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Hearing of the Energy and Water Development Subcommittee of the House Appropriations Committee Subject: "The Budget for the National Nuclear Security Administration (NNSA), Nuclear Nonproliferation & Naval Reactors" Chaired by: Representative Rodney Frelinghuysen (R-NJ) Witnesses: Thomas D'Agostino, Administrator, NNSA; Anne Harrington, Deputy Administrator, Office of Defense Nuclear Nonproliferation, NNSA; Admiral Kirkland Donald, Director, Naval Nuclear Propulsion Program and Deputy Administrator, Office of Naval Reactors, NNSA Location: 2362-B Rayburn House Office Building, Washington, D.C. Time: 10:00 a.m. EST Date: Tuesday, March 6, 2012

REPRESENTATIVE RODNEY FRELINGHUYSEN (R-NJ): Good morning. I'd like to call the meeting to order.

Administrator D'Agostino, last week we heard from you and your nuclear weapons representative. Today we will receive testimony from the NNSA's Naval Reactors and Nonproliferation programs. I'd like to take this opportunity to welcome back all three of you to the committee. The programs and professionals you each represent are critically important to the national security of our country, and we thank you all for your work.

I'd also like to take a moment to recognize Admiral Donald for his extraordinary service to our nation. The post of naval -- the post of naval reactors is an eight-year assignment, unique in the Navy for its length and truly formidable responsibility. This is the final year of your eight-year tour and, therefore, the final time you'll testify before this subcommittee as the head of naval reactors.

I'd also like to personally thank you for your 37 years of active duty service to this nation and for these eight past -- past eight years working tirelessly to assure the vitality of the Naval Reactors Program. I am sure that you have met the high standards that Admiral Rickover demanded, because I'm sure that you were one of those that he tapped after a very vigorous examination.

MR. : (Inaudible.) (Laughter.)

REP. FRELINGHUYSEN: If he objects to what I had to say, I'm sure we would hear from him. (Laughter.) But I'm sure he's not. So all of us are very proud of your -- of your work.

Mr. Administrator, the breadth of programs that NNSA oversees is truly impressive. You maintain the nuclear weapons that provide a strategic umbrella for us and our allies. You run the programs around the world that keep fissile material out of the hands of those who would do us harm. You work with the Navy to ensure our submarines excel at their role as the silent leg of our triad, and you provide the science and analysis to protect us against strategic surprises.

Last year this committee showed that our nation's strategic security could be maintained and even strengthened within constrained resources. And as I said last week, the task before you is to demonstrate to us, to the American people, that these funding levels, while constrained, will ensure our country's strategic security.

It's obvious to me, as I look through the budget request, that many hard decisions had to be made this year to work within constrained resources. The Naval Reactors' request is only 8.6 million (dollars) above fiscal year 2012, a significant change from the steep escalation we were facing last year.

Because of that escalation, Admiral Donald, this subcommittee asked you to take a hard look at your requirements. And it's clear that you've done so, bringing back a very reasonable request for funding this year. I do thank you for your diligence, but understand there are still some difficulties in developing a path forward that will meet all the Navy's requirements in the outyears.

We will be interested in hearing how the budget constraints may be affecting the needs of the operating fleet. That's important to us. For instance, the administration has announced that it will push back the Ohio-Class submarines replacement program by two years. This subcommittee has worked hard over the years, in a bipartisan fashion, to ensure adequate funding to support the development of the new reactor for this program.

Submarines are an indispensable part of our strategic triad, and we're looking forward to hearing more on the changes to the Ohio replacement program, and what other decisions could be -- could be around the corner that may impact our strategic posture.

With respect to NNSA's nonproliferation activities, the funding requested for core nonproliferation activities is actually decreasing after taking into account the request to start a uranium enrichment development program and the cost growth in operations associated with the MOX program. For instance, the budget request would cut funding for megaports -- part of the second line of defense program -- by 65 percent. That's an incredible cut to a program which just last year the administration was debating -- was defending as a critical part of our nation's effort to fight illicit trafficking of nuclear and radiological materials across international borders. I expect you'll be able to offer a good explanation of why you're taking a different approach this year.

Given the budgetary challenges facing this nation, we must at -- we must at all times take a look at our programs in whole new ways, seeking new efficiencies, innovation and inspiration. Mr. Administrator, I think the labs -- laboratories under your jurisdiction can be important source of new ideas, but tapping into that resource will require real improvements to the effectiveness of NNSA's federal oversight activities. Please keep this committee informed as you decide on what, if any, changes need -- are needed to improve this situation.

Mr. Administrator, please ensure that the hearing record -- questions for the record, and any supporting information requested by the subcommittee, are delivered in final form to us no later than four weeks from the time you receive them.

Members who have additional questions for the record will have until the close of business tomorrow to provide them to the subcommittee office.

So with that, I turn to Mr. Olver for any comments he may have.

REPRESENTATIVE JOHN OLVER (D-MA): Thank you, Mr. Chairman.

Mr. Administrator, it's good to see you again, sir.

And Ms. Harrington and Admiral Donald, welcome.

Thank you all for being here.

We two -- at least now, maybe more -- are interested in hearing what you -- what your testimony, and being able to ask some questions of you on these important national security issues.

Admiral Donald, I have just heard that this is probably your last appearance before this subcommittee, and I think we all in the Congress wish you the best in the next chapter in your life, and thank you for your long service to our country.

I am serving here in a deep utility position on these issues, so I am going to simply read a short statement that was prepared by and for the real ranking member, the real spokesman for this subcommittee on our side of the aisle, who could not be here today. And so the word "I" -- the utterance "I" in what I have to say, really is coming directly -- is coming from Mr. Visclosky, and we will have some questions somewhere along the way.

So the threat of nuclear terrorism is one of the greatest national security threats we face today. In its report, the bipartisan 9/11 Commission found that, and I quote, "The greatest danger of another catastrophic attack in the United States will materialize if the world's most dangerous terrorists acquire the world's most dangerous weapons," end quote. The secretary of Defense, Robert Gates, who served under both Presidents Bush and Obama, stated -- and, again, I quote, "Every senior leader, when you're asked what keeps you awake at night, it's the thought of a terrorist ending up with a weapon of mass destruction, especially nuclear."

In April, 2009, the president committed to an aggressive nonproliferation agenda to secure all vulnerable material that -- nuclear materials world wide in four years, an objective that I wholly support. The 2013 budget request professes to support this commitment by proposing two-and-a-half billion (dollars) for the Nonproliferation account, an increase of 163 million (dollars) over the 2012 enacted level. However, this increase is not to the core program; rather, it is due to

the inclusion of 150 million (dollars) for the U.S. Enrichment Corporation and an increase to the Fissile Materials Disposition program, neither of which contributes to securing vulnerable materials.

Mr. Administrator, your appearance before the committee -- subcommittee last week applauded the hard choices NNSA made in its budget request regarding nuclear weapons. However, I cannot do the same today. I have yet to be provided with any compelling reason for the -- including the funding for USEC within Nonproliferation. Further, I must point out that the increase in the account for USEC roughly corresponds to the drastic reduction in the Second Line of Defense program. I cannot fathom an explanation that will be satisfactory for these changes, given the importance of this mission, but I'm here to listen to your justification.

Admiral, the 2013 funding request for Naval Reactors funding is flat compared to the 2012 enacted level. This represents a significant change of 144 million (dollars) below the projected needs outlined in your budget last fiscal year. I understand this reduction is enabled by the Navy's decision to defer the Ohio Replacement by two years. I look forward to your insight regarding the modified program schedule, as well as more details on how this initiative has changed since last year.

Thank you, Mr. Chairman. I yield back.

REP. FRELINGHUYSEN: You did a great job for Mr. Visclosky.

REP. OLVER: (Chuckles.)

REP. FRELINGHUYSEN: And let me just say to those of you who, sort of, may be thinking why there are so few members in the room. Chairman Rogers made it quite clear to all committee members that we were going to get our appropriations bills out on time. Sometimes people view -- but perhaps with good reason -- is Congress as something -- being somewhat dysfunctional. We wanted to make sure that the appropriations process moved ahead as it did pretty well last year. (Inaudible) -- (sort of modeling it?). So there are a lot of committee meetings going on, and members have other commitments, so there will be people drifting in and out of here.

But thank you for pitching in for the ranking. You did an excellent job.

Mr. Administrator, the floor is yours. Thank you for being here, and also Secretary Harrington and Admiral Donald.

THOMAS D'AGOSTINO: Thank you, Mr. Chairman and Mr. Olver. Good morning again, and thank you for having me back to discuss the president's fiscal year 2013 budget request. As I said last week, your ongoing support for the men and women of the NNSA and the work they do, and your bipartisan leadership and some of the most challenging national security work, has kept the American people safe, helped protect our allies, and enhanced global security.

As you know, earlier this month President Obama released his 2013 budget. I again want to assure you that NNSA is being thoughtful, pragmatic and efficient in how we achieve the president's nuclear security objectives and shape the future of nuclear security. We've continuously improved the way we operate and we're committed to doing our part in this constrained budget environment.

2013 is a critical time for us, since we continue to work on some of our most important missions, which is supporting the president's commitment to secure the most vulnerable nuclear material across the globe. Our accomplishments in securing plutonium and highly-enriched uranium around the world have made it significantly more difficult to acquire and traffic materials required to make improvised nuclear devices, and I am proud to say that we are on track to meet our goals to remove or dispose of 4,353 kilograms of highly-enriched uranium and plutonium in foreign countries, and equip approximately 229 buildings containing weapons-usable material with state-of-the-art security upgrades by the president's four-year deadline. The Defense Nuclear Nonproliferation budget request provides 2.46 billion (dollars) to continue these and other critical nonproliferation and nuclear security efforts.

Our continued focus on innovative and ambitious nonproliferation security efforts is vital. The threat has not gone, and the consequences of nuclear terrorism and state proliferation would be devastating. Detonation of a nuclear device anywhere in the world would lead to a significant loss of life and overwhelming economic, political and physiologic -- psychological consequences. We must remain committed to reducing the risk of nuclear terrorism and state-based proliferation.

The president's leadership on nuclear security issues and the funding he has requested for 2013 has sent a clear message around the globe. Just two years ago, here in Washington, D.C., President Obama, along with leaders from 47 nations, began work on one of our most ambitious global security efforts of our time. They committed to the shared nuclear

security responsibility and mission to keep materials out of the hands of terrorists. Later this month, the president and those world leaders will again reconvene in Seoul, South Korea to review progress two years after the first summit, and to recommit themselves to this shared mission and to prevent nuclear proliferation. Essentially, it's kind of to evaluate what's happened over the past two years and the challenges that they have laid out before us.

This funding-level request represents the American leadership, our piece of that work -- working with other countries around the world, and it sends a signal, I believe, that it is a priority for this country, and that our work is vital. But we know there's no silver-bullet solution to this problem, and that's why we're looking forward to a layered -- multi-layered strategy to strengthen security of nuclear material around the world by removing or eliminating it when we can; consolidating it and securing it, if elimination is not an option; reducing the civilian use of highly-enriched uranium, particularly for research and medical isotope productions, where low-enrichment options exist or can be developed; and maintaining our commitment to detecting the smuggling material around the world, and movement of material around the world.

We'll continue to do research and development to advance our technologies to detect this material, as well as being able to track nuclear detonations should they occur. We'll provide technical support and leadership to our interagency colleagues during the negotiation and implementation of arms control treaties, as we did with New START; and we will expand our ongoing efforts to strengthen the capabilities of our foreign partners to implement international nonproliferation and nuclear security norms, such as, you know, export control verification, and all the training that's required in this particular area; and continue work with the International Atomic Energy Agency.

The president's budget request also keeps focus on our commitments to eliminate U.S. excess weapons material, and supports the Mixed Oxide Fuel Fabrication Facility and Waste Solidification Building at the Savannah River site in South Carolina. The resources committed to the MOX and related activities this year will lead to the permanent elimination of enough plutonium for at least 8,500 nuclear weapons, which will be matched by similar commitments by the Russian Federation.

As I said last week, we're not resting on old ideas to solve tomorrow's problems. We're shaping the future of nuclear security, and we're doing it in a fiscally responsible way. We've eliminated the line item for the Pit Disassembly and Conversion Facility for the MOX program, opting instead for a preferred alternative approach to provide feedstock for this facility by utilizing existing facilities at the Savannah River site and the Los Alamos National Laboratory. This approach saves money, but it also represents ways in which we're finding efficiencies with the Department of Energy's Office of Environmental Management.

We're also here this morning to discuss the president's budget request for NNSA's Naval Reactors Program, as Admiral Donald will detail for you in a minute. NNSA has helped American sailors reach destinations around the world safely and reliably for decades, and the \$1.1 billion request for Naval Reactors will support the effort for Ohio-Class Submarine Replacement, and looking at modernizing -- starting the modernization effort on key facilities and infrastructure. I'll leave it to Admiral Donald to explain the specifics on this area for the U.S. Navy.

Thank you again. I'm proud of what we've done.

And if I could request, Mr. Chairman, that Admiral Donald provide a few words as well in an opening statement?

REP. FRELINGHUYSEN: Absolutely.

I just want to find out whether, Madam Secretary, you're going to put your oar in the water here too. I want to make sure that we --

ANNE HARRINGTON: I will defer to the --

REP. FRELINGHUYSEN: OK.

Admiral Donald, the floor is yours. Thank you.

ADMIRAL KIRKLAND DONALD: Chairman Frelinghuysen, Mr. Olver, thank you very much for the opportunity to testify before you today on the Naval Reactors fiscal year 2013 budget request. I'd also like to thank you for your support in allowing your committee members to recently visit our facilities in New York to see some of the work done firsthand by our laboratories and training facilities.

My budget request is for \$1.1 billion, and the funding provides the resources required for the day-to-day work associated with the safe and reliable operation of 104 nuclear reactor plants, plants which provide power to more than 40 percent of

the U.S. Navy's major combatants: 11 aircraft carriers; 72 nuclear powered submarines; including the most survivable leg of our nuclear deterrent, 14 ballistic missile submarines.

The fiscal year 2013 budget also reports the president's national security strategy with continued development of the Ohio-Class Replacement Submarine and stewardship of our Naval nuclear infrastructure. As you know, the Department of Defense has decided to delay the Ohio Replacement submarine by two years. Our FY'13 request reflects that shift, and supports the Navy's revised shipbuilding schedule while ensuring the continuity of our sea-based strategic deterrent.

The budget further provides funding for the land-based prototype refueling overhaul, a critical aspect of the development of the life-of-the-ship core for the Ohio-Class Replacement. Core manufacturing, development and demonstration for a life-of-the-ship core will be performed as a part of this project. By constructing the replacement core for the prototype with technologies planned for the Ohio-Class Replacement, we will mitigate technical costs (that ?) schedule risk to that vitally important ship construction program.

And finally, resources are requested for the recapitalization of the aging nuclear spent fuel handling infrastructure at the Naval Reactors facility in Idaho. As you may recall from previous testimony, we remain in compliance with the 1995 Idaho settlement agreement for movement of fuel from wet storage to dry storage, and ultimately for disposal. While working to meet this commitment to the people of Idaho, that aging infrastructure must also support the demands of a very challenging refueling schedule for the nuclear powered fleet, including the refueling of the Nimitz-Class aircraft carriers.

Mr. Chairman, the Naval Reactors budget request for FY '13 is consistent with the controls set out in the Budget Control Act of FY '11. However, funding in the outyears between FY '14 to '17 is less than the Naval Reactors validated requirements. Within these constraints, my first priority must be to safely sustain Naval Reactors' fleet support and regulatory oversight mission within our baseline funding, followed by the continued progress on three major projects, Ohio Replacement, Land-based Prototype Refueling Overhaul, and Recapitalization of the program's Spent Nuclear Fuel Handling Facility. Within the Budget Control Act funding constraints, I cannot deliver these very important projects and maintain the proven standards of oversight and technical support that will continue to ensure nuclear fleet safety and effectiveness.

Given the vital importance of our nuclear ships, the growing challenges of both a high operational tempo and an aging fleet, and the grave consequences of even the perception of eroding day-to-day standards and support, I must apply limited available resources to sustaining today's nuclear fleet, which prevents me from progressing on new projects absent some additional funding.

As a result, the FY '13 budget will maintain the Land-based Prototype overhaul to be executed in 2018. It will not support the recapitalization of the Spent Fuel Handling infrastructure in time to support the existing plan of record for the refueling of CVN-73, U.S.S. George Washington. We are currently reviewing options as workarounds, but all options will include some additional costs and risks. I will keep the committee apprised of that analysis. In addition, I am forced to further defer maintenance and facilities work, plus on decontamination and decommissionings across my laboratories. I've made these decisions with the full understanding of the impacts, and I judge them to be prudent in the current fiscal environment.

I sit here today before you recognizing that this subcommittee must write its bill under some daunting fiscal constraints, more so than in decades. Prior to initiating the new projects in 2010, I embarked on a large-scale strategic alignment of funding, as well as significant initiatives that have streamlined our support infrastructure and gained cost savings and efficiencies, such as combining the maintenance and operations contract for my two laboratories. As you consider the many competing priorities before your subcommittee, I respectfully ask that you consider the contributions our program makes every day to our national security, and be required to make well into the future to meet our strategic objectives.

Before I close, I would like to note an important milestone for Naval Reactors in the nuclear-powered Navy. This year marks the final deployment of the world's first nuclear-powered aircraft carrier, U.S.S. Enterprise. Commissioned in 1961, Enterprise will deploy for the very last time, starting this month. No other ship better illustrates the success and evolution of the nuclear-powered Navy like Enterprise. Over her service life, she's been a part of history, from the Cuban Missile Crisis to Vietnam, from Operation Joint Endeavor in Bosnia and Southern Watch in the Persian Gulf, to Operation Enduring Freedom in 2001. More recently, Enterprise deployed to the Persian Gulf and Mediterranean, supporting operations against Somali pirates and enforcing the no-fly zone over Libya. After her final deployment, Enterprise will begin her inactivation in November of 2012.

As you commented earlier, this is likely my last time to testify before your subcommittee since this year. I will complete my tour as the director of Naval Reactors. It has been my privilege to work with you, and I thank you and your members

of your committee for all that you've done for Naval Reactors. Any success that we've enjoyed has been, in part, a result of your support and your stewardship of what we've done. So I thank you personally for all that you've done for the program.

A written statement has been submitted, along with Administrator D'Agostino, for the record, and I look forward to responding to any questions that you may have.

REP. FRELINGHUYSEN: OK. Thank you very much, Admiral.

Madam Secretary, any comment?

MS. HARRINGTON: No. Thank you.

REP. FRELINGHUYSEN: We not only salute you, obviously we salute the Enterprise and all those sailors that manned her for, you know, decades -- a remarkable contribution to our national security. And I -- both Mr. Visclosky and I serve on another committee, and we -- there are eight reactors (on ?) --

ADM. DONALD: That's correct.

REP. FRELINGHUYSEN: And I understand -- although this is not in my questions script -- (laughter) -- that the -- that this sort of decommissioning is going to take five years. Is it a five-year plan?

ADM. DONALD: Yes, sir --

REP. FRELINGHUYSEN: I happen to be --

ADM. DONALD: The defueling part of it, yes.

REP. FRELINGHUYSEN: Yeah, refueling (sic). But there's -- there's a lot of work to be done.

Somebody asked me -- and actually Mr. Dicks, who unfortunately has announced his retirement, did pose this question in our Defense Appropriations Committee, because we had the CNO there, as well as the substitute for the Marine commandant, who's name I've forgotten: Why does it take five years, and how complex is the -- is the -- you know, shall we say, disassembling of that remarkable ship?

ADM. DONALD: Yes, sir, it --

REP. FRELINGHUYSEN: Five years? Is this -- is this normal?

ADM. DONALD: Well, it's hard to clarify any -- characterize it as being normal, since it's the first one that we've -- we've ever done.

REP. FRELINGHUYSEN: But is that -- is that what you would anticipate?

ADM. DONALD: It is. It is. If you look at what needs to be done for the defueling portion of it, and that goes from FY '12 until FY '17: the preparations to get the plant ready for the defueling operation on eight reactors, and then the actual removal of the fuel itself, and preparation for tow to the West Coast. We have a detailed schedule, a resource-loaded plan. That planning is well under way now, and five years is the right time to be able to do all of that work.

REP. FRELINGHUYSEN: It's quite a lot of money up front, as I remember.

ADM. DONALD: Yes, sir, it --

REP. FRELINGHUYSEN: Why is that?

ADM. DONALD: Over the course of the --

REP. FRELINGHUYSEN: Because normally, if you're going to do it over five years, you sort of spread it over five years.

ADM. DONALD: Normally, when we contract for something like that, a contract would refuel -- (inaudible) -- to defueling. It's a -- it's a single contract for the five years, and we pay it, you know, all the money up front, as a part of the defueling program. And if you look at over the total of the program for that five years, it's about 1.3 billion (dollars), all total, to do that work.

REP. FRELINGHUYSEN: Yeah, the comment was made -- and I'm getting very tired of the expression, "constrained resources." We've got to come up with something a little better.

ADM. DONALD: (Chuckles.) Yes, sir.

REP. FRELINGHUYSEN: "Fiscal climate," or something.

ADM. DONALD: Certainly.

REP. FRELINGHUYSEN: But is it -- since you've never done this before, is it -- is it out of the ordinary to put that much money up front, the whole load, as opposed to spreading it over five years? And given the environment you're in --

ADM. DONALD: Sure.

REP. FRELINGHUYSEN: -- why wouldn't it have been somewhat -- you know, those resources be spread over five years, instead of up front, to begin with?

MR. D'AGOSTINO (?): I would say two things. It is in -- it's in keeping with what we have traditionally done for such large-scale programs as refueling overhauls of the aircraft carriers, which are large cost items; and that you issue a contract, and you pay for that contract at the time of issuance, and then you execute the work.

The other thing that I would say is that we want to make sure that, once we start into this, that we can continue to progress with dispatch. You don't want to necessarily have to stop in the middle of the evolution, when you have fuel being removed from this aircraft carrier. Once you start, you need to run it to completion. So whether that funding is up front or done in some other fashion, once you start it, you have to finish it, and then be ready to move the ship --

REP. FRELINGHUYSEN: Thank you for clarifying that.

MR. D'AGOSTINO (?): -- to its final --

REP. FRELINGHUYSEN: Admiral, you previously -- previously, you projected your needs to grow \$150 million this year for the development of the Ohio Replacement reactor systems. This year, your budget request instead includes a \$31.6 million decrease.

As you know, this program has been assured priority between this subcommittee and your program for years. I understand the Department of Defense has decided to delay -- as has been mentioned on many, many occasions -- the first ship procurement by two years. What are the reasons for the delay? And will this delay -- and I think more importantly, result in any temporary gaps in our deterrent posture or the operational availability of our submarine fleet?

ADM. DONALD: Yes, sir. The delay really reflects an overall Navy review of the shipbuilding programs and overall acquisition programs, whether they be shipbuilding or aviation. And it was -- it was balancing the available resources to the strategic needs of the Navy, certainly as seen through the lens of the Strategic Review that was conducted by the Office of the Secretary of Defense. And it was -- it was an attempt to balance those resources, recognizing that there was going to be some risk in many different programs. This happens to be one where there was some -- determined that some risk could be taken, and could be mitigated if you get out into the further years --

REP. FRELINGHUYSEN: It's a risk that you personally have reviewed?

ADM. DONALD: Yes, sir. I have.

REP. FRELINGHUYSEN: And obviously they sought your input.

I mean --

ADM. DONALD: Yes, sir.

REP. FRELINGHUYSEN: -- there were a lot of things --

ADM. DONALD: Yes, sir.

REP. FRELINGHUYSEN: -- shall we say -- I won't put it on the chopping block -- there are a lot of things that have been delayed, sometimes because of cost overruns and, let's say, you know, issues relating to the littoral combat ship issue. But this is something which you have had -- you know, you've had your hands on. Obviously the administrator hasn't.

ADM. DONALD: Yes, sir --

REP. FRELINGHUYSEN: There's nothing here that weakens our posture or the ability of our submarine fleet to operate, you know, the way it should be?

ADM. DONALD: I believe we're going into this with eyes wide open. And if you -- if you want to characterize the risks associated with it, the delay of two years will result in a period of time, in the 2029 to 2041 time frame, when the force structure, the numbers of ships for the Ohio-Class, and the strategic deterrent will drop below what the combatant commanders requirements are, what the numbers are -- or the Navy's number are for the numbers of platforms. Twelve is what the specified number for the ships are to meet the combatant commanders' requirements. We will drop below that number during that period of time. It would be about 10 ships during that period of time.

Again, it's recognized that there will be some challenges associated with operational availability during that time -- not unlike necessarily what we're seeing today, with the exception that it will be an older fleet at that time. But that's something we understand. We understand the importance of sustained maintenance on those ships to ensure that they're ready to meet that mission; that we preserve them, so they get their full life extension, the number -- the number of years of life. So, again, we understand what it is we've bought into. We understand that there's risk, and we are putting measures in place to make sure that risk is mitigated.

REP. FRELINGHUYSEN: We're counting on you. We're all too familiar with the expression, "the tyranny of distance" --

ADM. DONALD: Yes, sir.

REP. FRELINGHUYSEN: -- and I must say, when we had the CNO in and his Marine counterpart the other day, we weren't, I think, as well reassured as we should have been that we're going to have the fleet that we need, not only surface, but submarine -- for the silent fleet. And so we hope that this has been thought out, and you're giving us assurance it has been thought out.

ADM. DONALD: It has been. It's -- again, it's not without risk --

REP. FRELINGHUYSEN: It's a lot of territory to cover.

ADM. DONALD: Not without risk. That's --

REP. FRELINGHUYSEN: I know sometimes people say some -- say that, you know, the Chinese are -- it'll take generations for them to catch up to us. But if they're, if they're mending a lot of submarines -- maybe not with our capabilities -- sometimes numbers in the overall equation do matter.

ADM. DONALD: Numbers do matter.

REP. FRELINGHUYSEN: They do matter.

OK, Mr. Olver.

Thank you.

REP. OLVER: Well, I -- my impression is that you may have a good many more questions about the Ohio replacement issue, so I'll leave that namely to you. But I can't help but comment -- well, maybe I will make a couple of comments. (Laughter.) When you --

REP. FRELINGHUYSEN: You're the -- you're the ranking. You can say anything you want. (Laughter.)

REP. OLVER: When you, Mr. Chairman, are questioning the five- year decommissioning, is that likely to be a five-year decommissioning for each one of these nuclear power plants that we have to deal with, or is that only going to be for the aircraft carriers?

MR. D'AGOSTINO: This particular program is unique to enterprise, which is a one of a kind. It's an eight-reactor plant ship, and it -- the five years reflects that particular ship.

Submarines, we have a long history of inactivation of submarines, and those are much shorter, and --

REP. OLVER: OK.

So, all right, my -- I was going to comment that in the utility industry, the decommissioning seems to go on and on forever. In the weapons system -- in the defense system you have places that you park the radioactive materials automatically, pretty automatically. They've been created over time. We haven't quite figured out what to do with it.

And so the first of the nuclear reactors, for utility purposes, within my district, and was decommissioned back in the early '90s, and there's still -- they've still got the waste material, the highly radioactive waste materials sitting on site, because they haven't -- we haven't been able to figure out where to put it.

So this decommissioning process, in its totality, to actually deal with where the waste is going to be, it takes a lot longer time. And we'll have to figure out exactly where, over that long time, the Naval Reactors high-level waste will go as well, won't we?

ADM. DONALD: Our spent nuclear fuel, when we remove it from the ships, it's rail-shipped to Idaho, and that's the Expanded Core Facility. The Expanded Core Facility Recapitalization project refers to that location where we take that.

We are under obligation to the state of Idaho to move that spent fuel out of wet storage where it is today -- most of it is today, into dry canister storage, which we are doing as we speak, and then ultimately it moves out of Idaho. But the plan, as we go -- yes, sir, we have a long-term plan to comply with the Idaho agreements, however it's well understood, absent Yucca Mountain or some other land repository for the ultimate disposal of this fuel, it'll remain in the dry storage and in the Idaho facility until we come to a resolution on that.

So we do have an issue, at the end of the Idaho agreements in 2035, as to where that spent fuel will actually go, but it's in a safe and secure location right now.

REP. FRELINGHUYSEN: Mr. Olver, will you yield just for a minute?

REP. OLVER: Yes.

REP. FRELINGHUYSEN: I want to assure that Idaho will be here shortly. (Laughter.) I can hear a drum beat out in the hall.

REP. OLVER: I shouldn't have raised the question --

REP. FRELINGHUYSEN: No, I think it's absolutely appropriate. I mean, these are agreements that need to be examined, and I'm sure if you don't, he will. (Laughter.) Thank you for yielding.

REP. OLVER: All right, I will get -- I don't know what the time frame is here -- (inaudible). You and I, we seem to be having quite a good conversation already. But I will go on to a different thing.

To Mr. Administrator, last year your budget request indicated you would continue to ramp up the Second Line of Defense program and spending nearly 1.8 billion (dollars) over the five-year period. This year, you've adopted a huge cut, and I think probably it was -- the subcommittee itself urged you to do something like this, in part, there. You've adopted a huge cut to this program, cutting the request by 65 percent and providing only 317 million (dollars) over the five-year planning period.

This is an abrupt and major change in direction. I look at the five-year items, and now it looks as if we are talking about 50-ish million (dollars) -- 50 (million dollars) to \$60 million a year, or thereabouts, whereas it was talked about as somewhere between 250 million (dollars) and 500 million (dollars), as it went along.

So why have you proposed such a major shift in the strategy? And give us some insight into what activities you will conduct this year as you're shifting that strategy?

MR. D'AGOSTINO: Mr. Olver, it's a great question, and happy to answer it. And I'd also, with your permission, ask Anne Harrington -- Ms. Harrington to add on, after I'm done, if I could, please.

I want to assure you, the committee and our folks out that are implementing our Second Line of Defense program that it is and it remains an important component of our overall strategy. I mentioned in my opening statement about the idea of multi-layering. It isn't just good enough to secure material, and protect it and account for it at all times. It's important for us to be able to detect the transfer of the material around, and the Second Line of Defense program is an important element of that.

We did not -- we're not abandoning Second Line of Defense. We're taking the opportunity in this very difficult budget environment to, you know, sit back, take an opportunity and refocus, and take a look at our program, and making sure that we have the right strategy and that we're implementing it correctly with the Department of Homeland Security. We are going to do with the resources we're requesting in FY -- fiscal year 2013 is to make sure that we have the right sustainability effects and get the right operational characteristics on our program.

The program has been wildly successful. It's implemented radiation detection equipment in hundreds and hundreds of locations around the world -- land border crossings, seaports and airports. And instead of just pressing forward to get large numbers of detectors out there, we're taking this opportunity to pause and look -- and making sure things are integrated, and see how things move forward. We are also, in this constrained budget environment, wanting to make sure we focus on getting the job done, with respect to the president's commitment with his global leaders on securing material.

I'll ask Anne to add to my SLD question, because she runs the actual program itself, in great detail.

MS. HARRINGTON: Mr. Olver, thank you very much for the question.

So, as the administrator said in his opening remarks, we do believe in a multi-layered strategy. Right now we are extremely focused on what we consider First Line of Defense -- getting to the material at its origin, or removing it and bringing it back here or to Russia. So that's the four-year effort. The Second Line of Defense --

REP. OLVER: Let me just -- you say you still believe in a multi-layered program. Now, last year you were -- you were talking about a program that would -- that would be completely in place at some 650 border sites and a hundred megaports by the year 2017.

Now, I don't know, either you've changed the -- you changed the definition of how many megaports and how many border sites you really want to do; or the multi-layered program means that there are different kinds of things that you want -- that you thought you wanted to do, and are now thinking that some of these are not as effective as others.

Can you give us some insight as to what it is that is somehow being knocked out, or are you intending -- is it both a reduction in the total number of sites -- megaports and border sites? Or is it -- or do you intend to do only parts of the multi-layer -- how many ever layers there are, and do only some of them, which you have somehow assessed to make sure that those are the ones that are most effective at succeeding with what you -- what your goal is?

MS. HARRINGTON: Correct. We are trying to both address the vulnerable material -- to secure, remove, eliminate that material. That's the four-year effort. So some of the shift is due to ensuring that we have the funding available for those activities, because we believe that, that is the primary pathway to reducing risk to the United States of terrorists ever securing that material and using it in a weapon.

The Second Line of Defense, of course, is aimed at reducing the risk from nuclear trafficking. So much of our attention for the past, you know, 10-plus years has been on Russia, because Russia is where much of the material that could be vulnerable is located. So last year, toward the end of the year, we completed 383 air, sea and land border crossings with radiation detection equipment in Russia; helped them establish a consolidated control system. This is a full partnership with Russia. We have both contributed, in equal shares, to the project. They have now taken full control, as of the end of next year, of sustainability for this project. This has gone very well.

We've also worked on the countries surrounding Russia. But we thought it was appropriate at this point to take a step back and reassess where we're going to work next, how we're going to do that, and what kinds of partnerships, and particularly with what technologies.

There are new technologies that may become available in the not-too-distant future, one of which has actually caused quite a bit of excitement in the scientific community. It comes out of Lawrence Livermore Laboratory, and if it's commercially producible, if it's -- if it's something that can be produced on industrial scale, it could be a game changer in this field, which may mean we don't have to go with these big, very obvious detectors that we tend to install. We could be much more subtle.

We could perhaps deploy systems in a way that make it more difficult for someone trying to evade a system to do so. We're looking at mobile systems. We're looking at hand detectors. We're looking at a variety of technologies, and working in partnership with our other agencies and international partners to assess what combination of customs, border security, law enforcement do we need to engage to make these efforts work to the absolute maximum effect for the minimum amount of money.

And it's not that we won't do -- we will do a number of significant things in 2013 under that program.

REP. OLVER: Well, you know, I can relate somewhat to that, because we used to have computers that took -- the size of this room --

MS. HARRINGTON: Exactly.

REP. OLVER: -- and we now have far greater power in a laptop than was in those original computers. So this technology can be moving very quickly.

MS. HARRINGTON: Yes.

REP. OLVER: Well, I'm glad, then, to see that you are reassessing, and we'll see where we go next.

MS. HARRINGTON: Right. And we're looking at an opportunity where -- you know, we might have been able to install tens of detectors; with this new technology, perhaps hundreds. So it could -- again, it could be a game changer.

But I also want to point out that we have not yet defined the 2014 to 2018 budget trajectory for this program. That will be done during the course of this year as we do this evaluation and determine what the best future path will be.

REP. OLVER: I think I have in front of me a list of what it may be, but that may be subject to substantial change --

MS. HARRINGTON: Correct.

REP. OLVER: -- is that what you're saying?

MS. HARRINGTON: Correct.

REP. FRELINGHUYSEN: Mr. Olver and I would like to both get back into this after maybe Mr. Alexander has had an opportunity.

Thank you.

Mr. Alexander, thank you for being here.

REPRESENTATIVE RODNEY ALEXANDER (R-LA): Thank you, Mr. Chairman, and good morning. I just wanted to make a statement.

I'd just like to take a moment to recognize the good work that Ms. Harrington is doing with the NNSA. She's been to our office on occasions to talk to my staff and me about different things, and upgrade us on the MOX project. We appreciate giving us that knowledge.

Would particularly like to thank two of your associates, Pete Hanlon and Kelly Cummins. They've been to see us and have brought us up to speed. We appreciate the way that they conduct their business. And overall, we're happy with the progress that's being made at the MOX project, and we're confident in the direction that you are taking that project. And we hope that you will continue keeping the lines of communication open and let us know what we can do to help facilitate that, and look forward to working with you and your staff. Thank you.

MS. HARRINGTON: Thank you, sir.

REP. FRELINGHUYSEN: Compliments are always welcome, aren't they? (Chuckles.) (Laughter.) I'm sure they're -- they're well earned.

I want to get back with Mr. Olver, and he can -- he can jump right in as well to the issue here.

And I know you have an interesting portfolio. I was intrigued by your comment about Russia stepping up to the plate. We've made substantial investments -- you know, considerable investments. Have the Russians matched those?

MS. HARRINGTON: They have in several different areas.

REP. FRELINGHUYSEN: Yeah, all right. In terms of dollars and cents?

MS. HARRINGTON: Yes.

REP. FRELINGHUYSEN: Yeah.

MS. HARRINGTON: Yes. In terms of personnel, purchasing equipment, installation and real sustainability. And I've been to visit this consolidated response center that they've set up, and it's very impressive. It's -- and they are professional --

REP. FRELINGHUYSEN: It's been a few years since I was over there, but initially we put quite a lot of our largess, into these projects, and I wasn't sure whether they had substantially done the same type of investment.

MR. D'AGOSTINO: If I could --

REP. FRELINGHUYSEN: Mr. Administrator?

MR. D'AGOSTINO: Mr. Chairman, if I could also add --

REP. FRELINGHUYSEN: Jump in if you want.

MR. D'AGOSTINO: In my recent visits in Russia, we have -- Anne's folks have done a remarkable job and our Russian colleagues as well -- 50/50 cost-share arrangements on detector equipment. We helped with the installation, of course. They've committed to the sustainability of these all on their own, out of their own security programs. And we find a strong support by the people that run the security facilities to maintain -- to sustain these facilities. It's not enough just to install the detectors; you actually have to operate them, use them, maintain them, and it does require resources. They have committed to doing that, and they're full-up partners in this area.

REP. FRELINGHUYSEN: So you can assure us that the cost-sharing can actually be validated, that they're actually --

MR. D'AGOSTINO: It's --

REP. FRELINGHUYSEN: I mean, sometimes people claim, under the best of circumstances, that they're doing things.

MR. D'AGOSTINO: It's -- there is a -- we have arrangements -- different arrangements with different agencies --

(Cross talk.)

REP. FRELINGHUYSEN: (Inaudible) -- different sites, is there evaluations?

MS. HARRINGTON: Mm-hmm.

MR. D'AGOSTINO: Right.

REP. FRELINGHUYSEN: And so we are taking a look at what they're --

MS. HARRINGTON: Correct.

REP. FRELINGHUYSEN: -- claiming to do --

MS. HARRINGTON: And the border --

REP. FRELINGHUYSEN: -- for us, yes?

MS. HARRINGTON: -- the border crossings are --

REP. FRELINGHUYSEN: For themselves, I should say, and for nuclear security world wide?

MS. HARRINGTON: Well, the border crossings are fairly transparent, because you can --

REP. FRELINGHUYSEN: Yeah, but --

MS. HARRINGTON: -- physically see. And we know what we've paid for, and we know what they've paid for.

REP. FRELINGHUYSEN: But there are other sites.

MR. D'AGOSTINO: We have --

REP. FRELINGHUYSEN: Substantial.

MR. D'AGOSTINO: -- ministry of defense sites. We've worked with the Russian ministry of defense. I've had the opportunity, personally, to review the ministry of defense sites. Because of the sensitivity of these sites, we rely on different ways to confirm that they're being maintained, but everything that we've seen so far is --

REP. FRELINGHUYSEN: So you -- some have described the situation as -- trying to determine exactly what they're contributing, as a challenge. You don't -- you're saying we're not -- there haven't been issues of challenging their contributions?

MR. D'AGOSTINO: In fairness, I mean, there -- there are different challenges, depending on which agency we're talking about. Mostly the challenges -- I mean, this is not a matter of just the United States walking in at any particular time --

REP. FRELINGHUYSEN: Well, yeah, access is rather limited, as I remember --

MR. D'AGOSTINO: Absolutely.

REP. FRELINGHUYSEN: -- considering what we have put down on the table and assisted them. And there are obviously other sites where they're doing things that -- where we have no access at all.

Just one comment and then I'll go to Mr. Olver, because I've taken a little bit of his space on this question. I serve on the Homeland Security Subcommittee and, you know, sometimes I really wonder how you interact. You know, you talk about, you know, multi- layers. Maybe you have multi-layers, but we have a huge bureaucracy here. Everybody seems to -- seem to be many hands on the deck here. I'm not sure those hands are particularly well linked.

But I happened to have some sort of a briefing, and I -- can you assure me that the Department of Homeland Security is wedded to whatever you're doing --

MS. HARRINGTON: We have a --

REP. FRELINGHUYSEN: -- and that systems are, you know, talking to one another around here?

MS. HARRINGTON: We have a very close relationship with Homeland Security, and particularly with DNDO. We --

MR. D'AGOSTINO: Domestic Nuclear --

MS. HARRINGTON: Domestic Nuclear Detection Organization.

REP. FRELINGHUYSEN: Yeah. There is some sort of a directorate, is there?

MR. D'AGOSTINO: Yes.

MS. HARRINGTON: There is, yes. But we coordinate both on the detection issues, as well as on radiological source security, training and across a broad area.

REP. FRELINGHUYSEN: And I just -- I just -- I have a degree of discomfort. I don't (sic) want to make sure that everybody's sort of working together here.

MR. D'AGOSTINO: If I could add, Mr. Chairman --

REP. FRELINGHUYSEN: Give me a little higher level of reassurance.

MR. D'AGOSTINO: General Kehler -- General Bob Kehler is the commander of Strategic Command in Omaha --

REP. FRELINGHUYSEN: I'm sort of focused somewhat more on, obviously, on the domestic issue -- how you --

MR. D'AGOSTINO: Well, I was -- I want to describe --

REP. FRELINGHUYSEN: (Inaudible.)

MR. D'AGOSTINO: -- his responsibility for combating weapons of mass destruction. And in this effort, he has brought together the Department of Energy, the Department of Homeland Security, the Department of Defense organizations, because there's more than one that works in this particular area. And we are looking very closely at making sure that -- Warren Stern runs the Domestic Nuclear Detection Office in DNDO. He's an active participant in this group. And we're keenly focused on the fact that we don't want to duplicate efforts across departments, because obviously that doesn't make any sense. We don't want to compete with each other on this wide breadth of work, because we have to make sure that it all makes sense.

So Bob Kehler has worked very hard to help pull together kind of a framework on this front. We've had a number of sessions already at the leadership level, and we're -- and Anne does the same thing with her colleagues at Defense Threat Reduction Agency, and will be bringing in the DHS organization into that effort. We had what we call bridging meeting -- bridging meetings to bridge these organizations together.

REP. FRELINGHUYSEN: I'm all for bridging. I want to make -- I want to make sure that -- you know, is that you have your money, and Homeland Security has its money, that somehow that we're taking a look at, you know, making sure we don't duplicate technology and things of that nature.

So, Mr. Olver.

REP. OLVER: Well, I guess I'll take the bait -- (laughter) -- and continue this one for a bit.

I also serve on the Homeland Security Subcommittee, and we just had a hearing the other day where these issues of border crossings and ports of entry came up there, and in clearly and obviously a greatly different context. They're all border

crossings, across our borders into us, and I was thinking of this 650 border sites and 100 megaports -- that was the goal, as having some relation to that. But I think what I understand is that you had 383 sites -- wasn't that the number you mentioned?

MS. HARRINGTON: That's just in Russia.

REP. OLVER: I realize that. That's just in Russia.

MS. HARRINGTON: Just in Russia.

REP. OLVER: Those are just sites in Russia.

MS. HARRINGTON: Correct.

REP. OLVER: Now, does that --

MS. HARRINGTON: So our work is --

REP. OLVER: -- include some border sites and megaports?

MS. HARRINGTON: Our work is all outside the United States.

REP. OLVER: All outside the United States.

MS. HARRINGTON: Outside the United States, correct. So we are -- we are trying to get -- to keep material from moving into the United States.

REP. OLVER: The definition of megaports, does that include -- how many megaports are seaports, and how many megaports are airports in your planning --

MS. HARRINGTON: Currently, megaports only covers seaports.

REP. OLVER: Then what are you doing with the airports? Are they -- are they just viewed as border sites?

MS. HARRINGTON: They are. Currently, they are.

REP. OLVER: How many of those sites are airports in Russia? How many of those 383 are airports in Russia?

MS. HARRINGTON: I would have to get the count. It would cover any airport that has international connections. So I would need to get the exact number, but certainly the ones in Moscow and St. Petersburg.

REP. OLVER: So they might -- well, they are border sites, in the sense that --

MS. HARRINGTON: Correct.

REP. OLVER: -- they're deport -- they're --

MS. HARRINGTON: Right. That people could leave from there and come to the United States.

REP. OLVER: OK, OK. So then they may be.

MS. HARRINGTON: Yes.

REP. OLVER: Ah, well, that's helping me a good deal, of understanding what we're talking about here, if I know that it's all outside the country --

MS. HARRINGTON: Correct. Homeland Security does domestic --

REP. OLVER: But you must have a bunch of megaports. If you add a hundred megaports, they're all over the place. How many of those are in place?

MS. HARRINGTON: Correct. Right now I believe it's 42 are in place --

REP. OLVER: Forty-two.

MS. HARRINGTON: Yes.

REP. OLVER: Of the hundred that have been identified --

MS. HARRINGTON: That were originally identified.

REP. OLVER: -- by you.

OK, well, now, does this program, as you are now conceiving it, does this then -- And it's a reduction. Does that mean you're going to not go up from the 42 that are already there, and completely implement them and the sites in Russia? How many sites are there outside Russia? I'm thinking here it must -- the other major danger place for nuclear materials has to be Pakistan. How do you deal with Pakistan?

MS. HARRINGTON: Well, Pakistan is its own special case. One could also argue that Iran is another --

REP. OLVER: Yeah, but they don't yet have nuclear materials.

MS. HARRINGTON: Well, they do have --

REP. OLVER: Not weaponry grade materials.

MS. HARRINGTON: Not that we know.

REP. OLVER: -- we hope.

MS. HARRINGTON: Not that we know.

MR. D'AGOSTINO: If I could mention just Pakistan. I think the Pakistanis are very serious about nuclear security. Anne's folks work very closely with their counterparts on detecting the illicit trafficking of nuclear technologies and nuclear and radiological materials. Anne's folks have also implemented a program with the Pakistanis in the Port of (Qasim ?). It was what we called a secure freight initiative port, which is a radiation -- putting radiation detectors there. So they take nuclear security very seriously, and they're partners in this particular effort to detect the illicit trafficking.

You had asked earlier about, kind of, the ratio -- didn't ask for the ratio specifically, but how many in Russia and how many in other countries. Of the 420 sites or so that are -- have been completed internationally, about 260 are in Russia and about 161, I have in my notes, are in other countries. So the work in Russia was the initial slice of work that was started, and that is essentially finishing up due to the cooperation. Now the effort is, is to kind of expand these --

REP. OLVER: You realize that you have contradicted, by about 120 sites, what Ms. Harrington was saying was the number of sites in Russia, which was 383.

MR. D'AGOSTINO: Was that 300 --

MS. HARRINGTON: Total.

MR. D'AGOSTINO: Total sites. I'm talking about the land border -- I was talking about the land border crossings. So this is a sub- element of that -- of the total.

MS. HARRINGTON: Right.

REP. OLVER: All right. Do we assume that we don't have a problem with any leakage of nuclear materials out of France and England? And then, how -- how do you deal with India and China?

MR. D'AGOSTINO: I think that every country that takes nuclear security responsibly and very seriously, which I know the French and the U.K. does, never assumes that we've got the problem solved. We don't assume that we have the problem solved here.

REP. OLVER: Do we have any sites in those -- in those nations?

MR. D'AGOSTINO: There are --

REP. OLVER: Or do we do -- do we don't feel we need those sites in those nations?

MR. D'AGOSTINO: We work very closely with the French and the British. They have radiation detector equipment installed. And I believe also the U.K. partnered with the United States for a Secure Freight Initiative port, in their seaport in Portsmouth as well, a number of years ago with the Department of Homeland Security. So that was a joint effort between the Department of Homeland Security and the NNSA to work on the Secure Freight Initiative port in the U.K.

But, you know, I can assure you and the committee that I have regular contact with my counterparts in these other countries, and we are very clear about the kind of work we do. They are very clear about the kind of work they do. We're very confident that they have a robust program and take this as seriously as we do, as with the Russians that have come up to speed and have really demonstrated their resolve in this particular area.

But anybody that does this kind of work for a living -- whether it's in the Naval Reactors program or whether it's part of my organization that deals with the weapons activities, whether it's on the civilian side -- knows that this is an area of constant vigilance. And so we don't assume that we have it all solved, but we don't -- that's why we keep going after it.

REP. OLVER: Well, Mr. Chairman, I think I've explored almost more than I've ever wanted to know. (Laughter.)

REP. FRELINGHUYSEN: Well, that's one of the benefits of being ranking member -- (laughter) -- is that you could -- you could -- you're not going to -- if you'll pardon the expression, you're not going to be constrained by -

REP. OLVER: But I -- (inaudible) -- say there is --

REP. FRELINGHUYSEN: -- by time limitations.

REP. OLVER: -- some numerical difference between what the two of you were saying.

MR. D'AGOSTINO: Yeah, I was probably talking about a subset of what Anne was talking about. But we'd be glad to provide details for the record on the actual numbers themselves -- the 650 and the 100, as you described earlier, and what we've don't toward the 650 and the 100 ports.

REP. OLVER: Well, then, one last question on this point. How many does this -- does this new budget direction anticipate you're actually going to deploy of what was a goal under this old budget of 650 and 100 megaports?

MS. HARRINGTON: Well, when we --

REP. OLVER: (Inaudible) -- any idea about that? Or that so much up in the air, so much --

MS. HARRINGTON: Right now we need to finish the analysis that we're conducting right now. It will most likely be a reduced number, but that reduced number will be backed by some serious thinking.

REP. OLVER: OK. Thank you.

REP. FRELINGHUYSEN: Great. I just want to get back, since we have the benefit of Admiral Donald here, to -- with his institutional memory. And of course the Department of Defense is taking a look at a lot of its procurement programs, and the Ohio class is obviously a top priority. I think the committee, in a bipartisan way, has been supportive. And we're still trying to get the costs down to -- what is it, \$4.9 billion per boat? Is that -- is that right?

ADM. DONALD: Yes, sir -- the target.

REP. FRELINGHUYSEN: That's the target.

With the delay and, you know, you're having to somewhat contribute to the bottom line here, do you foresee any fundamental reconsideration of the requirements if -- you know, if -- by the delay?

ADM. DONALD: No, sir, not as a result of the delay itself. We're --

REP. FRELINGHUYSEN: Just instinctively, when you put something off for two years -- new technology, new bells and whistles -- things that are important to our national security emerge.

ADM. DONALD: Yes, sir. No, sir, from the perspective of Naval Reactors, we've worked very hard in the -- in the concept development phase to try and identify those specific areas that we consider to be the most fruitful from a point of view of inserting new technology, and those were really in two areas. And it was in the life-of-the-ship core, because we not only saw that helpful in minimizing the amount of time that these valuable platforms spend in port for their maintenance, for their refueling, and the important -- (inaudible) -- that they have the operational availability resulting from that. That was one.

And the second one was from an acoustic point of view, which is one of the important security aspects of this platform -- being at sea, undetectable. If you look for the long-term or the future, what can we do today to best ensure that the ship remains essentially invulnerable out through its life? And the most important area we saw -- and we still believe this to be true, to do today -- is to make sure that, that ship is as quiet as it can possibly be, technology that you have to build in up front. And that's where we focused, for instance, on the electric drive system to go into the ship.

So other than those two areas, we continue to evaluate. Are there other things we want to do? And the answer to that is, no; we're satisfied where we are. We're focused on trying to drive the costs of the propulsion plant down in areas that we're not advancing, from a technology point of view; leveraging what we've learned off of Virginia and the Ford-Class,

and complementing that with the advanced technologies in those two specific areas. So I feel very comfortable that we've got the right areas targeted. Now we've got to execute and drive the costs down to the extent that we can.

REP. FRELINGHUYSEN: It'll be remarkable when it's launched, I'm sure, but --

ADM. DONALD: Yes, sir.

REP. FRELINGHUYSEN: -- we deal with -- the Department of Defense has set, for a lot of -- a lot of programs, and this is one we support, certain cost reduction goals.

ADM. DONALD: Yes, sir.

REP. FRELINGHUYSEN: And it -- I mean, it's almost like DOD/OMB.

ADM. DONALD: Yes, sir.

REP. FRELINGHUYSEN: I mean, there's sort of an Office of Management and Budget requirement that you -- you know, that certain goals be met.

But what happens, you know, if those goals can't be met? And would that, in fact, figure into the fundamental reconsideration of the requirements that you have somewhat outlined?

ADM. DONALD: Yes, sir. If you -- if you look at the range of the Ohio-Class Replacement, the costs that we're talking about per platform that we've been challenged to meet, it's between 5.6 billion (dollars) and 4.9 billion (dollars) per platform. Now, that would -- over the life of the ship, it would take into consideration a learning curve. As you build more of these things, they become more proficient at it to try and achieve more cost savings.

But, again, I get back -- we feel reasonably confident, and by the time we go to construction on this ship in --

REP. FRELINGHUYSEN: So, when you talk about construction, what is the timeline here? I mean, it seems to be a little bit fluid here.

ADM. DONALD: Yes, sir --

REP. FRELINGHUYSEN: To say the least.

ADM. DONALD: Yes, sir. A two-year delay implies a 2021 authorization for the first ship. What that means, if you back that up, is that I have to start purchasing the long lead equipment, the heavy equipment for the reactor plant, not later than 2019, typically two years in advance. You back-up from there, we've got the design work that has to go into building those components and the integration into a propulsion plant --

REP. FRELINGHUYSEN: And then you have obviously what you referred to earlier, and this is true with a lot of ships, surface and submarine, operations and maintenance. I assume this submarine has what we call a tail, right, which --

ADM. DONALD: Yes, sir, absolutely --

REP. FRELINGHUYSEN: -- you got to -- you got to know, like an aircraft, how much it's going to cost to maintain.

ADM. DONALD: Absolutely. Yes, sir. And that's a part of the up-front design, is to try and minimize the amount of maintenance that the ship needs over its life, to make sure that it can meet the commitments that it has to. All of that goes into it. And, again, I believe that from a point of view of technical feasibility, from achievability based on what we've learned through the Virginia program, which has been a successful program --

REP. FRELINGHUYSEN: Well, the Virginia program was supposed to put out two Virginia-Class subs every year. This year, is it one?

ADM. DONALD: In FY '11, it was two; and by '12, it's two. It remains at two per year, with the exception of FY '14. We go down to one that year, and that ship --

REP. FRELINGHUYSEN: Why is that?

ADM. DONALD: That was, again, part of the overall consideration of the shipbuilding --

REP. FRELINGHUYSEN: Well, that's sort of why --

ADM. DONALD: -- plan, resources --

REP. FRELINGHUYSEN: -- the jist of my question here is. Are there any upcoming milestones or decisions for the larger ship reduction that might impact your planning and resource requirements? I mean, there are a lot of moving parts here, yours being one that we are particularly focused and interested in.

ADM. DONALD: No, sir. I mean, we --

REP. FRELINGHUYSEN: Pushing forward.

ADM. DONALD: The shipbuilding plan is, as it exists today -- I mean, you know, it can certainly, with fiscal constraints, and such things as sequestration and issues of that sort, could have some impact on it obviously.

REP. FRELINGHUYSEN: Would have a pretty catastrophic impact.

ADM. DONALD: Yes, sir. Yes, sir, it would. But absent that, the program, as it exists today, again, I'm confident we can execute that. It's certainly not without challenge to be able to deliver that ship at that cost. But we understand what the challenge is, and we're working as hard as we can to make sure that we meet it.

REP. FRELINGHUYSEN: There have been a few people who've suggested that since you have a whole array of programs -- but yours is pretty essential, this nuclear deterrent is something that we strongly believe in, and you have been supportive of and devoted your lives to. There has always been some talk, which I think worries me that -- about, you know, shall we say, cancelling the program.

That's not going to happen, I hope.

ADM. DONALD: No, sir --

REP. FRELINGHUYSEN: That's not in the -- that's not -- that's not something that we want to see here. So what you want to --

ADM. DONALD: No, sir. And that's --

REP. FRELINGHUYSEN: I mean, that's --

ADM. DONALD: -- to my knowledge, that hasn't been discussed --

REP. FRELINGHUYSEN: OK, there's been that --

ADM. DONALD: -- (in an official ?) forums --

REP. FRELINGHUYSEN: -- there's been some talk in that regard.

ADM. DONALD: Yes, sir.

REP. FRELINGHUYSEN: But it would be -- you know, we -- the subs that we have now, you know, we can't keep them going forever. This is something we need to get working on right now.

ADM. DONALD: Yes, sir. In my view, that would be --

REP. FRELINGHUYSEN: Catastrophic.

ADM. DONALD: -- catastrophic. Yes, sir.

REP. FRELINGHUYSEN: Yeah.

OK, Mr. Olver, you ready for some more? (Laughter.)

REP. OLVER: Well, you've opened another question. Well, you went back to it, and so now I'm ready to delve into it here, because -- Now, I'm a little bit confused. How many Ohios are there?

ADM. DONALD: The Ohio class consisted of 18 ships originally --

REP. OLVER: Eighteen. And how many --

ADM. DONALD: -- four of those have been -- first four have been converted from their strategic deterrent mission to become guided missile-shooting submarines, SSBNs, as we call them. Those are no longer part of the strategic deterrent.

REP. OLVER: So there's only 14 left?

ADM. DONALD: Fourteen are left. That's correct, sir.

REP. OLVER: OK. That's fine. How many Virginias have been -- have been authorized?

ADM. DONALD: Well, authorized, we've -- Let's see, we've delivered eight, with a ninth coming up here this year, and we started in FY '11, two per year, and --

How many we're authorized?

I'd have -- let me get a specific answer. I think it's 12 that were --

REP. OLVER: Total?

ADM. DONALD: So far, yes, sir. It's a 30-ship class.

REP. OLVER: A 30-ship class?

ADM. DONALD: Yes, sir.

REP. OLVER: Total 30, is that -- that is the planning horizon on the part of the Navy.

ADM. DONALD: That's correct, yes, sir.

REP. OLVER: Thirty. OK.

ADM. DONALD: And those replace the ships that are retiring.

REP. OLVER: When you say two -- one was delivered last year in 2011, did you say?

ADM. DONALD: That's correct.

REP. OLVER: One Virginia -- ?

ADM. DONALD: We had -- we had one delivered last year, the U.S.S. California was delivered last year; two were authorized for the --

(Cross talk.)

ADM. DONALD: -- in the 2011 budget.

REP. OLVER: There's a planning horizon, but then an authorization that (counts ?) for specific numbers. But the sum total -- at least in your planning horizon -- is at the 30 level?

ADM. DONALD: It's a 30-ship class. That's correct, sir.

REP. OLVER: OK. Let me just ask you, when -- the ones that were authorized last year, when will they be commissioned? Isn't that a long period of time -- five to eight years?

ADM. DONALD: Five years.

REP. OLVER: Five years at least?

ADM. DONALD: Yes, sir. Our target right now is a 60-month cycle, from commencing construction with authorization until delivery. The most recent ship delivered in 64 months, I believe it was, and we're moving toward 60 months now.

REP. OLVER: I will get confused in my own numbers eventually here. But in the case of the Ohios, when was the first commissioned, and when was the last commissioned? Maybe you --

ADM. DONALD: The first one was around 1980 -- 1979, 1980. The last one was commissioned in the mid-1990s. I think it was 1996 --

REP. OLVER: So, from '80 to '95, say, is roughly right?

ADM. DONALD: Yes, sir. Yes, sir.

REP. OLVER: If any of this -- I mean, I -- hopefully nobody is taking notes about --

REP. FRELINGHUYSEN: Well, actually they are. (Laughter.)

REP. OLVER: They are?

REP. FRELINGHUYSEN: They're taking plenty of notes. Yeah, I think so. No, I think this is -- these are questions that need to be examined.

Can I -- would you yield to me?

REP. OLVER: Sure.

REP. FRELINGHUYSEN: Is the administration considering further reducing the size of our ballistic missile submarine fleet, because of this environment we're in here?

ADM. DONALD: No. The program of record right now calls for 12 SSBNs, with the replacement -- the Ohio replacement going from 14 to 12. There is a period of time during the transition when the Ohios are coming off line and the new class are coming on line, where we will dip below 10, but that's a recognized risk associated with the two-year delay. But right now the plan still remains at 12 SSBNs.

REP. FRELINGHUYSEN: So if the gentleman will continue to yield here.

If the Naval Reactors is not able to get the performance improvements it needs out of its new reactor designs to provide for a life-of-the-ship core, does this drive back the number of replacement submarines it will need to be procured by the Navy?

ADM. DONALD: The rationale from going from 14 to 12 was that we would deliver on a life-of-the-ship core and eliminating the refueling that would occur in the mid-life, that occurs today on the Ohio class --

REP. FRELINGHUYSEN: This is because of the design?

ADM. DONALD: That's correct. And that would imply that more ships will be necessary to meet the requirement for having ships at sea and ships available for the strategic mission. Yes, sir.

REP. FRELINGHUYSEN: Mr. Olver, excuse me. Thank you for yielding.

REP. OLVER: Well, that just opens up a different question on my part, which is we started with 18 of the Ohios, which are now down to 14. We didn't need the other four. We already converted them to some other purpose.

ADM. DONALD: Correct.

REP. OLVER: And we have 14 left. We have, at most, only eight or nine of the Virginias in place. So the total fleet is something like 23. There may have been a time when the Virginias were already being -- coming online, where before we -- or at about the same time we were converting some of them Ohios.

Do we still intend to -- do you think we still are thinking about building 30 Virginias -- a total of 30 Virginias, and at the same time going on and building another 12 of a more modern fleet? Are we in worse --

ADM. DONALD: No --

REP. OLVER: -- military position now than we were when this whole business started out, toward the end of the -- the middle of the Cold War, the end of -- toward the end of the Cold War? There was the -- the build up of the Ohios was during the Reagan administration.

ADM. DONALD: Right. If you look at fleet size right now -- and I think what's missing from the conversation so far, is the fact that while we're building Virginia-Class submarines, older classes -- the Los Angeles-Class submarines are coming offline --

REP. OLVER: They're not nuclear.

ADM. DONALD: Yes, sir, they are. Yes, sir.

REP. OLVER: Oh, really? We have older submarines --

ADM. DONALD: Yes, sir.

REP. OLVER: -- than the Ohios?

ADM. DONALD: Yes, sir. Yes, sir. The Los Angeles-Class started coming on service in 1973, with the last one of those built in 1995.

Maybe I -- if you go back and look at the end of the Cold War, the 1990 time frame when we were at our peak, we had approximately 100 attack submarines and 41, or in that area -- 40-so SSBNs. Today we have 54 attack submarines and 14 SSBNs.

If you go out and look, as the Los Angeles-Class --

REP. OLVER: Yeah, but the 100 that you had that long ago were much less capable than any of the --

ADM. DONALD: They, in fact, were less --

REP. OLVER: -- things that we're doing now.

ADM. DONALD: -- they were less capable. That is true. The ships we're building today are better.

Now, if you project out to 2026 time frame, as a result of the older submarines coming offline, and the Virginias coming online -- the older ones are coming off faster because we built them faster, the new ones coming online slower because we're building them slower -- the SSN force structure will get down to 39 ships in around 2026.

REP. FRELINGHUYSEN: Will the gentleman yield? And then all the while, while we're doing what we're doing --

ADM. DONALD: Yes.

REP. FRELINGHUYSEN: -- the Russians are developing a new submarine class, aren't they?

ADM. DONALD: The Russians have a new --

REP. FRELINGHUYSEN: And what -- and we talk about --

ADM. DONALD: -- ballistic missile submarine on service --

REP. FRELINGHUYSEN: -- capabilities here.

ADM. DONALD: -- and they have a new attack submarine just has come on service. And the Chinese continue to build submarines at an aggressive rate.

REP. FRELINGHUYSEN: They're pretty aggressive -- aggressive rate.

ADM. DONALD: At an aggressive rate, correct.

REP. FRELINGHUYSEN: Yeah, and those are -- those are -- those are -- they have some nuclear, right?

ADM. DONALD: They do. Yes, sir, they do.

REP. FRELINGHUYSEN: But most of them are diesel.

ADM. DONALD: Those are diesels, but they are bringing nuclear online --

REP. FRELINGHUYSEN: The sheer number is the issue here.

ADM. DONALD: Correct.

REP. FRELINGHUYSEN: It should cause a fairly high degree of anxiety.

Mr. Olver, excuse me. Thanks for yielding.

REP. OLVER: Should (it ?) -- (off mic) -- cause great anxiety on the part of China and Russia and the U.S., all of us -- (off mic).

The oldest of these -- the Los Angeles, now, I've just started trying to draw myself a list of what's -- what's in the fleet, but I didn't realize that there were much older ones than the ones that we started doing that are still operating. Are you still replacing (their ?) reactors, or are those sort of going out of business as their fuel cycle is complete?

ADM. DONALD: The Los Angeles class, the first half of that class were -- they did not have a, what we call, the life-of-the-ship core. So most of those -- many of those went through --

REP. OLVER: But all the new ones are supposed to have a life-of- the-ship core.

ADM. DONALD: The second half of the class -- the 31 ships in the second half of the class all had life-of-the-ship cores, so those are just continuing to deplete. And their life is determined by their whole life, which is 33 years. So they retire

at the 33-year point, and typically, they're typically running low on fuel. So it works at both of them. That's when they reach obsolescence.

REP. OLVER: What's the whole life of the Ohios?

ADM. DONALD: The Ohios right now is 42 years -- 42 to 44, it depends on the operational life-of-the-ship. That was extended from about 35 years, based on some of additional analysis --

REP. OLVER: So those that were built in the -- in the -- in the middle '90s have a life -- whole life that goes on until at least 2030?

ADM. DONALD: They start coming off line in 2027.

REP. OLVER: 2027. So they're going to be there -- they're beginning to come off line in 2027.

ADM. DONALD: Correct. Right.

REP. OLVER: For the Ohios --

ADM. DONALD: Correct.

REP. OLVER: -- coming off line?

ADM. DONALD: Correct.

REP. OLVER: Which sort of fits with the idea that you have authorization for the replacements of platforms at 2021, and commissioning is some years later?

ADM. DONALD: Correct. Yes, sir.

REP. OLVER: It's always a possibility. So the two years hasn't lost you anything, because the lifetime of the Ohios still goes -- they must start to come offline by late '20s.

ADM. DONALD: 2027. That's correct.

REP. OLVER: OK, now, for replacement of nuclear reactors you -- for refueling those nuclear reactors, those that are not lifetime -- and we don't have any yet that are online that are lifetime. Is that right?

ADM. DONALD: No, sir. We have the --

REP. OLVER: (Inaudible) -- Virginias have lifetime?

ADM. DONALD: A quick summary: The Los Angeles class that are in the fleet today all have life-of-the-ship cores. The Seawolf class -- there's three of those, they have life-of-the-ship cores. The Ohio class have a midlife refueling, so at approximately the 20-year point or so, they go in and have a midlife refueling. The Virginia Class are life-of-the-ship cores for 33 years.

REP. OLVER: OK. I don't think I need --

REP. FRELINGHUYSEN: Need any more encouragement.

ADM. DONALD: (Chuckles.) I was done anyway. (Laughter.)

REP. OLVER: -- (inaudible) -- on this, but --

REP. FRELINGHUYSEN: Mr. Olver wanted --

REP. OLVER: -- isn't there --

Do you want your turn? I'll yield.

REP. FRELINGHUYSEN: OK, well, thank you. (Laughter.)

Since Ms. Harrington is here, I want to focus in on, I guess, North Korea. There have been reports that North Korea has agreed to stop nuclear tests, uranium enrichment, long-range missile launches, and allow checks by nuclear inspectors, and to resume disarmament talks, and these are encouraging developments. I've heard the secretary of state weigh in, and obviously weigh in with a note of caution.

NNSA has previously performed work in North Korea, verifying the shutdown of nuclear facilities there. How did we leave it when we left? And how would you characterize where we are now? When you left Dodge, what --

MS. HARRINGTON: (Chuckles.)

REP. FRELINGHUYSEN: When you left North Korea, where were you?

MR. D'AGOSTINO: OK, well, I mean, maybe I'll start, and then -- When we left, we had taken down the cooling tower with the North Koreans. That was the tower that provided the cooling for their reactor. This was the reactor that was involved in production of materials, obviously, for a particular program.

And also, you know, the -- we just had a few people there working with the North Koreans in this particular effort. And there was a period of time -- and the exact year escapes me, it was a few years ago -- where we were told to leave; and we left, of course. Since that time, just the recent news, of course, is very encouraging.

Previously in our budget request we had resources -- we had requested resources to be able to put together containers and the right tooling, because there was going to be the question after you shut down a reactor and you want to defuel it, then the fuel has to go somewhere. And it's a very involved process, and Ms. Harrington's -- Anne's folks do this -- work with other countries and do this regularly, so we were called to assist in that effort.

Because there was this pause, we have not asked for those resources in the fiscal year 2013 request. The recent developments, of course, happened after our budget was submitted, and proposed and was released publicly three or four weeks ago. So, if things progress, we will obviously have to be nimble on our feet here, and work with the committee on that.

REP. FRELINGHUYSEN: (Off mic) -- realistic here. I served on the committee during the Clinton administration and we, you know, agreed to follow the direction of, you know, the administration and the State Department. There were some lessons to be -- to be learned, but we need to be -- think positively.

MR. D'AGOSTINO: Right.

REP. FRELINGHUYSEN: And I think any outreach -- you know, considering all the talk about what the new leader might do to establish his reputation -- this is not a bad signal coming from North Korea.

MS. HARRINGTON: Correct. And we are in very tight coordination with our colleagues at the State Department -- Rose Gottemoeller is now acting undersecretary; my counterpart -- (inaudible) -- Madelyn Creedon at the Defense Department -- about how we will move forward. I think we're all in agreement right now that are at the end of a beginning. The negotiation of the food package is under way.

We have a very long way to go before we would, I think, be on the ground for nuclear issues again, but we have offered the full resources that we can provide to our colleagues at the State Department for technical backup on this, and we're ready to go back in if necessary.

REP. FRELINGHUYSEN: Well, thank you.

I want to shift gears here. No hearing would be beneficial without talking about the MOX fuel fabrication facility. (Chuckles.) (Laughter.)

(Cross talk.)

REP. FRELINGHUYSEN: So, here we go.

So your five-year plan shows almost a billion dollars in operating costs for the MOX facility, (nothing ?) including project start-up costs of the facility that are funded as, quote, "other project costs," unquote, in the construction project.

Buried in the project details, we've noticed a major change in the estimated annual costs of operating this facility.

Your reported annual operating costs have ballooned to 5 million (dollars) -- 500 million (dollars) a year, over two-and-a-half times the costs projected just two years ago when you stated they would be only \$185 million per year.

To make matters worse, your request states that the current estimates, quote, "should be considered preliminary." Whoa. Can you explain what is driving these costs up so substantially? And what do you think the ultimate costs will be?

MR. D'AGOSTINO: These earlier budget -- presidential budget requests provide a projection out in the future on what we think the annual operating costs will be. These were done in advance of the construction experience that we've had, the understanding -- the complexities associated with getting the right kind of people to operate the facility.

The environment and the nuclear environment in this country has changed dramatically over the last few years in many respects. What we have -- what we've realized is that the -- a nuclear qualified operator is a precious commodity. Admiral Donald knows this, because many of the folks, frankly, that end up in the commercial side, end up being trained under --

REP. FRELINGHUYSEN: We know that the --

MR. D'AGOSTINO: -- under the programs.

REP. FRELINGHUYSEN: -- Naval Reactors trained a lot of remarkable people that go into the private sector.

ADM. DONALD: And the public sector.

MR. D'AGOSTINO: Yeah. I was one that didn't make it into the private sector, sir. (Laughter.)

REP. FRELINGHUYSEN: We thank you too for many years -- what, is six years.

MR. D'AGOSTINO: Yes, sir.

REP. FRELINGHUYSEN: Thank you. The longest standing -- (chuckles) -- representative.

MR. D'AGOSTINO: Thanks, sir. (Chuckles.)

The challenge we -- so, some of these -- well, we have projections, because we're still projecting five years from now what it costs to operate this facility. The MOX facility, at our current rate, we'll be looking at kind of some cold start-up operations, which is not really full-up operations, and then getting into hot operations, 2016 to 2018 time frame. So we're still projecting out five years from now. But one thing we've learned is that we're going to have to compete very severely -- very strongly to get the right kind of people to operate this facility.

REP. FRELINGHUYSEN: Getting the right people to operate the facility is related to controlling the cost growth, or is that -- does that fall into your shop?

MR. D'AGOSTINO: Well, I'm competing in the market for these people. It doesn't fall under -- completely under my shop. There was recently a construction project just across the river in Vogle, which is drawing a lot of talent. We're competing to retain our people on the MOX project itself --

REP. FRELINGHUYSEN: I think many of us are happy with what's going on over there. I think that's a -- you know, I think that's a good endorsement. I'm pleased that the administration has, you know -- you know, was there to endorse that --

MR. D'AGOSTINO: I agree.

REP. FRELINGHUYSEN: -- basically, a new generation of reactors.

MR. D'AGOSTINO: Right, sir, a new generation of reactors and a new generation of operators for those -- for the re-surgent nuclear industry.

We happened to be on the front end of that, leading -- with respect to on the, on essentially what I would call on the non-military side of the equation. And this is why some of these costs are -- we believe some of these costs are going up.

I don't believe that's the full extent of the increase in dollars that we have in our budget. I'll have to get back to you with -- because I think you described a multi-hundred to 500 a year on operating costs. And I think --

REP. FRELINGHUYSEN: And do you have --

MR. D'AGOSTINO: -- I think maybe the thing -- (inaudible) --

REP. FRELINGHUYSEN: You haven't challenged my figures, but I think we --

MS. HARRINGTON: Right. No, wait.

REP. FRELINGHUYSEN: There's some challenges here. I think the basic question is, if -- if we have these challenges, you know, inherent in this project, you know, why are you sort of proceeding full speed ahead to -- with start-up plans? I mean, I -- I mean --

MS. HARRINGTON: We can provide you with a detailed breakout of where these projections came from and why there have been some changes in the figures, and I think that will help you understand where we're going in the future. At this point --

REP. FRELINGHUYSEN: Because there have been even issues, like, you know, there was some incident that had to do with people sent for training before some people were sent abroad to be trained. Is that right?

MS. HARRINGTON: No, that has not happened.

REP. FRELINGHUYSEN: That has not happened.

MS. HARRINGTON: No.

REP. FRELINGHUYSEN: So that -- there's -- there's no -- nothing here.

And is it true that the Navy pays a million dollars to fully train a fighter pilot, who must -- oh, excuse me. OK, there was a -- there was a -- there was talk of sending 90 employees to train in France before the facility was operational?

MS. HARRINGTON: There will be training at the reference facility in France prior to operations, so that those people can come back and become the on-site trainers for all additional personnel who will work in the unit. But they have to be trained at the reference facility.

REP. FRELINGHUYSEN: So they are going, or not going?

MS. HARRINGTON: They will go at some point in the future, but at a time that is appropriate --

REP. FRELINGHUYSEN: When we -- when the challenges are further examined?

MS. HARRINGTON: Correct.

REP. FRELINGHUYSEN: Yeah.

The Navy pays a million dollars to fully train a fighter pilot who must serve for eight years of active duty. If we're investing \$1 million per person, do these workers -- will these workers have any contractual obligation to remain employed at the facility through start-up -- assuming it ever starts up -- and operation for 2017 and beyond?

MS. HARRINGTON: I don't believe we're training -- we're paying a million dollars per person to train them. I think it's a million dollars to train the 90 people in France.

REP. FRELINGHUYSEN: Well, if we do the -- I think from our math, it comes out to that figure.

Mr. Olver.

REP. OLVER: Thank you.

Since you started now talking about MOX, Mr. Administrator, you mentioned in your testimony that we were on track to dispose of some eight or 10 tons of highly enriched uranium and plutonium. But we don't have the MOX up and ready to go, so what are we doing to dispose of that now?

MR. D'AGOSTINO: The uranium that we bring back -- repatriate, if you will, because some of the -- this is U.S. flagged material that we're bringing back from reactors that --

REP. OLVER: But the MOX does not --

MR. D'AGOSTINO: -- we converted --

REP. OLVER: -- yet function?

MS. HARRINGTON: No.

MR. D'AGOSTINO: No, sir. The MOX is only dealing with the plutonium piece of the equation, so that -- we handle the uranium and plutonium a bit differently.

REP. OLVER: But the tonnage, then, is of both uranium and plutonium?

MS. HARRINGTON: No. We have a bilateral agreement with Russia under which we will each dispose of 34 metric tons of excess weapons plutonium. So that is the material that is subject to the MOX program. We also have an additional, approximately 9.4 tons of other plutonium that we could process through that plant, should we choose.

REP. OLVER: And so then when the administrator spoke of removers disposing of 4,000 kilograms, which would be a bit over 8,000, 9,000 pounds or something, that it's -- that's -- that's the guy that gave me the tonnage that I --

MS. HARRINGTON: Right. That's material outside the United States.

REP. OLVER: OK.

MS. HARRINGTON: (Chuckles.) We have different amounts of material in and out of the United States.

REP. OLVER: All right, but in your testimony, you said that, that was matched by the Soviets. Now, the difference is, though, that the Soviets are burning the plutonium in a breeder reactor. We are intending, under the MOX, to make it into a dry oxide somewhere.

MR. D'AGOSTINO: Right. Yes, sir.

MS. HARRINGTON: And they will do the same.

REP. OLVER: They think -- Oh?

MS. HARRINGTON: Yes.

MR. D'AGOSTINO: The Russians -- yeah, the Russians --

REP. OLVER: Ultimately.

MS. HARRINGTON: Yes.

MR. D'AGOSTINO: -- ultimately will do that.

REP. OLVER: So we're not using a breeder reactor process, so we're not actually using that for utility -- for utility purposes.

MS. HARRINGTON: Right. And under the -- under the agreement, the 34 metric tons of weapons plutonium that the Russians will disposition also will not be in a reactor that breeds. It will only burn, and it will burn MOX fuel, but that's -- that a condition of the agreement.

REP. OLVER: OK. I'd be a -- I'm beyond my --

MR. D'AGOSTINO: I think -- I think the biggest change, sir, is, in the past, the original plan for the material we've both burned in the light water reactors, both in the United States and in Russia. The amended plutonium management disposition agreement allowed for the Russians to not burn it in a light water reactor, but burn it in a fast reactor, but use -- burn it in a fast reactor, such that they are not breeding additional plutonium. That's the key difference that happened.

And you're absolutely right, there is a -- there is that change that, some would argue, that says, well, you've -- you've walked away from the original agreement.

REP. OLVER: They have walked away from the original --

MR. D'AGOSTINO: No. No, we don't -- we don't believe they've walked away.

(Cross talk.)

REP. OLVER: But, the reason for their agreement -- (inaudible) -- was going to do the one, and we were going to do the other.

MR. D'AGOSTINO: Some people would --

MR. D'AGOSTINO: Yes, sir.

MS. HARRINGTON: Yes.

MR. D'AGOSTINO: Yes, sir.

MS. HARRINGTON: Yes.

REP. OLVER: Ah.

MR. D'AGOSTINO: That creates a -- it's very -- it's confusing in that way.

MS. HARRINGTON: And the Russians are well on track to meet the date by which we've agreed, to both begin disposition and have -- have, in fact, invested several billions of dollars into the construction of a new reactor for this.

REP. OLVER: To do that?

MS. HARRINGTON: Correct.

REP. OLVER: Are we at the same level of on-trackness for bringing the MOX --

MS. HARRINGTON: We are, at this point --

REP. OLVER: -- online?

MS. HARRINGTON: -- perhaps slightly behind the Russians.

REP. OLVER: Ah. OK.

I'll quit here, whenever you want to give time to Mr. Womack, but otherwise --

REP. FRELINGHUYSEN: Let's give -- let's give Mr. Womack a chance to have a few words, if that's all right, for a minute.

REP. OLVER: Fine.

REP. FRELINGHUYSEN: Mr. Womack. Thank you for being here.

REPRESENTATIVE STEVE WOMACK (R-AR): Thank you, Mr. Chairman. And, look, I'm going to be very brief, because I've been in another hearing, and I came in to listen to the tail end of this one.

I just want to say, Mr. Chairman, how -- what a great honor it is to be a members of Congress and to be represented in the agencies by the panel that's before us today.

And Mr. D'Agostino and Admiral Donald and Ms. Harrington have all been very gracious -- just absolutely splendid cooperation in taking people with a very little working knowledge of the subject matter here, and helping me achieve that learning curve.

So I just want to say publicly, Admiral, Mr. D'Agostino and Ms. Harrington, what a true pleasure it is to work with you through these -- through these issues, and to be able to help your agency help America, so thank you so much.

ADM. DONALD: Thank you, sir.

MS. HARRINGTON: Thank you.

REP. WOMACK: And I'd be more than pleased to yield some of my time to the distinguished gentleman down to my right.

REP. FRELINGHUYSEN: Must be talking about you. (Laughter.) I'd be happy to hook into that, but -- (laughter) -- take the floor, and then I have some questions, and we may, you know, move toward some sort of a conclusion here.

REP. OLVER: Well, I want to follow one other line, though I have probably kind of harrowed across my discussions enough that I can -- probably -- (inaudible) .

My understanding is that the U.S. Enrichment Corporation, which produces our enriched uranium for both utility purposes and for military reactor purposes -- the Naval Reactors. Is that correct? The enriched uranium for both those purposes comes from that site?

ADM. DONALD: On the Naval Reactors side, no, sir, not today. The fuel stock for ours comes through dismantled weapons, and that work is done at Oak Ridge for us. But, no, sir.

REP. OLVER: All of the --

ADM. DONALD: Yes, sir.

REP. OLVER: -- all of the Naval Reactors' fuel --

ADM. DONALD: Correct.

REP. OLVER: -- is done at Oak Ridge?

ADM. DONALD: Correct, from dismantled weaponry.

REP. OLVER: OK. All right, well, then I'll -- let me follow, then, with the administrator the line I'm thinking here. There is a -- is the Paducah plant slated to terminate this year, to end operations this year?

MR. D'AGOSTINO: Well, the Paducah plant is operated by the United States Enrichment Corporation, which is facing some significant challenges.

We have proposed in our 2013 request for a \$150 million line item. Your comments in your opening statement, sir, described, you know, that a section of the increase associated with nonproliferation is offset by this \$150 million request. So actually the increase wasn't on -- the core work was not really this change. Absolutely correct, from that standpoint.

What we believe is that it's very important for the United States to maintain an indigenous U.S. capability to enrich fissile material. It's important on a number of fronts. One of the fronts, ultimately, is to provide the materials that Admiral Donald's follow on -- people that follow on in the Naval Reactors program will absolutely need in order to keep our submarines and aircraft carriers operating. Because, in order to -- the other -- the other reason it's important is, in order for me to have unencumbered, domestically produced, low- enriched uranium, so that I can continue to have tritium for our nuclear stockpile.

But it's important on other fronts as well. Particularly, we believe that in order to avoid the -- want to discourage the unnecessary spread of enrichment technology, that other countries need to have confidence in the uranium enrichment market to be able to supply its needs; and that having a domestic U.S. capability, the country that, frankly, invented this technology in its infancy, and developed this technology in its infancy, that confidence is absolutely important to market stability.

But there's more. There are other reasons that Anne Harrington could talk about, with respect to the nonproliferation benefits associated with having a domestic and indigenous capability in this country. That's why we feel it's important that we don't focus necessarily on USEC, the United States Enrichment Corporation, but we focus on what is the most promising technology, to date, to maintain an indigenous U.S. capability. And we believe that the technology that has -- that USEC has developed provides that opportunity.

And Ms. Harrington, if you'd like to add to that, I'd -- maybe some of the nonproliferation benefits associated with an indigenous capability will be helpful for getting --

MS. HARRINGTON: Right. Or if -- did you have another specific question there? I just want to underline --

REP. OLVER: Well, why do you take -- why do you place it under nonproliferation, if we're talking about the tritium material? And the tritium production is under defense --

MS. HARRINGTON: Defense programs.

REP. OLVER: Programs.

MR. D'AGOSTINO: Yes, right.

MS. HARRINGTON: Yes. Let me explain that.

It might seem logical to put it there, but the R&D office that I have in my small universe is our residence's repository of expertise on centrifuge technology. It's an area that we look at, in terms of foreign weapons programs and so forth. So we have a fair amount of knowledge.

We also have an extremely close working relationship with our colleagues in the Nuclear Energy Office at the Department of Energy, which also has interests here. We work very closely on this issue. But the main discussion of this issue has been on the NNSA side, over the past year to 18 months, which is why it seems logical to manage this next piece of the portfolio out of an R&D office that actually has the experience in running and assessing R&D projects.

REP. OLVER: OK. I think one could argue it either all belongs in one or the other, and maybe it is one of those cases where there needs to be internal cooperation --

MR. D'AGOSTINO: Mm-hmm.

MS. HARRINGTON: Very much.

REP. OLVER: -- along the way. So I'll accept that one.

Do the -- does the utility industry get its nuclear refueling -- nuclear refueling fuels all from this plant as it presently operates, if that's the only one that is U.S. owned, that is making super enriched --

MS. HARRINGTON: No. No --

REP. OLVER: Not super enriched, but --

MS. HARRINGTON: There are a number of power plant fuel providers --

REP. FRELINGHUYSEN: Would you just provide --

(Cross talk.)

REP. FRELINGHUYSEN: Year, there's some -- they're based here. But would you just give us a -- give the --

MS. HARRINGTON: Right.

But --

REP. FRELINGHUYSEN: -- Mr. Olver a view of the landscape here --

MS. HARRINGTON: Right. That --

REP. FRELINGHUYSEN: -- just a little bit, please.

MS. HARRINGTON: USEC is the only one that we can consider indigenously American, and therefore appropriate to produce material that we would use for defense purposes.

REP. OLVER: So the 100, plus or minus, utility power plants are buying from them or from others --

MS. HARRINGTON: Or from other fuel providers.

REP. OLVER: Do you know what proportion is bought from the USE -- EC?

MS. HARRINGTON: Well, the material that comes out of USEC, particularly for example, USEC is our -- is a partner with the Russians in our HEU blend-down program, where we have taken 500 metric tons of surplus Russian military highly-enriched uranium and down-blended it in this country for use in our own power plants. One out of every 10 light bulbs in the United States is powered with that fuel. So they have -- they have a reasonable share of the market, but it's -- it's not by any -- you know, it's not a -- it's not a monopoly position in the United States.

REP. OLVER: You know, I have a hard time --

MS. HARRINGTON: There is a uranium fuel market in the United States, and we can give you more information on that, if you wish.

REP. OLVER: I have a hard time measuring what the relatively is here on that scale -- (inaudible) --

REP. FRELINGHUYSEN: I may jump in for a few more general questions, if I could.

REP. OLVER: Do you want to jump in?

REP. FRELINGHUYSEN: Yeah, OK. I just -- I just want to get back. I've been a little bit Ohio-class-centric here. I just -- I'm concerned about the billion dollars taken out of your five-year planning estimates.

In terms of you, Admiral, you're responsible for the prototype refueling project. You're responsible for the things occurring at Idaho. How is that going to impact our -- you know, your work in those areas?

ADM. DONALD: Yes, sir. Just one quick one to correct one statement I made earlier about the number of authorized Virginia class submarines. It's 16 through FY -- through 2012, instead of 12.

Yes, sir, if you look at the three major projects that we had discussed for the last couple of years in there, the funding that's in the budget for FY '13 supports continuing the prototype -- land-based prototype core. It reflects the two-year slip in Ohio, which we've talked about. The one we haven't touched on is the recapitalization of the expended fuel facility -- the expended core facility in Idaho.

REP. FRELINGHUYSEN: For that, you're requesting \$50 billion more.

ADM. DONALD: That is 28.6 million (dollars) --

REP. FRELINGHUYSEN: That was --

ADM. DONALD: -- this year.

REP. FRELINGHUYSEN: Yeah, OK.

ADM. DONALD: And it is less than what we had --

REP. FRELINGHUYSEN: Last year you'd indicated you were going to --

ADM. DONALD: Yes, sir, I --

REP. FRELINGHUYSEN: -- 50 billion (dollars) -- \$50 million more.

ADM. DONALD: Yes, sir.

And where we -- where we stand with that one is, that money -- the 28.6 million (dollars) this year allows us to continue with the conceptual design of the new facility, and it also allows us to continue the environmental protection -- the NEPA Environmental Protection Assessment that we have to do. But we -- the outyear funding does not support delivering the facility that we had discussed last year by the 2020 time frame.

REP. FRELINGHUYSEN: So is that why there's nothing in this request, or?

ADM. DONALD: That we -- we have been -- we've got some action to take, to go back and work with OMB to first evaluate options for fitting that project within existing top-line budgets, and also to come back to OMB to provide some alternatives if that doesn't necessarily work. And that --

REP. FRELINGHUYSEN: Well, the projects needed it.

ADM. DONALD: It is absolutely needed.

REP. FRELINGHUYSEN: Yeah, you need to --

ADM. DONALD: And it is factual that the facility, as we envision it today, will not fit -- that bill will not fit underneath our top line in the outyears if we continue to do the work we need to do for the fleet and support the fleet at others. So we've got a lot of work to do --

REP. FRELINGHUYSEN: How would you characterize the robustness of the design that you have at this point?

ADM. DONALD: We're in the -- we're in the very early stages of the -- of the concept design work right now. So we've defined the facility, what we think it needs to do; and working on the location for the -- the specific location for the facility. But we're in the early design stages of that right now.

REP. FRELINGHUYSEN: You'll be requesting funding?

ADM. DONALD: Yes, sir.

REP. FRELINGHUYSEN: For a design and construction?

ADM. DONALD: Yes, sir, we will.

REP. FRELINGHUYSEN: And how much do you -- would you anticipate?

ADM. DONALD: I think it's -- it's early to answer that question right now, given the work we have to do with OMB over the next several months.

REP. FRELINGHUYSEN: Admiral, shifting to the -- I know that the administrator has environmental clean-up and management under his purview this year. Can you talk about the clean-up project in KAPL? You have \$24 million requested.

ADM. DONALD: This is the SPRU?

REP. FRELINGHUYSEN: Yes, the SPRU. Yeah, the SPRU clean-up project.

ADM. DONALD: What I would recommend is -- I'll give you the overview with respect to where Naval Reactors stands with that, and then it might be best for Mr. D'Agostino to answer the specifics of it.

REP. FRELINGHUYSEN: I think there's 24 million (dollars) requested in here -- part of this budget is there? In environmental management?

ADM. DONALD: EM?

REP. FRELINGHUYSEN: In Mr. D'Agostino's -- in your shop?

MR. D'AGOSTINO: I haven't -- I'm -- if that's the -- I don't -- I don't remember the exact number for SPRU. There are any number -- hundreds of projects that we fund.

But I'm actively involved in the SPRU project itself, from the standpoint of getting the -- getting this thing back on track. We had a problem about -- I'd say about a year-and-a-half ago or so, with one of the subcontractors to our contractor on this particular project. As a result of that particular problem, some contamination was spread. As a result of that contamination spread, we had lost some confidence with our state regulator.

And so we've -- I've called in literally the leadership of the contract organization on this particular project, and we're asking -- we're holding them to our -- holding each other to our commitments to get this thing done. I will take for the record what our exact number is, and we'll get that submitted to the committee.

REP. FRELINGHUYSEN: We're dealing with the issue satisfactorily?

ADM. DONALD: Yes, sir, we've got a lot of work left to do.

Just to be clear, the SPRU facility is -- it's on the Knolles Atomic Power Laboratory property, but it's not -- it's not a part of the Knolles Atomic Power Laboratory. It's a separate facility. And the dividing lines are: Naval Reactors -- we are responsible for the KAPL facility, Knolles Atomic Power facility; and EM is responsible to SPRU.

We obviously have a vested interest in this, since -- the adjacent nature, and also the engagement with the New York state regulators on this, that we're paying close attention to it.

REP. FRELINGHUYSEN: It's being dealt with?

ADM. DONALD: Yes, sir.

REP. FRELINGHUYSEN: Good.

Mr. Olver, anything?

REP. OLVER: Thank you, Mr. Chairman. I'll be relatively brief here. I think we may have to have some additional conversation.

I am told now by staff that the USEC is -- only provides about 20 percent of the -- of the enriched uranium that goes to our domestic industry -- our domestic power industry, which means there's a lot of -- that domestic power industry is getting it from other places, which I don't have any sense of. And if you can -- if you can enlighten me on where that is, either in writing or other, or maybe even just a briefing of some sort, that would be -- that would be fine.

But the -- you have -- this 150, and for some time they have been trying to -- and we have funded early on -- really, some eight years or so ago, started the funding of a different plant, using a different technique, rather than, rather than gas diffusion to go to a different mechanism in a new -- totally new plant.

And I'm curious on that, because now that -- now that I know much of the industry is already getting it from other sources, and seems to have been figured out how to do that, and most of our domestic industry operates on the basis of long-term contracts for the enriched uranium that goes into those power plants, I'm wondering what -- why is it so important that we get into this whole new building of a program which seems to be quite troubled -- if it was started in 2003, to build the plant in Ohio -- why are we, why are we headed forward on that one? It seems like one that is troubled and quite expensive.

MR. D'AGOSTINO: Very expensive.

REP. OLVER: Pardon?

MR. D'AGOSTINO: Yes.

Our desire is -- my desire is to maintain a domestic or indigenous U.S. capability in enriching fissile material for national security purposes. I think it's critically important, as we mentioned briefly earlier, on the tritium side. It's critically

important on our ability to assess foreign countries' progresses in enrichment technologies, because we can do the types of R&D work on enrichment technologies that help essentially develop expertise in this area. So we can advise intelligence agencies, and others within the administration and future administrations on the progress that other countries are making in this area -- whether they're making progress to advance their weapons programs, counter to their obligations on treaties, and the like.

So I'm thinking of it just from a personnel development standpoint and from a research and development capability alone. It's important for the U.S. to maintain this indigenous capability.

You referenced this plant, I think -- this activity, a research project activity managed by the United States -- currently managed by the United States Enrichment Corporation. This, we believe -- I'm not talking about United States Enrichment Corporation -- we believe the technology that's developed is the closest and best opportunity for the U.S. to maintain a capability for national security purposes. It has the -- for the reasons Anne mentioned, for the reasons I mentioned, and we didn't get -- even get an opportunity to talk about the advantages that it might provide to the -- that it provides to the Naval Reactors program in the outyears.

So we believe -- and this is not \$150 million to USEC per say. This is \$150 million to develop an R&D program that the nonproliferation program will work with any on the structure of that particular program. We'd be happy, of course, to meet with you on some of the specifics, and we do know that we'll be providing the committee some additional information, some questions that we have received earlier, prior to the hearing. So we'd be glad to provide those as well, make sure you have those as well.

REP. OLVER: I think I recognize that this is a much more complicated question than I thought it was.

MR. D'AGOSTINO: Yes, sir. It's complicated.

REP. OLVER: OK, I'll --

REP. FRELINGHUYSEN: It's complicated --

REP. OLVER: -- quit there.

MR. D'AGOSTINO: Maybe we should have a briefing.

REP. FRELINGHUYSEN: Yeah, and it's almost time to -- the last word will go to Admiral Donald. There's been some manning issues. Would you comment on some of those?

ADM. DONALD: Yes, sir. I think one of the things I -- as I come to the close of this tour -- I've been involved in, the thing that I take the greatest sense of reward about is the people that are associated with the program, those who are currently in, and who have been associated with it in the past, and what they do on a day-to-day basis.

If you look at our -- at the enterprise -- not the ship, but the nuclear propulsion enterprise, we're going through a unique time in our history, in that the -- there's a demographic shift that's in progress at our laboratories and our shipyards, where our older workers are starting to move into well-deserved retirement. We've got a large number of very bright young folks coming in, the beginning of the program. And we have been very fortunate over the last several years. The recruiting environment has been very good on -- maybe the economy not so good, but from a recruiting point of view, very good. We brought very good people in.

Now the challenge before us is to keep those good young people in, continue to hire to replace the folks who are retiring, and transfer the knowledge from the senior folks to the junior. That's in progress as we speak right now, and why it's important that we keep the hiring, and training and retention programs in place that we have right now.

REP. FRELINGHUYSEN: This is a part of our industrial base and we obviously --

ADM. DONALD: Yes, absolutely, it's --

REP. FRELINGHUYSEN: -- pay tribute to other parts of our industrial base which are, we know -- you know, there's been an erosion, which I think it's important that you have --

ADM. DONALD: Yes, sir. We pay close attention to this. Yes, sir.

REP. FRELINGHUYSEN: We have some remarkable people that work for you, and all of you, and we --

ADM. DONALD: Yes, sir.

REP. FRELINGHUYSEN: -- we pay tribute to them. Their work is essential.

And, again, we want to thank you for your many years of service to our nation.

And with that, we stand adjourned. Thank you very much.

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