question of a North Korean road-mobile missile factored in to the decision in 2009 to abandon the Third Site and the deployment of 44 ground based interceptors at the missile fields at Fort Greely and Vandenberg Air Force Base? If North Korea begins fielding an array of road mobile ICBMs, and if they proliferate this technology to Iran and other countries as in the past, what does such activity do to current judgments about the adequacy of the current inventory of GBIs?

Dr. MILLER. I agree with Secretary Gates' assessment that North Korea constitutes a direct threat to the United States, as it does to our South Korean and Japanese allies. North Korea's nuclear ambitions and continued development of long-range missiles remain a primary focus of the development and deployment of the Ballistic Missile Defense System (BMDS). The capabilities developed and deployed as part of the integrated BMDS protect the United States from the potential emergence of an ICBM threat from Iran or North Korea. To maintain this advantageous position, the Administration is taking steps to improve the protection of the homeland from the potential ICBM threat posed by Iran and North Korea. These steps include the continued procurement of ground-based interceptors (GBIs), the deployment of additional sensors, and upgrades to the Command, Control, Battle Management, and Communications system. Improvements to the Ground-based Midcourse Defense (GMD) system, in particular, will better protect the United States against future ICBM threats, whether from Iran, North Korea, or other regional actors.

In the future, if projections regarding Iran or North Korea change significantly, then the United States should reassess its baseline program and consider implementing some elements of our hedge posture.

Mr. LAMBORN. This summer, when asked about the consequence of cuts to NNSA's modernization program, Secretary Gates said: "This modernization program was very carefully worked out between ourselves and the . . . Department of Energy. And, frankly, where we came out on that also, I think, played a fairly significant role in the willingness of the Senate to ratify the New START agreement. So the risks are to our own program in terms of being able to extend the life of our weapon systems . . . this modernization project is, in my view, both from a security and a political standpoint, really important." Do you agree with Secretary Gates that the modernization project is very important both from a national security standpoint and from a perspective of sustaining support for the New START Treaty? What are the consequences of not funding the "very carefully worked out" plan for NNSA modernization?

Dr. MILLER. I agree with Secretary Gates that NNSA's modernization is very important to U.S. national security. The nuclear security enterprise remains, today and for the foreseeable future, the foundation of the U.S. deterrence strategy and defense posture. The Administration is committed to making the investments nec-

essary to recapitalize the U.S. nuclear complex and to ensure we have the highly skilled personnel needed to maintain our nuclear capabilities.

With the passing of the Budget Control Act (BCA), we now face new fiscal realities. These fiscal realities do not weaken our commitment to the safety, security, and effectiveness of the nuclear deterrent, but they must inform our path forward. The Administration is working to develop an FY13 budget request for NNSA that reflects these fiscal realities, but funds the core elements of the nuclear complex and meets military requirements.

Without adequate funding for NNSA, the nuclear weapons life extension programs, nuclear infrastructure, and the retention of the people on which we depend to maintain a safe, secure, and effective nuclear arsenal would be at risk. Congressional participation in this process and commitment to continuing investments in these programs and capabilities is critical to the future health of our nuclear deterrent.

Mr. LAMBORN. The 2010 Nuclear Posture Review says that, “by modernizing our aging nuclear facilities and investing in human capital, we can substantially reduce the number of nuclear weapons we retain as a hedge against technical or geopolitical surprise.” It goes on to say that these modernization “investments are essential to facilitating reductions while sustaining deterrence under New START and beyond.” If we do not carry out the modernization program, what is your military opinion of the risks associated with nuclear stockpile reductions?

General KEHLER. Modernization and investment in our aging nuclear facilities and human capital are important to the sustainment of our nuclear weapons, the dismantlement of retired weapons and other non-proliferation activities. There are increased risks if the modernization program is not executed and it is an important consideration in reducing the stockpile. I believe successful life extension programs are critical to strategic deterrence.

Mr. LAMBORN. This summer, when asked about the consequence of cuts to NNSA’s modernization program, Secretary Gates said: “This modernization program was very carefully worked out between ourselves and the . . . Department of Energy. And, frankly, where we came out on that also, I think, played a fairly significant role in the willingness of the Senate to ratify the New START agreement. So the risks are to our own program in terms of being able to extend the life of our weapon systems . . . this modernization project is, in my view, both from a security and a political standpoint, really important.” Do you agree with Secretary Gates that the modernization project is very important both from a national security standpoint and from a perspective of sustaining support for the New START Treaty? What are the consequences of not funding the “very carefully worked out” plan for NNSA modernization?

General KEHLER. I agree the nation must recapitalize its nuclear capabilities as all of our nuclear weapon systems and facilities are “aged” and require investment in the upcoming decades. The fiscal environment demands that we prioritize and synchronize the various platform, weapon and infrastructure modernization activities. Inadequate funding undermines our ability to provide a credible deterrent force to assure allies and respond appropriately, as directed by the President, if deterrence fails.

Mr. LAMBORN. This summer, when asked about the consequence of cuts to NNSA’s modernization program, Secretary Gates said: “This modernization program was very carefully worked out between ourselves and the . . . Department of Energy. And, frankly, where we came out on that also, I think, played a fairly significant role in the willingness of the Senate to ratify the New START agreement. So the risks are to our own program in terms of being able to extend the life of our weapon systems . . . this modernization project is, in my view, both from a security and a political standpoint, really important.” Do you agree with Secretary Gates that the modernization project is very important both from a national security standpoint and from a perspective of sustaining support for the New START Treaty? What are the consequences of not funding the “very carefully worked out” plan for NNSA modernization?

Secretary TAUSCHER. Yes. A credible and affordable modernization plan is necessary to sustain the nuclear infrastructure and support our nation’s deterrent. NNSA will continue to update and improve the exact details of these modernization plans as it completes the designs and analyzes the infrastructure needed to support the stockpile. The programs and capabilities of our long-term modernization plans for the nuclear infrastructure remain important both from a national security standpoint and from a perspective of sustaining support for the New START Treaty.

Mr. LAMBORN. This summer, when asked about the consequence of cuts to NNSA’s modernization program, Secretary Gates said: “This modernization program was very carefully worked out between ourselves and the . . . Department of Energy.

And, frankly, where we came out on that also, I think, played a fairly significant role in the willingness of the Senate to ratify the New START agreement. So the risks are to our own program in terms of being able to extend the life of our weapon systems . . . this modernization project is, in my view, both from a security and a political standpoint, really important.” Do you agree with Secretary Gates that the modernization project is very important both from a national security standpoint and from a perspective of sustaining support for the New START Treaty? What are the consequences of not funding the “very carefully worked out” plan for NNSA modernization?

Mr. D’AGOSTINO. We agree that modernization is important and we urge the Congress to provide funding. The consequence for not funding the NNSA modernization plan is increased risk to the long-term maintenance of the U.S. stockpile and deterrence in general. The plan for modernization of the complex was carefully crafted through concerted interaction between the Departments of Energy and Defense. It was based on national strategic planning outlined in the April 2010 Nuclear Posture Review (NPR). This stockpile planning has been carefully formulated in the Stockpile Stewardship and Management Plan (SSMP) as a flow of complex activities over the next two decades. In some cases, decreases in funding would risk cessation or reduction of key activities (such as certain complex experiments and nuclear component manufacturing). Additional analysis will be undertaken, often in consultation with the Department of Defense, to minimize or eliminate such risks.

The New START Treaty is an important part of our security strategy and provides transparency and stability between the world’s two major nuclear powers and will remain in our interest as long as we face nuclear challenges.

QUESTIONS SUBMITTED BY MR. BROOKS

Mr. BROOKS. Dr. Miller, as you know, this committee has been concerned about what a U.S.-Russia missile defense agreement negotiated by the Obama Administration might look like. Specifically, the provision I authored in this year’s national defense authorization act would prohibit the exchange of sensitive missile defense sensor data and technology, such as our hit-to-kill technology. I note that the Administration expressed concern about this provision but it did not rise to the level of a veto threat. Several weeks ago, the Russian newspaper Kommersant published a report that a heretofore secret agreement tabled by Ms. Tauscher—I say secret because nothing about this “agreement” was briefed to Congress—with her Russian counterpart that President Obama actually had to reject. Surely, as a former congressional staffer, Dr. Miller, you understand that the Congress has a vital oversight function. In the absence of transparency by the Administration, the Congress has no choice but to resort to legislative provisions such as the amendment I offered. Would you please provide us get a copy of that draft agreement? It appears that now it is even circulating in the Russian press.

Dr. MILLER. The Administration is committed to keeping Congress informed of its missile defense efforts. The Administration is currently pursuing a political framework with the Russian Federation that could open the way for practical cooperation with Russia on missile defense. There are a variety of ways to establish such a political framework; no agreement has been reached on the content or format of any such framework to date. Any finalized statement will be shared with Congress. The Administration has been clear that it will not agree to any constraints or limitations on U.S. and NATO missile defense systems. As such, any political framework we reach with the Russian Federation would not be a legally binding agreement. I have passed your specific request to the Department of State.

Mr. BROOKS. Ms. Tauscher, as you know, this committee has been concerned about what a U.S.-Russia missile defense agreement negotiated by the Obama Administration might look like. Specifically, the provision I authored in this year’s national defense authorization act would prohibit the exchange of sensitive missile defense sensor data and technology, such as our hit-to-kill technology. I note that the Administration expressed concern about this provision but it did not rise to the level of a veto threat. Several weeks ago, the Russian newspaper Kommersant published a report that a heretofore secret agreement tabled by you—I say secret because nothing about this “agreement” was briefed to Congress—with your Russian counterpart that President Obama actually had to reject. Surely, as a former Member of Congress, you understand that the Congress has a vital oversight function. In the absence of transparency by the Administration, the Congress has no choice but to resort to legislative provisions such as the amendment I offered. Would you please provide us get a copy of that draft agreement? It appears that now it is even circulating in the Russian press.

Secretary TAUSCHER. The Administration is committed to keeping Congress informed of its missile defense efforts. We have provided numerous senior level briefings to the Congress on our efforts to cooperate with Russia on missile defense. The most recent briefing for this Committee was held on December 21, 2011. The Administration is currently pursuing a political framework that would open the way for practical cooperation with Russia on missile defense. There are a variety of ways to establish such a political framework. No agreement has been reached on the content, and no decision has been made on a format. The political framework would not be a legally binding agreement. Any finalized statement will be shared with Congress. The Administration has been clear that it will not agree to any constraints limiting the development or deployment of U.S. and NATO missile defense systems.

Mr. BROOKS. The State Department has been negotiating a Defense Technology Cooperation Agreement (DTCA) with Russia since the beginning of the Obama Administration, but a copy of a draft of that agreement has never been shared with this committee or anywhere in the Congress as far as I am aware. Ms. Tauscher, by refusing to share this draft document with the Congress, it appears that the Administration seems to trust the Russians more than Congress.

a. Can you help us resolve this situation? Can you make clear for the members of this subcommittee whether the United States will share with the Russian Federation telemetric information on U.S. missile defense interceptor or target vehicles? Do you understand why the House passed my amendment prohibiting the sharing of "sensitive" missile defense information with the Russians when we can't even see what you're offering them? This is not the only concern, with such information sharing, but it is a weighty one. Are you willing to share any classified U.S. missile defense technology with Russia? What classified information is Russia willing to share with us?

b. Perhaps most distressing is talk of guarantees for Russia concerning our missile defenses. Ms. Tauscher, can you please tell us the Administration position concerning missile defense agreements and guarantees for Russia? What of NATO guarantees? We are told that the United States may outsource to NATO, perhaps at the May 2012 Chicago NATO Summit, political guarantees to Russia about our missile defenses. Is that something you and the State Department would support? Regarding the guarantees the Obama Administration is willing to provide, would you see any reason a future Administration wouldn't be able to just walk away from the guarantees the Obama Administration is willing to provide, would you see any reason a future Administration wouldn't be able to just walk away from the guarantee you're offering? Would there be geopolitical costs to doing so? Two weeks ago, in the news clips distributed to members of this committee, there was a press report concerning Russia's S-500 ICBM-killer missile defense system. Why is so much time spent addressing Russian concerns about our missile defense system with regards to their deterrent when never a peep is heard about the extensive Russian missile defense system and its implications for the U.S. deterrent?

Secretary TAUSCHER. a. The Department of Defense is negotiating a DTCA with Russia. Such negotiations have been ongoing since initiated during the Bush Administration in 2004. We will not provide Russia with sensitive information about our missile defense systems that would in any way compromise our national security. For example, hit-to-kill technology and interceptor telemetry will not, under any circumstances, be provided to Russia.

However, in the event that the exchange of classified information with Russia on missile defense will increase the President's ability to defend the American people, U.S. deployed forces, allies, and partners, the President will retain the right to do so. These factors are the same ones that motivated the last Administration to have determined that some classified information exchange with Russia on missile defense would benefit the United States.

In those circumstances where an exchange of sensitive data with Russia would benefit the national security of the United States, the Administration will only do so contingent on an agreement regarding information handling and protection, including the prohibition of access to such information by third parties. Additionally, any Russian access to classified information would be strictly governed by U.S. National Disclosure Policy and other applicable laws, including a determination that such exchange benefits the United States. The President has also ordered us to closely consult with the appropriate Members of Congress before the exchange of classified information with Russia.

b. The Administration has consistently stated that it will not agree to legally binding restrictions or limitations on U.S. or NATO missile defenses. The Administration has stated, publicly and privately, that the missile defense system being established in Europe is not directed against Russia. The Administration is prepared

to put the same statement in writing as part of a political framework that would open the way for practical cooperation with Russia on missile defense. There are a variety of ways to establish such a political framework. No agreement has been reached on the content, and no decision has been made on a format. The political framework would not be a legally binding agreement. The Administration would also support, in coordination with and subject to agreement by all Allies, such a statement by NATO.

With Russia, the Administration is pursuing an agenda aimed at bringing the strategic military postures of our two countries into alignment with our post-Cold War relationship—no longer enemies, no significant prospect of war between us, and cooperating when mutually advantageous. Therefore, Russia is not the focus of U.S. BMD.

QUESTIONS SUBMITTED BY DR. FLEMING

Dr. FLEMING. When will the New START force structure be determined? When does it need to be determined in order to achieve implementation not later than February 2017? Specifically, with respect to potential strategic force reductions under New START:

a. Are the full costs of eliminating, converting from deployed to non-deployed, and converting to non-nuclear status DOD systems known by the Department?

b. If the Navy and STRATCOM are comfortable with 192 launchers on 12 SSBN-X submarines based on the assumption that New START levels will be those required in 2027 and beyond, meaning 48 fewer launchers than suggested for the submarine-based deterrent in the original 1251 plan, what other reductions are needed to the ICBM and bomber legs to comply with the New START limits?

Dr. MILLER. To date, no final decisions have been made with respect to future force structure or the modernization plans for nuclear delivery systems; such decisions will be informed by the Administration's ongoing Nuclear Posture Review (NPR) Implementation Study. These decisions will be consistent with the goals of the NPR, including maintaining strategic stability, providing assurance to our Allies and partners regarding the credibility of the U.S. nuclear umbrella and other security commitments, and maintaining a safe, secure, and effective nuclear deterrent.

The final costs of implementing New START Treaty will be dependent on decisions concerning the future force structure, conversion and elimination procedures, facility requirements for supporting inspections or conversion and elimination procedures, and possibly the development of additional inspection equipment. Although the NPR provided certain recommendations concerning force structure, it did not specify a New START Treaty-compliant structure nor set the schedule for its implementation, aside from a seven-year implementation period of the Treaty. Costs will also be dependent on the procedures that are selected for the conversion or elimination of U.S. strategic offensive arms. The Treaty provides the flexibility for the United States to decide what conversion or elimination procedures are most suitable given its strategic requirements.

Dr. FLEMING. One of the binding conditions (condition 9(B)) of the Senate's Resolution of Ratification for the New START Treaty says: "If appropriations are enacted that fail to meet the resource requirements set forth in the President's 10-year [Section 1251] plan ... the President shall submit to Congress, within 60 days of such enactment ... a report detailing—(1) how the President proposes to remedy the resource shortfall; (2) if additional resources are required, the proposed level of funding required and an identification of the stockpile work, campaign, facility, site, asset, program, operation, activity, construction, or project for which additional funds are required; (3) the impact of the resource shortfall on the safety, reliability, and performance of United States nuclear forces; and (4) whether and why, in the changed circumstances brought about by the resource shortfall, it remains in the national interest of the United States to remain a Party to the New START Treaty."

a. Administrator D'Agostino, General Kehler, and Dr. Miller: Which of you is responsible for this report? Has the President delegated his responsibility on this requirement from the Resolution of Ratification?

b. The current continuing resolution funds NNSA's modernization plans well below the FY12 levels laid out in the 1251 plan—essentially at a level 1.5% below FY11. Is the administration preparing a report for submission to Congress per this requirement? Please submit such a report, in writing, prior to the expiration of the current CR.

c. If the funding levels for Weapons Activities in the Energy and Water appropriations bills in the House and Senate are enacted, or if sequestration or a budget deal

results in funding for Weapons Activities less than that laid out in the Section 1251 plan, will the administration submit a report per this binding condition?

Dr. MILLER. The President has not delegated his responsibility on this requirement from the Resolution of Ratification. Should there be a resource shortfall, DOD would expect to work closely with the National Security Staff (NSS) and National Nuclear Security Administration (NNSA) in drafting the President's report specified in Condition 9(B) of the Senate's Resolution of Ratification for the New START Treaty. At this time, it would be inappropriate to assume that a resource shortfall exists; the Administration continues to support full funding in an Appropriations bill.

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a. Are the full costs of eliminating, converting from deployed to non-deployed, and converting to non-nuclear status DOD systems known by the Department?

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General KEHLER. Discussions regarding final nuclear force structure for New START are ongoing. Once a final force structure decision is reached Services will be able to finalize costs to conduct any necessary conversions, eliminations, and non-deployment of systems.

A. The Air Force and the Navy estimates of expected costs are based on the force structure detailed in the current 1251 Report. Once a decision has been made on a final force structure the Services will refine estimates.

B. The *Ohio* Replacement SSBN will not enter strategic service until after New START has expired. The future strategic environment and other factors will ultimately determine future force structure requirements.

Dr. FLEMING. General Kehler, as you know B-52 and B-2 bombers are hardened to protect them from electromagnetic radiation in the event of a nearby nuclear detonation.

a. Why is this hardening important in terms of STRATCOM's operational construct?

b. Will the next generation bomber be nuclear-hardened as well?

c. Can STRATCOM estimate the additional developmental and life cycle costs associated with hardening the next generation bomber?

d. General Kehler, you stated at a recent breakfast with the Defense Writers Group (10-18-11) that the follow-on bomber "has to be long range." Can you please elaborate on the importance of this concept? Also, can you describe what its combat payload will be relative to our current heavy bombers, the B-52 and B-2?

e. Will it be nuclear certified from Initial Operational Capability? If not, why?

f. Please describe in detail STRATCOM's requirements for warhead modernization on the next ALCM, a.k.a., the long-range standoff missile. Has STRATCOM performed an analysis of alternatives on warhead options, and what the projected costs for each alternative are? Is the W84 one of the alternatives being studied? If yes, do a sufficient number of W84s exist in the enduring stockpile to fulfill the requirement?

General KEHLER. A. Bombers must be capable of operating in a variety of environments, to include nuclear effects environments—hardening directly supports bomber survivability and effectiveness, underwriting deterrence and assurance.

B. Yes, USSTRATCOM has conveyed a requirement for a nuclear hardened bomber to the Air Force.

C. The Air Force is not at a point in the development process that would enable a detailed cost estimate for the new bomber. We anticipate hardening to be a relatively small percentage of the overall cost, if incorporated in initial designs.

D. Denying geographic sanctuary to potential adversaries is an important aspect of deterrence. The new bomber must have sufficient range to hold targets that adversaries value at risk. Trades concerning specific capabilities e.g. payload and range, are being evaluated.

E. The new bomber will be nuclear capable, but nuclear certification timeline decisions have yet to be made.

F. The next ALCM requires a safe, secure and effective warhead. The Air Force is conducting an analysis of alternatives including a specific working group with USSTRATCOM representatives to examine warhead alternatives, including the W84. The alternatives will require varying investments; however, a detailed concept

and cost study has not been started. There are not enough W84 assets to field a cruise missile replacement at current ALCM levels.

Dr. FLEMING. General Kehler, please explain in detail why the B61 LEP is important to the bomber leg of our strategic deterrent.

General KEHLER. The B61 is an important part of DOD's long range planning to ensure the bomber leg of the strategic deterrent remains credible. The B61 LEP will provide a refurbished weapon capable of being employed on the B-2 and integrated with a future bomber. Additionally, the B61 nuclear package will be evaluated for incorporation into a future stand-off missile.

Dr. FLEMING. One of the binding conditions (condition 9(B)) of the Senate's Resolution of Ratification for the New START Treaty says: "If appropriations are enacted that fail to meet the resource requirements set forth in the President's 10-year [Section 1251] plan . . . the President shall submit to Congress, within 60 days of such enactment . . . a report detailing—(1) how the President proposes to remedy the resource shortfall; (2) if additional resources are required, the proposed level of funding required and an identification of the stockpile work, campaign, facility, site, asset, program, operation, activity, construction, or project for which additional funds are required; (3) the impact of the resource shortfall on the safety, reliability, and performance of United States nuclear forces; and (4) whether and why, in the changed circumstances brought about by the resource shortfall, it remains in the national interest of the United States to remain a Party to the New START Treaty."

a. Administrator D'Agostino, General Kehler, and Dr. Miller: Which of you is responsible for this report? Has the President delegated his responsibility on this requirement from the Resolution of Ratification?

b. The current continuing resolution funds NNSA's modernization plans well below the FY12 levels laid out in the 1251 plan—essentially at a level 1.5% below FY11. Is the administration preparing a report for submission to Congress per this requirement? Please submit such a report, in writing, prior to the expiration of the current CR.

c. If the funding levels for Weapons Activities in the Energy and Water appropriations bills in the House and Senate are enacted, or if sequestration or a budget deal results in funding for Weapons Activities less than that laid out in the Section 1251 plan, will the administration submit a report per this binding condition?

General KEHLER. A number of agencies are responsible for inputs to, and review of the report, including USSTRATCOM. The President has not yet delegated his responsibility on this requirement from the Resolution of Ratification, but USSTRATCOM stands ready to assist as needed.

Dr. FLEMING. Ms. Tauscher, please explain in detail why the B61 LEP is important to our allies.

Secretary TAUSCHER. The B61 life extension program (LEP) will ensure its functionality with the dual capable aircraft as well as ensure continued confidence in the warhead's safety, security, and effectiveness. The B61 LEP will ensure that the United States maintains the capability to forward deploy U.S. nonstrategic nuclear weapons to Europe in support of its Alliance commitments and that our arsenal is safe, secure, and effective. The decision to conduct a B61 LEP does not presume the results of future decisions within NATO about the requirements of nuclear deterrence and nuclear sharing, but keeps all options open.

Likewise, the B61 plays a significant role in assuring our allies in Asia. As you know, as a result of our Nuclear Posture Review, the United States will retire the TLAM-N. That decision was made after close consultation with our allies, during which we assured them that there would be no diminution of our extended deterrence commitment and capabilities. The B61 is an important component of those capabilities.

Dr. FLEMING. Mr. D'Agostino, please explain in detail why the B61 LEP is needed, both for the extended deterrent in Europe and to the bomber leg of the U.S. TRIAD.

Mr. D'AGOSTINO. The B61 Life Extension Program (LEP) supports the sustainment of the U.S. strategic and non-strategic nuclear capability. Consistent with U.S. commitments to the North Atlantic Treaty Organization (NATO) and the findings of the 2010 Nuclear Posture Review, the B61 LEP will ensure the U.S. retains its capability to forward-deploy non-strategic nuclear weapons in support of its Alliance commitments. Furthermore, it is a key component of the air-delivered strategic deterrent and ensures continued contribution of the bomber leg of the Triad to nuclear deterrence.

The B61 bomb is one of the oldest warheads in the stockpile and has components dating from the 1960's, such as vacuum tube radars. The B61 LEP provides the opportunity to include modern safety and security technologies, sustain system effectiveness, optimize NNSA production capacity, and reduce costs over the long-term.

Dr. FLEMING. One of the binding conditions (condition 9(B)) of the Senate's Resolution of Ratification for the New START Treaty says: "If appropriations are enacted that fail to meet the resource requirements set forth in the President's 10-year [Section 1251] plan . . . the President shall submit to Congress, within 60 days of such enactment . . . a report detailing—(1) how the President proposes to remedy the resource shortfall; (2) if additional resources are required, the proposed level of funding required and an identification of the stockpile work, campaign, facility, site, asset, program, operation, activity, construction, or project for which additional funds are required; (3) the impact of the resource shortfall on the safety, reliability, and performance of United States nuclear forces; and (4) whether and why, in the changed circumstances brought about by the resource shortfall, it remains in the national interest of the United States to remain a Party to the New START Treaty."

a. Administrator D'Agostino, General Kehler, and Dr. Miller: Which of you is responsible for this report? Has the President delegated his responsibility on this requirement from the Resolution of Ratification?

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Mr. D'AGOSTINO. The main responsibility for this report lies with the Department of Defense. Should there be a resource shortfall, NNSA would work closely with the DOD in drafting the President's report specified in Condition 9(B) of the Senate's Resolution of Advice and Consent to Ratification for the New START Treaty.

While we recognize that fiscal austerity will constrain spending on national security programs in the years ahead, our strategic and extended deterrence will continue to be the top priority. The President committed to modernizing our nuclear weapons and infrastructure after completion of the 2010 Nuclear Posture Review—including a commitment to pursue these programs and capabilities for as long as he is President. Even in this difficult budget climate, the President's budget for NNSA continues to consistently reflect those commitments.

The Department of Defense contributed significantly to the preparation of NNSA's budget requests for FY2011 and FY2012, and is prepared to continue support at least through FY2016. These contributions are reflective of the close linkage between NNSA's nuclear weapons programs and the specific needs of its partner, the Department of Defense. Without adequate funding for NNSA, however, the nuclear weapons life extension programs, nuclear infrastructure modernization, and the retention of the people on which we depend to maintain a safe, secure, and effective nuclear arsenal, may be at risk and will continue to be analyzed in consultation with the Department of Defense.

QUESTIONS SUBMITTED BY MR. SCOTT

Mr. SCOTT. How is deterring China different from deterring Russia?

a. How is providing extended deterrence in Europe different than doing so in East Asia?

b. During a recent Strategic Forces Subcommittee hearing on the nuclear weapons programs of Russia and the People's Republic of China, Dr. Mark Schneider stated: "We know a lot less about China overall than we know about the Russians in nuclear capability, if for no other reason that the Russians talk about it all the time, where the Chinese are fairly secretive. I think you can find deliberate leaks by the PLA in Hong Kong Press. I think they are using that as a mechanism of debating some issues that they can't openly debate in China. But I suspect we are going to see a very large increase in Chinese capability, including extensive MIRVing."

How do we hedge the uncertainty in our understanding of China's nuclear weapons program? How will this be reflected in the Administration's mini-NPR on nuclear weapons targeting? Why do you think China has a large underground tunnel complex for its second artillery?

Dr. MILLER. Fundamentally, deterrence requires that, in the calculations of any potential adversary, the perceived gains of attacking the United States or its allies and partners would be far outweighed by the unacceptable costs of the response. But in seeking to deter potential adversaries, there is no "one size fits all" approach. The requirements of deterrence vary by circumstance, including the capabilities of

the adversary, the nature of the issue in dispute, and the ability and willingness of the adversary to escalate—and to exercise restraint. Uncertainty is an enduring feature of the deterrence equation, though the United States makes a priority of trying to reduce such uncertainty with detailed assessments of the intentions and capabilities of potential adversaries. Uncertainty about the potential future nuclear weapons capabilities of other states is also an enduring theme of U.S. deterrence policy. Every President in the nuclear era has sought to have some capacity to respond to a significant erosion of the nuclear security environment. The United States hedges against such uncertainty by ensuring that it has the technical means to cope with geopolitical surprise, with a mix of short-term responses (such as the potential to up-load existing weapons onto existing delivery systems) and long-term responses (the production and deployment of new capabilities). The requirements of this hedge are one of the many elements in review in the NPR Implementation Study.

China's large underground tunnel complex fits well with China's overall military strategy. It enables China to conceal capabilities, in a manner consistent with its general lack of transparency. And it helps to ensure that its leadership and any hidden capabilities survive attack.

Providing extended deterrence to Allies in NATO and in East Asia is similar in some ways and different in others. It is similar in a) an appropriate mix of nuclear and non-nuclear capabilities; b) a combination of capability and credibility to effectively deter potential adversaries and assure Allies; c) appropriate consultations between the United States and Allies; and d) adjustments over time to account for changes in the security environment.

Providing extended deterrence to Allies in NATO and in East Asia is different in several respects, including: a) different mutual expectations about the specific modalities of nuclear deployments, as reflected in differing historical practices; and b) different assessments of the specific requirements for deterring potential adversaries.

Mr. SCOTT. Some budget cutting proposals that are circulating have suggested significantly reducing the size of our intercontinental ballistic missile (ICBM) force to save money. For instance, eliminating one-third of the ICBM force by cutting one of the three wings.

a. Does the New START Treaty require us to close down an entire ICBM wing to meet its deployed strategic launcher limit? What about eliminating a squadron?

i. Would such a cut amount to a unilateral reduction in delivery vehicles?

ii. Is such a reduction being considered in the 90-day NPR Implementation Study?

b. Based on the most recent public data released as part of a New START Treaty data exchange, if we were to eliminate 150 ICBMs this would be more than enough to put us below the 700 deployed strategic launchers limit. Would we then retain all of our forces in the other legs of the triad, to remain at or near the New START limit?

c. Please describe when de-MIRVing of our ICBMs will begin to occur under the 2010 NPR. Please describe when DOD intends to have that process and completed, how much it will cost, and how the skill set required to upload in the event that is necessary will be maintained.

Dr. MILLER. The New START Treaty does not require the United States to reduce any specific element of its strategic forces. To date, no final decisions have been made with respect to future strategic nuclear force structure; such decisions will be informed by the Administration's ongoing NPR implementation study.

The elimination of 150 deployed ICBMs, if that were to be decided (and to respond to your specific conjecture) would allow the United States to retain all or virtually all of its current deployed strategic forces in the other legs of the Triad under the limits of the New START Treaty. Force structure decisions will be consistent with the goals of the Nuclear Posture Review (NPR), including maintaining strategic stability, providing assurance to our Allies and partners of the credibility of the U.S. nuclear umbrella and other security commitments, and maintaining a safe, secure, and effective nuclear deterrent. I expect a final decision regarding the specific force mix for New START Treaty implementation to be made following the conclusion of the NPR implementation study in the near term.

The "de-MIRVing" (reduction of Multiple Independent Reentry Vehicle capability) of our ICBM forces has already begun. In order to maximize safety and security, we have allowed the Air Force to begin de-MIRVing ICBMs in conjunction with its previously established maintenance plans. This minimizes disruption to our operational forces and is the most cost-effective method for carrying out the NPR guidance to de-MIRV the ICBM force.

Mr. SCOTT. How is deterring China different from deterring Russia?

a. How is providing extended deterrence in Europe different than doing so in East Asia?

b. During a recent Strategic Forces Subcommittee hearing on the nuclear weapons programs of Russia and the People's Republic of China, Dr. Mark Schneider stated: "We know a lot less about China overall than we know about the Russians in nuclear capability, if for no other reason that the Russians talk about it all the time, where the Chinese are fairly secretive. I think you can find deliberate leaks by the PLA in Hong Kong Press. I think they are using that as a mechanism of debating some issues that they can't openly debate in China. But I suspect we are going to see a very large increase in Chinese capability, including extensive MIRVing."

How do we hedge the uncertainty in our understanding of China's nuclear weapons program? How will this be reflected in the Administration's mini-NPR on nuclear weapons targeting? Why do you think China has a large underground tunnel complex for its second artillery?

General KEHLER. The primary difference in how extended deterrence is provided today is that in Europe we have forward deployed non-strategic nuclear capabilities and robust nuclear burden sharing commitments with our NATO allies. We do not have forward deployed non-strategic nuclear capabilities in East Asia.

In general we hedge against uncertainty, both geopolitical and technical, by retention of non-deployed warheads in the stockpile in order to provide the ability to increase warhead loading on our existing nuclear systems, and through our infrastructure's ability to diagnose and repair weapons that develop technical problems. Today, this hedge relies more heavily on the stockpile, but as our infrastructure is modernized it will assume a larger share of the required capability. The ongoing follow-on analysis to the NPR is examining our hedge requirements.

Since the early 1950s, the PLA has employed underground tunnels to protect and conceal its vital assets. These likely include both nuclear and conventional missile forces.

Mr. SCOTT. Some budget cutting proposals that are circulating have suggested significantly reducing the size of our intercontinental ballistic missile (ICBM) force to save money. For instance, eliminating one-third of the ICBM force by cutting one of the three wings.

a. Does the New START Treaty require us to close down an entire ICBM wing to meet its deployed strategic launcher limit? What about eliminating a squadron?

i. Would such a cut amount to a unilateral reduction in delivery vehicles?

ii. If we were to eliminate a third of our ICBM force, how would you like to see our future SSBN force structured (number of boats, number of tubes, etc.)? Are the size and makeup of the ICBM and SSBN forces linked? How?

iii. Would you support such a cut? Have you done any analysis that would support a cut of 150 ICBMs?

b. Based on the most recent public data released as part of a New START Treaty data exchange, if we were to eliminate 150 ICBMs this would be more than enough to put us below the 700 deployed strategic launchers limit. Would we then retain all of our forces in the other legs of the triad, to remain at or near the New START limit?

c. Please describe when de-MIRVing of our ICBMs will begin to occur under the 2010 NPR. Please describe when DOD intends to have that process completed, how much it will cost, and how the skill set required to upload in the event that is necessary will be maintained.

General KEHLER. A. No, New START provides considerable flexibility to manage the deployed force and meet strategic deterrent requirements in a cost effective and safe manner over the duration of the treaty.

i. The treaty provides the flexibility to manage the deployed force within central limits, not to exceed 700 deployed strategic delivery vehicles (SDVs). My principle concern is ensuring the strategy objectives are met and deterrence and stability are maintained while ensuring we are as cost efficient as possible.

ii. Any decision to reduce Minuteman and subsequently change SSBN and bomber force structures must be based on strategy. The size and makeup of the SSBN and ICBM forces are complementary. Sufficient ballistic missile capabilities must be retained to address strategy requirements. Therefore, potential adjustments in Minuteman would result in a reassessment of the entire force structure.

iii. Any adjustment to Minuteman must be strategy based. USSTRATCOM is participating in the ongoing National Security Staff (NSS)-led interagency activity and is providing analysis and military advice to OSD and the Joint Staff. Any detailed discussion of that analysis and potential implications to our current force structure is premature.

B. Not necessarily. I am concerned about meeting policy and strategy objectives and maintaining deterrence and stability. New START provides the U.S. consider-

able flexibility in determining the composition and structure of its strategic offensive arms. New START provides the option of retaining force structure, if required, and deployed strategic launchers should be viewed as a “ceiling” not a “floor,” so we can meet our operational needs with flexibility.

C. We are working with the Air Force to develop plans to begin de-MIRVing Minuteman in FY12. There are many factors that impact completion date including integration with other maintenance activities and weather. In the near-term, skills to accomplish re-MIRVing is not an issue. I have asked the Air Force to develop long-term re-MIRVing plans to include cost and skill set retention.

Mr. SCOTT. Under Secretary Tauscher, we hear the Russians are placing certain conditions on starting any new arms control talks—in other words, Russia is saying these conditions must be met before any negotiations can begin on another arms control agreement. For instance, we have heard that Russia is demanding that U.S. nuclear weapons be removed from Europe, that we destroy the infrastructure in Europe that supports those weapons so that they cannot be easily redeployed, and that NATO allies cease training for the nuclear mission. Is this correct? What other conditions is Russia saying must be met by the U.S. before negotiations can begin? What conditions is the United States saying must be met by Russia before negotiations can begin?

Secretary TAUSCHER. Some Russian officials have suggested that several issues should be considered in future discussions, but whether those suggestions amount to preconditions remains unclear. In regards to tactical nuclear weapons, Russian Foreign Minister Lavrov on March 1, 2011, stated at the UN Conference on Disarmament that the “first step” towards reductions in these weapons should be the “withdrawal of tactical nuclear weapons to the territory of the State to which they belong as well as removal of the infrastructure for their deployment abroad.”

The United States rejects preconditions for discussions with Russia to reduce nuclear weapons. The President has certified to the Senate and the United States has made clear to the Russians that we seek to initiate negotiations with the Russian Federation on an agreement to address the disparity between the nonstrategic nuclear weapons stockpiles of the Russian Federation and the United States and to secure and reduce these weapons in a verifiable manner and that such negotiations shall not include defensive missile systems. Indeed, the United States is committed to continuing a step-by-step process, as outlined by President Obama in Prague in 2009, to reduce the overall number of nuclear weapons, including the pursuit of a future agreement with Russia for broad reductions in all categories of nuclear weapons: strategic, nonstrategic, deployed and nondeployed.

As a first step, we want to have a broad policy discussion with Russia on stability, security, and confidence-building, which will help lay the groundwork for eventual further nuclear arms reductions.

