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FISCAL YEAR 2017 NUCLEAR REGULATORY COMMISSION BUDGET

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND POWER

AND THE

SUBCOMMITTEE ON ENVIRONMENT AND THE ECONOMY

OF THE

COMMITTEE ON ENERGY AND COMMERCE
HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTEENTH CONGRESS

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[1] Mr. Burns submitted a written statement on behalf of the Commission.

FISCAL YEAR 2017 NUCLEAR REGULATORY COMMISSION BUDGET

WEDNESDAY, APRIL 20, 2016

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY AND POWER
JOINT WITH THE
SUBCOMMITTEE ON ENVIRONMENT AND THE ECONOMY,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittees met, pursuant to call, at 10:03 a.m., in room 2123 Rayburn House Office Building, Hon. John Shimkus (chairman of the Subcommittee on Environment and the Economy) presiding.

Members present: Representatives Shimkus, Harper, Olson, Latta, McKinley, Kinzinger, Griffith, Johnson, Long, Ellmers, Flores, Mullin, Hudson, Cramer, Tonko, Rush, Engel, Green, Capps, McNerney, Welch, and Loebsack.

Staff present: Will Batson, Legislative Clerk; Rebecca Card, Assistant Press Secretary; Tom Hassenboehler, Chief Counsel, Energy and Power; A.T. Johnston, Senior Policy Advisor; Chris Sarley, Policy Coordinator, Environment and the Economy; Dan Schneider, Press Secretary; Peter Spencer, Professional Staff Member, Oversight; Andy Zach, Counsel, Environment and the Economy; Tiffany Guarascio, Democratic Deputy Staff Director and Chief Health Advisor; Rick Kessler, Democratic Senior Advisor and Staff Director, Energy and Environment; John Marshall, Democratic Policy Coordinator; Jessica Martinez, Democratic Outreach and Member Services Coordinator; Alexander Ratner, Democratic Policy Analyst; Timothy Robinson, Democratic Chief Counsel; Andrew Souvall, Democratic Director of Communications, Outreach, and Member Services; and Tuley Wright, Democratic Energy and Environment Policy Advisor.

Mr. SHIMKUS. Let's call the hearing to order. If staff could close the door; staff, members take their seats. And I would like to recognize myself for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. JOHN SHIMKUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

We want to welcome the NRC. Welcome for coming. Good morning and welcome to examine the Nuclear Regulatory Commission's budget request. Nuclear energy is and must remain a central component of our Nation's electricity mix. The NRC's role in overseeing civilian nuclear power reactors serves to ensure that nuclear energy will remain an integral part of our energy future. Thank you

for all being here. I would like to add a special thank you to Commissioner Bill Ostendorff for his service on the Commission. This will be his last appearance before this committee as a Commissioner. I know that breaks your heart.

I appreciate Commissioner Ostendorff's willingness to speak up on the need for the Federal Government to fulfill its legal, I will add, obligation to dispose of spent nuclear fuel. You will be an invaluable asset to your alma mater, United States Naval Academy. Of course, they need a lot of help there, and as a distinguished visiting professor of national security. The next generation of military leaders will greatly benefit from your deep knowledge and expertise on national security issues. Good luck to you.

My home State of Illinois generates the most nuclear energy in the Nation. Nuclear energy is a major contributor to Illinois' economic wellbeing, and must continue to remain so. Our reliance on nuclear power plants also means my constituents and ratepayers throughout the State provide more funding to the NRC than any other State. Therefore, the agency's effort to right-size the organization and streamline efficiency is of great importance to me and my constituents.

This morning, we will examine the NRC's fiscal year 2017 budget request. I appreciate the initial steps the Commission has taken to reduce its budget to date, but the budget reductions thus far are inadequate. Yesterday, the House Appropriations Committee considered the energy and water appropriations bill for the upcoming fiscal year. And I support Chairman Simpson's funding level for the NRC of $936 million, including $20 million for the Nuclear Waste Fund for Yucca Mountain activities.

This committee will continue to provide close oversight of the Commission to find further opportunities to increase efficiency and reduce the budget. Let me also be clear, these efforts will not compromise the safety of our nuclear power plants, nor will they prevent the NRC from fulfilling its mission to protect public health and safety.

Last Wednesday the Commission approved an additional $30 million in reductions through rebaselining and prioritization efforts. I hope that the additional reduction in workload and responsibility will translate to a tangible reduction of NRC staff. However, just because the Commission has voted on these recommendations, Project Aim 2020 is not complete. As the Commission stated, and I quote, "It is important that the completion of the rebaselining effort and the other Project Aim tasks be view by the NRC staff and stakeholders as the beginning and not the end in our goal to be better positioned to respond to the challenges of 2020 and beyond."

I would be remiss if I didn't express my dissatisfaction that once more, the Commission failed to include funding to continue consideration of Yucca Mountain's license application. This Congress, I have held a series of hearings to examine different issues associated with development of a comprehensive solution to disposal of used fuel. I will continue to advocate for a bipartisan solution that must include Yucca Mountain.

This committee has been persistent in its oversight to assure the NRC complies with the Nuclear Waste Policy Act. The courts di-

rected the NRC to spend previous appropriated nuclear waste fund money. And I understand that funding will be nearly exhausted by the end of this fiscal year. I hope you are taking all the necessary steps to maintain the necessary expertise and infrastructure to continue consideration of the Yucca Mountain license application.

I look forward to hearing from the Commissioners today. And I thank you for your service. With that, I've ended my opening.

[The prepared statement of Mr. Shimkus follows:]

PREPARED STATEMENT OF HON. JOHN SHIMKUS

Nuclear energy is and must remain a central component to our Nation's electricity mix. The NRC's role overseeing civilian nuclear power reactors serves to ensure that nuclear energy will remain an integral part of our energy future. Thank you all for being here.

I would like to add a special thanks to Commissioner Bill Ostendorff for his service on the Commission. This will be his last appearance before this committee as a Commissioner. I appreciate Commissioner Ostendorff's willingness to speak up on the need for the Federal Government to fulfill its obligation to dispose of spent nuclear fuel. You will be an invaluable asset to your alma mater, the United States Naval Academy, as a Distinguished Visiting Professor of National Security. The next generation of military leaders will greatly benefit from your deep knowledge and expertise on national security issues. Good luck.

My home State of Illinois generates the most nuclear energy in the Nation. Nuclear energy is a major contributor to Illinois' economic well-being and must remain so. Our reliance on nuclear power plants also means my constituents and ratepayers throughout the State provide more funding to the NRC than any other State. Therefore, the agency's efforts to right-size the organization and streamline efficiency are of great importance to me and my constituents.

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This committee has been persistent in its oversight to assure that NRC complies with the Nuclear Waste Policy Act. The courts directed the NRC to spend previously appropriated Nuclear Waste Fund money and I understand that funding will be nearly exhausted by the end of this fiscal year. I hope you are taking all necessary steps to maintain the necessary expertise and infrastructure to continue consideration of the Yucca Mountain License Application.

Mr. SHIMKUS. Anyone want the last minute? If not, I yield back the balance of my time and I now yield to my ranking member, Mr. Tonko, from the great State of New York, for 5 minutes.

OPENING STATEMENT OF HON. PAUL TONKO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. TONKO. Thank you. Thank you, Mr. Chair. Thank you, Chair Shimkus and Chair Whitfield, for holding this hearing. And I want to thank my good friend and cohost on our side, Congressman Rush, for joining with us. I also welcome Chairman Burns and Commissioner Svinicki, Commissioner Ostendorff—and the best to you, Commissioner, as you move forward—and Commissioner Baran for appearing before the subcommittees today.

We are here to discuss the Nuclear Regulatory Commission's fiscal year 2017 budget request of $982.3 million, which reflects a decrease of some $19.8 million below last year's enacted level. It is a decrease of $73.7 million, and 279.7 full-time equivalent employees when compared to the fiscal year 2014 enacted budget. We know the electric utility sector is undergoing major changes. New technologies and markets are changing, grid management, deployment of distributed generation, and the relationship between our utilities and their customers. Nuclear power still accounts for a significant amount of baseload generation. And in some areas, it plays an important role in the mix of power supply, and to ensure the important concept of reliability.

But we must start to consider, seriously, how nuclear power will best fit into the new grid and sector structures that are emerging. Given the trends occurring in the nuclear industry, the Commission has undertaken Project Aim to find deficiencies and streamline the Commission. I understand the goals of Project Aim to right-size the agency in light of the ratio of decommissioning plants to new licenses while still continuing to meet its mission to ensure the safe operation of nuclear facilities and the protection of public health and the environment.

Some Project Aim reductions have already been included in the fiscal year 2017 budget request. Members on this committee have a wide range of views on existing and new nuclear power. But there is unanimous agreement that we need high standards for safety and enforcement of those standards. There is no compromising on that agenda. So I think it is fair that as the Commission's budget and staff is shrinking, we look at calls for expediting the licensing process very closely, and potentially with some skepticism, we must recognize the need for the Commission to be staffed and resourced at levels appropriate for carrying out its very critical oversight and safety missions, first and foremost.

In addition to changes in the utility sector, we must also pay more attention to those changes to the climate. Just reported, The New York Times yesterday, under the title of 2016 Already Shows Record Global Temperatures, according to the National Oceanic and Atmospheric Administration, NOAA, 2016 has been the hottest year to date with January, February, and March each passing the mark set in the year 2015. Out West, persistent drought will pose challenges to the nuclear industry, as most designs require significant availability of water. As a Nation, we will face water scarcity challenges, and nuclear plants' access to sufficient water and sufficiently cool water must be considered.

Elsewhere, floods, hurricanes, and other natural disasters are becoming more and more common. These events can pose serious op-

eration and safety challenges. Some plants may not have been designed or constructed with the frequency and magnitude of these events in mind. The nuclear industry is not immune to the threats of climate change. In the future, severe weather events will happen even more often.

So, I know I speak for many of us when I say the nuclear industry and the Commission need a concerted effort to put strong adaptation and resiliency plans in place to mitigate the effects of climate change.

Last month was the 5-year anniversary of Fukushima disaster. The Commission has worked on developing and implementing lessons learned, and expects a number of safety enhancements to be completed this year. Other longer-term issues will be looked at in the years ahead. And I look forward to hearing what we have learned from this tragedy and what steps are necessary to ensure such a disaster never occurs here in the United States.

I look forward to hearing from all of you today about the Commission's efforts to guide the nuclear industry, and to guide it through the transition that is underway. Again, I thank you all for being here. And I yield back the balance of my time, Mr. Chair.

[The prepared statement of Mr. Tonko follows:]

PREPARED STATEMENT OF HON. PAUL TONKO

Good morning. Thank you, Chairman Shimkus and Chairman Whitfield for holding this hearing. And thank you, Chairman Burns, Commissioner Svinicki, Commissioner Ostendorff, and Commissioner Baran for appearing before the subcommittees today.

We are here to discuss the Nuclear Regulatory Commission's fiscal year 2017 budget request of $982.3 million, which reflects a decrease of $19.8 million below last year's enacted level. It is a decrease of $73.7 million and 279.7 full-time equivalent employees when compared to the fiscal year 2014 enacted budget.

We know the electric utility sector is undergoing major changes. New technologies and markets are changing grid management, deployment of distributed generation, and the relationship between utilities and their customers.

Nuclear power still accounts for a significant amount of base load generation. And in some areas it plays an important role in the mix of power supply and to ensure reliability. But we must start to consider seriously how nuclear power will best fit into the new grid and sector structures that are emerging.

Given the trends occurring in the nuclear industry, the Commission has undertaken Project Aim to find efficiencies and streamline the Commission.

I understand the goals of Project Aim to right size the agency in light of the ratio of decommissioning plants to new licenses while still continuing to meet its mission to ensure the safe operation of nuclear facilities and the protection of public health and the environment. Some Project Aim reductions have already been included in the fiscal year 2017 budget request.

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So I think it is fair that as the Commission's budget and staff is shrinking, we look at calls for expediting the licensing process very closely—and potentially with some skepticism. We must recognize the need for the Commission to be staffed and resourced at levels appropriate for carrying out its critical oversight and safety missions first and foremost.

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Elsewhere floods, hurricanes, and other natural disasters are becoming more and more common. These events can pose serious operation and safety challenges. Some plants may not have been designed or constructed with the frequency and magnitude of these events in mind.

The nuclear industry is not immune to the threats of climate change. In the future, severe weather events will happen even more often. So I know I speak for many of us when I say, the nuclear industry and the Commission need a concerted effort to put strong adaptation and resiliency plans in place to mitigate the effects of climate change.

Last month was the 5-year anniversary of the Fukushima disaster. The Commission has worked on developing and implementing lessons learned and expects a number of safety enhancements to be completed this year.

Other, longer-term issues will be looked at in the years ahead. I look forward to hearing what we have learned from this tragedy and what steps are necessary to ensure such a disaster never occurs in the United States.

I look forward to hearing from all of you today about the Commission's efforts to guide the nuclear industry through the transition that is underway. Again, I thank you all for being here, and I yield back the balance of my time.

Mr. SHIMKUS. The gentleman yields back the balance of his time. The Chair looks to the majority side. Seeing no interest, the Chair now recognizes the ranking member of the Energy and Air Quality Committee, Bobby Rush, from the great State of Illinois, for 5 minutes.

OPENING STATEMENT OF HON. BOBBY L. RUSH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. RUSH. I want to thank you, Mr. Chairman. And I want to thank all of the NRC Commissioners for being here today. I would also, Mr. Chairman, like to welcome back a former staffer from our committee, Commissioner Jeff Baran, who worked diligently in the past on a variety of issues with my office. Welcome back, Commissioner Baran.

Mr. Chairman, it appears that the NRC has fully embraced Project Aim, an initiative designed to significantly downsize the agency that has received much support from members of my colleagues here on Capitol Hill. Five years after the Fukushima disaster, Mr. Chairman, I want to make sure that we are not becoming overly complacent in our attitudes towards nuclear safety, and we are constantly being vigilant in our efforts to prevent a catastrophe from ever occurring here in the United States.

Mr. Chairman, in fact, the NRC request of fiscal year 2017 of $982.3 million represents a decrease of $19.8 million below the fiscal year 2016 enacted level. Additionally, Mr. Chairman, in the area of nuclear reactor safety, specifically, the NRC request of $587.5 million to support activities at current nuclear facilities represents a $1.7 million decrease from the fiscal year 2016 enacted budget.

Mr. Chairman, as part of the Project Aim initiative, the NRC has identified at least 151 activities to be reduced or cut out entirely, including discontinuing or delaying rulemakings, reducing travel, and, in some cases, reducing staff and/or their workloads.

Mr. Chairman, while I understand that many of my colleagues applaud these deep cuts, I think it is important to understand the practical implications of making these decisions before we all start patting each other on the back.

Mr. Chairman, foolishness must never be the sum total of our frugality. With Illinois housing, more nuclear reactors than any other State in the country, my constituents, Mr. Chairman, want to be assured that the agency in charge of safety has all of the funding, all of the staff, and all of the resources it needs to do its job. To that point, Mr. Chairman, I understand that there are still currently 10 Tier 2 and Tier 3 items that remain unresolved from the NRC task force that was established following the Fukushima accident back in 2011. Some of these unsettled items that are still being evaluated by the Commission include various emergency preparedness activities and evaluation of natural hazards, among others.

So, Mr. Chairman, today, I look forward to engaging the Commissioners on these outstanding items, as well as hearing from them directly on the impacts of their proposed funding cuts on the overall safety protocols of the NRC.

Mr. Chairman, as we move towards a more sustainable, reduced energy economy, there is no doubt in my mind that nuclear power must play a vital role in our Nation's overall energy portfolio if we are to achieve these objectives. However, we must also, Mr. Chairman, continue to assure the American public that we have the best safety protocols and practices in place, and that the agency in charge of overseeing these systems have all the resources that they need.

So I look forward to hearing from our Commissioners on these issues in more depth. And with that, Mr. Chairman, I yield back the balance of my time.

Mr. SHIMKUS. The gentleman yields back his time. And based on the two openings statements by my colleagues on the Democrat side, we also want to point out that if climate is a national debate, then the largest baseload generation of carbon-free energy is nuclear. And that has an important part of our debate in this portfolio. So I just want to raise that.

Now, I would like to, again, welcome the NRC. We are going to recognize the Chairman first for 5, and then, I think, 2 minutes each for the other Commissioners. And with that, Chairman Burns, welcome. You are recognized for 5 minutes.

STATEMENTS OF STEPHEN G. BURNS, CHAIRMAN, NUCLEAR REGULATORY COMMISSION; AND KRISTINE L. SVINICKI, WILLIAM C. OSTENDORFF, AND JEFF BARAN, COMMISSIONERS, NUCLEAR REGULATORY COMMISSION

STATEMENT OF STEPHEN G. BURNS

Mr. BURNS. Thank you, Chairman Shimkus and Ranking Members Tonko and Rush, and other distinguished members of the committee. My colleagues and I appreciate the opportunity to appear before you today to give an overview of the NRC's fiscal year 2017 budget request and the agency's current regulatory activities. The NRC, of course, is an independent agency established to license and regulate the civilian use of radioactive materials in the United States, to ensure adequate protection of the public health and safety, to promote the common defense and security, and to protect the environment.

The resources we are requesting will allow the NRC to continue to carry out our important mission. Our proposed budget is $970 million, and 3,462 full-time equivalent staff, excluding the office of the inspector general. The proposal represents a net decrease of nearly $20 million and 90 full-time equivalent from the 2016 enacted budget. The 2017 request reflects a decrease of roughly $74 million and 280 full-time equivalent employees from the fiscal year 2014 enacted budget. And the inspector general's component of the 2017 budget is $12 million.

Consistent with the Omnibus Budget Reconciliation Act, our request provides for 90 percent fee recovery, resulting in a net appropriation of $121 million. This is an increase of $2 million over 2016 due to the inclusion of $5 million in non-fee recoverable resources for advanced nuclear reactor technology. Our budget request reflects our continuing focus on our important mission, while continuing our Project Aim initiative. The Commission has concluded its review of the rebaselining paper, as the chairman noted, and approved a total savings of about $41 million in 2017, of which about $10 million is reflected in the President's budget.

However, we can't emphasize strongly enough that while we expect to be a smaller agency, as a reflection of workload reductions and efficiency gains, the need for the great majority of the services we provide the American people remains unchanged. And as we proceed, the agency remains mindful of the importance of its highly skilled technical staff, and the need to maintain our expertise. We must keep a focus on knowledge management as senior staff retire and new experts take their place.

I would like to highlight one area that the Commission is attending to: improvement in our rulemaking process. The Commission has revised its processes to improve its understanding of and where possible to reduce the cumulative effects of regulation. The Commission is currently considering a proposal to establish a single unified approach to tracking rulemaking activities so the public and stakeholders have access to current information. We carry out our activities through two major programs: the Nuclear Reactor Safety, which includes both operating reactors and new reactors, and Nuclear Materials and Waste Safety, consisting of fuel facilities, nuclear materials users, decommissioning and low-level waste, and spent fuel storage and transportation.

The 2017 budget request for the operating reactors business line supports the implementation of lessons learned from the Fukushima Daiichi Nuclear Power Plant accident in Japan. The requested resources support the continued implementation of the safety significant—most safety significant Tier 1 activities, including continuing implementation of the orders on mitigation strategy, spent fuel pool instrumentation, and severe accident capable hardened containment vents. Resources will also support reviews associated with seismic and flooding hazard reevaluations. The bulk of the most safety-significant enhancements should be completed in calendar year 2016. And we expect to bring to closure our valuation of longer term Tier 2 and Tier 3 issues. We will inspect the work that has been done and ensure that plants maintain their progress. We strongly believe that the United States plants are better prepared for extreme events now than they were in 2011.

The budget request for the new reactors business line will allow us to begin review of a small modular reactor design certification application from NuScale. The budget request includes $5 million in non-fee recoverable activities to implement a strategy for developing the regulatory infrastructure for advanced non-light water nuclear reactor technologies. We will hope it will help us to undertake licensing reviews consistent with the maturity and development pace of the technologies.

Again, members of the committee, it is a pleasure to be here, and we will be pleased to answer your questions. Thank you.

[The prepared statement of Mr. Burns follows:]

STATEMENT OF STEPHEN BURNS, CHAIRMAN
U.S. NUCLEAR REGULATORY COMMISSION

BEFORE THE

HOUSE COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON ENERGY AND POWER, AND
SUBCOMMITTEE ON ENVIRONMENT AND THE ECONOMY

April 20, 2016

Good morning Chairmen Whitfield and Shimkus, Ranking Members Rush and Tonko, and distinguished members of the Subcommittees, my colleagues and I appreciate the opportunity to testify this morning and provide to you an update on the U. S. Nuclear Regulatory Commission's (NRC) Fiscal Year (FY) 2017 budget request and the agency's current regulatory activities.

As you know, the NRC is an independent agency established to license and regulate the civilian use of radioactive materials in the United States to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment. The resources we are requesting for FY 2017 will allow the NRC to continue to uphold our important safety and security mission.

This budget request reflects a reduction from the 2016 enacted budget. NRC's Project Aim is delivering on the promise to achieve efficiencies in both corporate and programmatic areas. The NRC has taken a hard look at the proposed FY 2017 budget, and is proposing reductions in both full-time equivalents (FTE) and contract support dollars that represent real savings. As we continue our work through the Project Aim initiative, we anticipate additional savings and efficiencies to come.

To put this in context, the FY 2017 budget request reflects a decrease of $73.7 million and 279.7 full-time equivalent employees from the FY 2014 enacted budget. We believe this FY 2017

budget request reflects our continuing focus on our important mission while achieving resource savings and improving the agency's efficiency and effectiveness.

THE CHANGING REGULATORY ENVIRONMENT

Beginning in 2001, the agency grew significantly to enhance its security and incident response regulatory structure, and to prepare for the projected growth in nuclear power in the United States. That forecast in growth has been adjusted downward in response to changes in the nuclear industry. As is appropriate, the NRC is being scrutinized by its stakeholders for its response to these changes and the resulting use of resources. The NRC's safety and security mission remains paramount as actions are taken to re-baseline the agency, take a hard look at our workload and achieve efficiencies.

We are confident the agency is on the right track with our Project Aim initiative to find efficiencies, use resources wisely, and streamline processes and regulatory decision making while continuing to meet our critically important safety and security mission. More than $9 million in savings in the FY 2017 budget proposal has already been identified through a comprehensive evaluation that involved staff at all levels of the agency, as well as stakeholder input. The savings, particularly in the areas of rulemaking, travel and corporate support are significant. However, we are continuing to pursue additional efficiencies.

The Project Aim Steering Committee delivered to the Commission a rebaselining paper that outlines additional proposed efficiencies. This paper, which is publicly available, reflects more than 150 activities that could be eliminated or reduced over the next eighteen months, with total potential reductions of $49.5 million. In its decision on this matter, the Commission approved almost all of the staff's rebaselining recommendations for a reduction of about $49 million (of

which, $9.9 million is already included in the FY17 President's Budget). The Commission also directed the staff to perform a set of specific business process improvement reviews in various areas and identify resource savings, and incorporate those savings into the FY 2018 budget and subsequent budgets. Beyond these reviews, we directed the staff to plan further similar reviews in various areas of practice. The Commission emphasized it is important that the completion of the rebaselining effort and the other Project AIM tasks be viewed by the NRC staff and stakeholders as the beginning and not the end to meet our goal to be better positioned to respond to the challenges of 2020 and beyond. The staff recently submitted to the Commission a paper outlining additional areas for longer-term efficiencies and projected workload changes through FY 2020.

However, we cannot emphasize strongly enough that the NRC's ability to ensure adequate protection of public health and safety and the common defense and security will always be our main concern. While our size may change to reflect workload reductions and efficiency gains, the need for the great majority of the services we provide the American people remains unchanged.

As we proceed, the agency remains mindful of the importance of its highly skilled technical staff and the need to maintain our expertise. We must keep a focus on knowledge management as senior staff retire and new experts take their place. We must not forget the success of the agency is due, in no small part, to the quality and dedication of the agency's people. Remaining one of the best places to work in the Federal government is important to our ability to continue to recruit the most talented candidates, and retain our skilled and knowledgeable technical experts.

To highlight one other area where the Commission is focusing on improvement is the Commission's rulemaking process. Over the last several years, the Commission has revised its rulemaking processes to improve its understanding of, and, where possible, reduce the cumulative effects of regulations. These new processes include increased opportunities for stakeholder

interactions and feedback, publishing draft supporting guidance concurrent with proposed rules, requesting specific comment on the cumulative effects of regulations in proposed rules, and developing better-informed implementation timeframes. In addition, the Commission has recently issued its direction to staff on a proposed plan, which presented eight recommendations to better define and enhance the Commission's role in the early stages of rulemaking, before significant resources are expended.

Further, the staff was tasked with providing a vote paper to the Commission recommending a single, unified approach to tracking rulemaking activities so the public and stakeholders have "real time" access to current information. While the NRC prides itself on being one of the most transparent agencies in the Federal government, this tasking will improve communication and ensure the accuracy and timeliness of rulemaking information. The Commission is currently considering the staff's proposal to establish a single, unified approach to tracking rulemaking activities so the public and stakeholders have "real time" access to current information.

FY 2017 BUDGET REQUEST

The NRC's proposed FY 2017 budget is $970.2 million and 3,462 FTE, excluding the Office of the Inspector General (OIG). The proposal represents a net decrease of $19.8 million from the FY 2016 enacted budget, as well as a decrease of 90 FTE.

The OIG's component of the FY 2017 budget is $12.1 million, of which $11.2 million is for auditing and investigation activities for NRC programs and $1 million is for auditing and investigation activities of the Defense Nuclear Facilities Safety Board (DNFSB). These resources will allow the OIG to carry out its mission to independently and objectively conduct audits and investigations to

ensure the efficiency and integrity of the NRC and DNFSB, to promote cost-effective management, and to prevent and detect fraud, waste, and abuse.

Consistent with the provisions of the Omnibus Budget Reconciliation Act of 1990, as amended, the NRC FY 2017 budget request provides for 90 percent fee recovery, less the amounts appropriated for generic homeland security activities, waste incidental to reprocessing activities and DNFSB activities. Accordingly, $861.2 million of the FY 2017 budget will be recovered from fees assessed to NRC licensees, resulting in a net appropriation of $121.1 million. This appropriation is an increase of $2.1 million compared with the FY 2016 enacted budget due to the inclusion of $5 million in non-fee-recoverable resources for advanced nuclear reactor technology.

The NRC carries out its safety and security activities through two major programs: Nuclear Reactor Safety, which includes both Operating Reactors and New Reactors, and Nuclear Materials and Waste Safety, consisting of fuel facilities, nuclear materials users, decommissioning and low-level waste, and spent fuel storage and transportation. Compared to the FY 2016 enacted budget, the NRC's Nuclear Reactor Safety Program decreased by $3 million and 61.9 FTE; the Nuclear Materials and Waste Safety Program, including Decommissioning and Low-Level Waste, decreased by $1.8 million and 28.1 FTE.

Below are some highlights of the FY 2017 budget request.

NUCLEAR REACTOR SAFETY

Operating Reactors

The FY 2017 budget request for the Operating Reactors Business Line is $587.5 million, a decrease of $1.7 million from the FY 2016 enacted budget. This reflects declining or completed

workload associated with, among other activities, implementation of the Fukushima lessons learned, license renewals and National Fire Protection Association 805 license amendment requests.

In FY 2017, the NRC will continue licensing and oversight activities for 100 operating commercial nuclear power reactors, including the Watts Bar Unit 2 nuclear power station slated to begin commercial operation later in calendar year 2016, and 31 research and test reactors.

The resources requested for FY 2017 also support ongoing work associated with implementing lessons learned from the Fukushima Dai-ichi Nuclear Power Plant accident in Japan. We expect the bulk of the most safety significant enhancements to be completed in calendar year 2016 and to bring to closure our evaluation of the longer-term "Tier 2 and 3" issues. Resources requested for FY 2017 support the continued implementation of the most safety-significant "Tier 1" enhancements, including continued implementation and documentation of NRC Orders on mitigation strategies, spent fuel pool instrumentation and severe-accident-capable hardened containment vents, and completing the mitigation of beyond-design-basis events rulemaking. Resources will also support reviews associated with seismic and flooding hazard reevaluations.

The NRC has made great strides in enhancing U.S. nuclear power plants' already robust safety measures in the five years since the Fukushima Daiichi accident. We took swift action after the accident, ordering a variety of upgrades to plant safety. A key lesson from the accident was that plants must be prepared for events not contemplated when they were designed and constructed. Just as important, strategies to address events must be flexible to deal with variety of circumstances.

About half of U.S. commercial reactors have completed integrating portable pumps, generators and other resources and procedures to maintain key safety functions. We expect every U.S. plant to have these physical resources in place by the end of the year. The industry also has two fully operational national rapid response centers in Phoenix and Memphis with portable equipment that can be dispatched if needed.

Significant progress has been made on the NRC's requests for U.S. plants to re-examine earthquakes and flooding hazards. Every plant has updated its understanding of potential earthquakes at its site. A quarter of the plants have completed all their earthquake-related work. The remainder are assessing whether their new quake hazard affects the plant's ability to safely shut down. While improving flooding hazard information has proven more complex, more than half of the plants have updated their understanding of flooding sources. All the plants will continue examining any risk changes due to revised flooding estimates.

Our next step is inspecting the work that's been done and ensuring the plants maintain their progress. We're adapting our inspections and other processes to cover these enhancements. We're also updating our assessment process to cover potential inspection findings related to the post-Fukushima upgrades. We're now to the point of incorporating the Fukushima-related work into our ongoing inspection and oversight processes. We strongly believe U.S. plants are better prepared for extreme events now than they were in 2011.

On a related note, the NRC recently issued letters to the nation's commercial operating nuclear plants about their 2015 performance. These assessment letters ensure all stakeholders clearly understand the basis for our assessments of plant safety and security performance and the actions we are taking to address any identified performance deficiencies.

All but three plants were in the two highest performance categories. Three reactors at two sites were deemed to be in the fourth, or lowest, performance category. One site, the Pilgrim nuclear power plant, is in that category due to long-standing issues of low-to-moderate safety significance. The plant will receive substantial additional inspection to confirm performance issues are being addressed. An additional Resident Inspector has been placed onsite to support more inspections in targeted areas, as well as more in-depth inspections.

Arkansas Nuclear One 1 and 2 are also under increased oversight because of two safety findings of substantial significance identified as a result of an industrial accident that occurred in March 2013. One worker was killed and eight were injured as a result of the accident, which was not radiological in nature.

The NRC has conducted several supplemental inspections as a result of its additional oversight at Arkansas Nuclear One. A public meeting to discuss the preliminary results of the inspection was held on April 6, 2016. A final report documenting the NRC inspectors' findings will be issued in June 2016.

Also in June, the Commission will hold a briefing to hear the results of the Agency Action Review Meeting related to the performance at these two sites. The Commission will hear from NRC staff and officials from Entergy, which owns both sites, on how performance deficiencies are being addressed.

In FY 2017, the NRC's research program will continue to support the NRC's regulatory activities by evaluating and resolving generic safety issues for NRC-regulated nuclear power plants, other nuclear facilities and materials users that the agency regulates. The NRC will further enhance its regulatory programs through coordination and cooperation with other Federal agencies, States,

Tribes, and international organizations and foreign governments. The NRC will continue to support international conventions on safety and treaty compliance, and support a wide range of activities to help foreign regulatory counterparts develop or enhance their programs and their controls over radioactive sources.

NEW REACTORS

The FY 2017 budget request for new reactors is $169.9 million, which represents a funding decrease of $1.4 million when compared with the FY 2016 enacted budget. The decrease is a result of delays in application submittals, and project slowdowns or suspensions. The New Reactors Business Line is responsible for the regulatory activities associated with siting, licensing, and overseeing construction of new nuclear power reactors.

During FY 2017, the NRC expects to continue reviewing three new reactor combined license applications. These applications are for new plants at North Anna, Turkey Point and Bell Bend. Additionally, the NRC will continue to conduct inspections of four new reactor units under construction – Vogtle Electric Generating Plant, Units 3 and 4, and Virgil C. Summer Nuclear Station, Units 2 and 3 – and will continue to carry out its vendor inspection program for both new and operating reactors. The NRC also expects to receive and begin review of one small modular reactor design certification application from NuScale.

The FY 2017 budget request includes $5 million in non-fee-recoverable activities to implement a strategy for developing the regulatory infrastructure for advanced, non-light water nuclear reactor technologies. This funding would prepare the NRC to undertake effective and efficient licensing reviews of advanced reactor technologies consistent with the maturity and development pace of the technologies.

The strategy and associated activities to be initiated in FY 2017 would fall into three primary areas: licensing infrastructure, technical preparation, and outreach.

Under the licensing infrastructure activities, we would use the funding to conduct a gap analysis of regulations and guidance to determine areas where revisions are needed, and begin developing revised regulations and guidance for advanced reactors. We would also complete development of advanced reactor design criteria, evaluate new approaches to review conceptual designs on an incremental basis, and evaluate unique policy issues.

As for our technical preparation activities, staff intends to observe international design reviews as opportunities become available, to increase our expertise in advanced reactor technology and to obtain lessons learned from advanced reactor technology licensing. For example, the Canadian Nuclear Safety Commission will be performing a design review for an advanced molten salt reactor designed by Terrestrial Energy.

Additionally, we would develop proposed revisions to industry codes and standards to address certain advanced reactor designs and develop related requirements. Further, we would conduct a hazard analysis to better understand the potential hazards and safety requirements to prevent or mitigate these hazards.

Important outreach activities would include the continuation of periodic engagements with designers of advanced reactors, participation in standards development for advanced reactors and information sharing with various national and international groups, including the Department of Energy, the Organisation for Economic Co-operation and Development's Nuclear Energy Agency and the International Atomic Energy Agency.

Being prepared to evaluate potential applications for light water-based small modular reactors and non-light water reactor technologies presents some challenges for the NRC, but the NRC is ready to receive and review any such applications under its existing framework.

Further, the FY 2017 budget request supports NRC plans to review three applications for medical isotope production facilities, including reviewing an operating license for one facility and conducting environmental and safety reviews of construction permits at two others.

NUCLEAR MATERIALS AND WASTE SAFETY

Fuel Facilities

The FY 2017 budget request for fuel facilities is $41.5 million, which represents a funding decrease of $2.9 million when compared with the FY 2016 enacted budget. The Fuel Facilities Business Line supports licensing, oversight, rulemaking, international activities, research, generic homeland security, and event response associated with the safe and secure operation of various operating and new fuel facilities such as conversion, enrichment, and fuel fabrication facilities, and nuclear fuel research and pilot facilities.

Nuclear Materials Users

The FY 2017 budget request for nuclear material users is $92.5 million, which represents a funding increase of $0.9 million when compared with the FY 2016 enacted budget. The Nuclear Materials Users Business Line supports the safe and secure possession, processing, and handling of nuclear materials in many diverse applications, along with associated activities related to licensing, oversight, rulemaking, international engagements, research, generic homeland security, event response, and State, Tribal, and Federal Program interfaces. This increase is due

to the resumption of a security rulemaking to address an industry petition and to conduct a rulemaking for cyber security at fuel cycle facilities. These were delayed in FY 2016.

The FY 2017 budget request ensures the NRC can continue to license and oversee the safe and secure use of radioactive materials used for medical, academic, industrial and research purposes. The NRC and Agreement states oversee approximately 21,000 specific materials licensees. In FY 2017, the NRC will complete approximately 2,000 materials licensing actions and approximately 900 routine health and safety inspections, as well as reactive and follow-up inspections.

Spent Fuel Storage and Transportation

The FY 2017 budget request for spent fuel storage and transportation is $37.2 million, which represents a funding increase of $1.1 million when compared with the FY 2016 enacted budget. The Spent Fuel Storage and Transportation Business Line supports licensing, oversight, rulemaking, international activities, research, and generic homeland security associated with the safe and secure storage and transportation of spent nuclear fuel and other radioactive materials. This increase is due to safety and environmental reviews of an interim consolidated storage facility and related safety analysis.

In FY 2017, the NRC will continue its oversight over nuclear waste and spent fuel storage facilities, certify storage and transportation containers, and respond to events involving our licensees. The NRC expects to receive and review one application for an interim consolidated storage facility.

Decommissioning and Low-Level Waste

The FY 2017 budget request for decommissioning and low-level waste is $41.6 million, which represents a funding decrease of $1 million when compared with the FY 2016 enacted budget. The Decommissioning and Low-Level Waste Business Line supports licensing, oversight, rulemaking, international activities, and research associated with the safe and secure operation of uranium recovery facilities, removal of nuclear facilities from service and reduction of residual radioactivity to a level that permits termination of the NRC license, and disposition of low-level radioactive waste from all civilian sources.

The FY 2017 budget request provides funding for licensing reviews and oversight activities at power reactors undergoing decommissioning, including Kewaunee Power Station, San Onofre Nuclear Generating Station Units 2 and 3, Crystal River 3 Nuclear Power Plant and Vermont Yankee Nuclear Power Plant. At least one additional plant, Entergy's James A. FitzPatrick Nuclear Power Plant near Oswego, New York, has announced plans to shut down on January 27, 2017.

The NRC is exploring the initiation of a rulemaking on reactor decommissioning in accordance with direction from the Commission. The NRC published an advanced notice of proposed rulemaking to solicit stakeholder input in November 2015, with a public comment period that recently closed in March. The staff is currently evaluating these public comments and will begin developing a regulatory basis for the decommissioning rulemaking. To augment its outreach activities on this rulemaking, the Commission held a public meeting with a wide selection of stakeholders to hear their perspectives.

Public comment was sought on a variety of topics relevant to the rulemaking, such as achieving efficiencies in the decommissioning process, reducing the need for exemptions from existing

regulations for operating plants, and addressing the timeliness of decommissioning and the role of state and local government, and other organizations. The NRC will continue processing current and pending applications for decommissioning amendments and exemptions until that regulatory work is complete.

CLOSING

This budget request represents a reduction from the 2016 enacted budget. The President's Budget takes advantage of the Project Aim-identified efficiencies, and, as we continue our work, we anticipate additional savings and efficiencies to come.

Chairmen Whitfield and Shimkus, Ranking Members Rush and Tonko, and distinguished members of the Subcommittees, this concludes my formal testimony on the NRC's FY 2017 budget request. On behalf of the Commission, I thank you for the opportunity to appear before you.

I would be pleased to respond to your questions. Thank you.

Mr. SHIMKUS. Thank you. Now I would like to recognize Commissioner Svinicki for 2 minutes.

STATEMENT OF KRISTINE L. SVINICKI

Ms. SVINICKI. Thank you, Chairman Shimkus, Ranking Members Rush and Tonko, distinguished members of the subcommittees for the opportunity to appear before you today. The Commission's Chairman, Steve Burns, in his statement on behalf of the Commission has provided an overview of the agency's budget request, as well as a description of several ongoing activities that are central to carrying out NRC's important work. The NRC continues to implement safety-significant lessons learned from the Fukushima accident in accordance with agency processes and procedures, while maintaining our focus on ensuring the safe operation of nuclear facilities and the safe use of nuclear materials across the country. The past few years have been a particularly dynamic period for the NRC as an organization, and our staff has been addressing these challenges in a systematic fashion.

Our fiscal year 2017 budget request was developed concurrent with the ongoing implementation of our Project Aim initiative. Beyond the rebaselining effort discussed in Chairman Burns' testimony, the NRC continues to pursue improvements to our programs, processes, and procedures. The NRC staff is also developing guidance for the disciplined implementation of approved changes and for monitoring the impacts of changes after they are implemented.

I thank you for your consideration of our budget request and look forward to your questions. Thank you.

Mr. SHIMKUS. Thank you. And the Chair now recognizes Commissioner Ostendorff. Again, thank you for your service, and you are recognized for 2 minutes.

STATEMENT OF WILLIAM C. OSTENDORFF

Mr. OSTENDORFF. Good morning, Chairman Shimkus, Ranking Members Rush and Tonko, and distinguished members of the subcommittees. I appreciate the chance to be here today. Chairman Shimkus and Tonko, thank you for your kind remarks. It has been an honor and privilege to serve on the Commission. Today is my twenty-sixth time to testify before Congress as a Commissioner. And I have always appreciated the respect and civility which you and both sides of the aisle have afforded this Commission. And I am very grateful for that.

I am in complete alignment with the Chairman's testimony. I want to emphasize the deliverables that the Chairman mentioned do not represent the end state for Project aim. Project Aim is not just a temporary exercise, but the beginning of a longer-term initiative.

I will make two very specific comments. First, the Commission's recent direction to our staff to seek Commission approval before embarking upon rulemaking activities is a significant step towards better efficiency and better stewardship of agency resources. Second, our budget request of $5 million in non-fee billable resources to further develop our regulatory infrastructure for advanced non-light water reactor technology. It is important for the long-term

health of the NRC and the industry that we retain the ability to license new technologies.

In closing, I appreciate the chance to be here today, and I look forward to your questions.

Mr. SHIMKUS. The gentleman yields back his time. The Chair now recognizes Commissioner Baran. Welcome back. And you are recognized for 2 minutes.

STATEMENT OF JEFF BARAN

Mr. BARAN. Thanks. Thank you, Chairman Shimkus, Ranking Members Tonko and Rush, and members of the subcommittees, for the opportunity to testify today. It is great to be back to discuss NRC's fiscal year 2017 budget request and the work of the Commission.

With respect to Project Aim, I have been very impressed by the willingness of the NRC staff to take a hard look at the work the agency is doing and how we are doing that work. The NRC staff generated a list of 151 proposals that would reduce costs in the coming months. The Commission recently approved nearly all of those proposals. I think a large majority of these items make a lot of sense. But I have concerns about a number of them, including a few that would reduce inspection hours. In my view, Project Aim should not be about relaxing regulatory oversight of licensee performance and safety.

On March 22, I traveled to Fukushima Daiichi to take a firsthand look at conditions at the site. The scale and decades-long duration of the cleanup effort there are a sobering reminder of the need to learn and implement the lessons of Fukushima. Last month marked 5 years since the accident in Japan. It is a natural time to take stock of where we are. I think it is clear that we have made significant progress, but still have a lot of work left to do.

Decommissioning is another important issue for NRC. In the last few years, five U.S. reactors have permanently shut down, and three more have announced plans to close in the near term. I see two main purposes for the decommissioning rulemaking effort that is now underway. And both are important. First, it will allow NRC to move away from regulating by exemption in this area. The exemption approach isn't efficient for anyone, and it provides no opportunity for public comment. And second, the rulemaking provides a chance for NRC and all of our stakeholders to take a fresh look at our decommissioning process and requirements. We need to thoughtfully consider stakeholder ideas with an open mind.

There are, of course, other important efforts underway at NRC. The staff is preparing for the first small module reactor design application expected later this year. The budget request also includes funds to ramp up NRC's efforts to prepare for advanced reactor designs that may be submitted further into the future.

We are happy to discuss these and any other issues of interest. Thank you, and I look forward to your questions.

Mr. SHIMKUS. Thank you very much.

Now, I will recognize myself 5 minutes for the opening of the questions. And I will begin with Chairman Burns. I appreciate your efforts to identify and reduce the workload of the agency through the Commission's recent approval, and the vast majority

of the proposals, including in the staff's integrated priority and rebaselining agency activities.

Will you please tell the committee the total funding reductions and reductions in full-time equivalents that were approved by the Commission?

Mr. BURNS. Yes, Mr. Chairman. The full reductions in the rebaselining effort is on the order of about 40 to $50 million. Actually, the number escape me. We have about $10 million that is reflected in the reductions that came through the President's budget. And what we are suggesting since then is it is about another $31 million. There is an additional $8 million. That is how I get to my about 50 number that we really were reflecting on beyond fiscal year 2017 into the 2018 period. I would have to give you——

Mr. SHIMKUS. Well, I have—maybe I can help. We have $49 million and 185 FTEs.

Mr. BURNS. OK.

Mr. SHIMKUS. Of the FTEs that were approved to eliminate those activities, what are they doing now?

Mr. BURNS. Well, some of those—they may be involved in some of the tasks. What we would be doing is reducing those FTEs. For example, we are seeking, as we did last year, early-out buyout authority for some staff in those areas. And then attrition would also address some——

Mr. SHIMKUS. So you are shifting some folks around waiting for the ability for——

Mr. BURNS. Yes. And we also—I think we have also shifted in the technical—some of the technical discipline's staffing to other offices where the technical work may be. But, I mean, this is—it is an attempt to, I mean, in terms of real reductions, in terms of the number of staff where we see we don't need the staff anymore.

Mr. SHIMKUS. Thank you. This is still directed, next question to you, Chairman, but Commissioner Ostendorff mentioned in his opening statement about Project Aim continues to go forward. Obviously, it is labeled 2020. What is next on your goal as you look at Project Aim 2020? What is the next type of reorganization?

Mr. BURNS. Well, I think we have adopted the notion it is Project Aim with—originally it was called 2020. But I think, as Commissioner Ostendorff and my other colleagues have said, it is important that we keep a focus on this. So a few other things that are—that would be coming to us, the EDO and our CFO have asked for a hard look at the corporate support offices. And in terms of looking at reductions there, we anticipate a merge—re-merger of the new reactors office and the NRR office. And so those are highlights of activities that come. But I think what I want to do, certainly as Chairman, and talk to the EDO about this, is—and as reflected in the Commission direction is inculcate this idea—we need to look at ourselves in terms of how do we carry out our mission effectively in the most efficient way possibly.

Mr. SHIMKUS. And right back at you, again, on another question. Obviously, I am going to—in previous testimony, we know that when you submitted your budget, obviously you didn't put in the money to finish the work on Yucca Mountain. And in testimony on the Senate side, your comment was, the question was asked by Chairman Alexander, your response was, It is the President's budg-

et. So here is the question: How does your legal standing as an independent safety regulator comport with your comment that it is the President's budget?

Mr. BURNS. Well, thanks for the question. We ultimately—we are the regulator. We have to make a decision one way—on the application that comes before us. The difficulty that we are in is that we don't have an applicant that is sponsoring its application in front of us. We have done the work that we can do and——

Mr. SHIMKUS. But you are really not answering the question. The point being is you are an independent agency. You have requirements under the law. This is part of the portfolio of responsibilities, but yet, you don't request the dollars. And in a question, a comment, you say, Because it is the President's budget. It is not the President's budget. It is your budget. You are independent of the executive branch. And so that is the issue I want to raise.

My time has expired. There will probably be some follow-up. But, you know, I am tired of agencies not following the law, especially when they are independent. And I yield back my time, and now turn to my ranking member, Mr. Tonko, for 5 minutes.

Mr. TONKO. And I thank the Chair.

In the aftermath of the Fukushima tragedy, the Commission set a goal of completing its response within 5 years, as has been mentioned here this morning. We have passed that date. And while there is still more work to be done, there has been progress.

Chair Burns, can you please explain the tiered system for Fukushima Lessons Learned activities?

Mr. BURNS. It—excuse me. The tiered——

Mr. TONKO. Yes.

Mr. BURNS. What the Commission did, and some of my colleagues who were on the Commission at the time adopted might want to add to my responses. The Tier 1 were considered—those are the things where we saw the most safety benefit from—and that is what we focused on first. And those are the things, particularly, that are coming to closure this year and into next year. The Tier 2, actually many of the Tier 2 items were absorbed into the Tier 1 activities, some of our rulemaking activities, the orders that were issued to licensees. The Tier 3 were considered longer term items. These are things worth looking at. Not clear whether ultimately there would be some new requirement coming out of them. But it was deemed that those were things that could be looked at on a later period. The significant things, for example, the installing equipment to deal with these beyond-design basis events, the seismic and flooding evaluations, the spent fuel pool instrumentation. Those were the things that were in the first tier or deemed most significant.

Mr. TONKO. And then is it accurate then that Tier 2 and 3 items may also involve significant safety issues?

Mr. BURNS. They involve safety issues, particularly from the standpoint that they are things that I think we thought needed to be looked at. Whether or not a particular requirement might come out of them, that—I think that is left to be seen. And as I say with some of the Tier 2—or much of the Tier 2 was really absorbed into a lot of the initial activities.

Mr. TONKO. And, Commissioner Baran, do you feel more work needs to be done on longer term Tier 2 and 3 issues?

Mr. BARAN. Yes. My view is that NRC should do a thorough safety analysis for each open item that is a Tier 2 or Tier 3 item before deciding whether additional action needs to be taken in that area. The staff did this—did a good job on some items, but I thought their analysis was insufficient on other items. A full analysis doesn't necessarily mean you are going to take additional regulatory action, as the Chairman mentioned. But when someone asks me, you know, whether we fully examined all of the items identified as lessons of Fukushima, I want to be able to respond with an unqualified yes, not, well, we didn't look at this as hard as I thought we should have. So I thought there were cases where the staff should have taken a harder look at it.

Mr. TONKO. One issue addressed by the Near Term Task force focused on reevaluating external hazards, that would include drought and extreme temperatures. As I mentioned in my opening statement, we are already seeing significant impacts from climate change. These hazards are expected to be worse in many parts of the country in the future. Commissioner Baran, do you agree with that observation?

Mr. BARAN. I do. And I am actually very encouraged with how seriously the NRC staff is taking this Near Term Task Force recommendation to reevaluate external hazards. The Near Term Task Force recommended doing it every 10 years. And I think the staff is absolutely right that we need to be more proactive as an agency than we have been about getting additional scientific information, the latest scientific information, that could deepen our understanding of those external hazards. And I think you are exactly right that this reevaluation is going to be critical, particularly for climate-related hazards, like drought, or hurricane, or extreme temperatures or flooding, where we cannot assume that the magnitude or the duration or the intensity of those hazards are going to be static in the future.

And so what the staff is doing right now throughout 2016 is trying to figure out, well, one approach is we could reevaluate every 5 years or 10 years or 15 years. What they are looking at is can we do it on a more continuous pro-active basis to make sure that we are getting the latest information, considering that and making sure that if our understanding of the hazards change, or if the hazards themselves change, our plants are—the plants we regulate are prepared for that.

Mr. TONKO. OK. So that obviously, then, you think the Commission needs to do more in terms of requiring that proactive, forward look to potential hazards?

Mr. BARAN. I think as an agency, we need to do better than we have been doing. The staff recognizes that. And they are working on the process to do a better job of that and be more pro-active and make it more of a routine part of what we do, gathering that information and incorporating that into our analysis. Right now, I think we consider information when we get it, but we are just a little too passive. We need to be more forward-leaning to get that information.

Mr. TONKO. OK. With that, I yield back and thank you, Mr. Chair

Mr. SHIMKUS. The gentleman yields back his time.

The Chair now recognizes the gentleman from Mississippi, Mr. Harper, the vice chair of my subcommittee. And you are recognized for 5 minutes.

Mr. HARPER. Thank you, Mr. Chairman. Thanks to each of you for being here.

Chairman Burns, in February, the Commission provided a report to Congress on Commission involvement in the early stages of rulemaking. This effort was conducted in a very timely manner and appears to be a well thought-out product. And I would like to ask you a couple of questions about this report.

Will you please provide a bit of background as to what prompted this effort and describe how this will increase efficiency in the Commission?

Mr. BURNS. Certainly. Thank you for the question. Part of—as we were looking at things, I think actually Commissioner Svinicki had gone back and identified a time, a period of about 10 years ago or so, at which the Commission decided to not be as involved at the early stages. And I think we were looking at that. We also got congressional direction in one of our reports last year. And I felt, as the Chair, before there was a final report on that, we should go forward and take a look at that, those types of things. And that is sort of how we got to where we are in terms of putting more of a Commission imprimatur on the initial stages of the rulemaking process.

Mr. HARPER. And, you know, that report did acknowledge that NRC changes over a decade ago eventually developed into a lack of discipline by the staff and their authority to initiate rulemaking. So the report is—we would like to see that. But how can we assure that those long-term trends don't resurface in the future?

Mr. BURNS. Well, I think that is the role of the Commission as it—as individual rulemakings come before it, or proposals is for us to take a hard look at why we might be going forward and making that type of judgment. I think that is—the idea is that the senior leadership of the Commission—at the Commission level would be doing that. So that is how I would see it going forward.

Mr. HARPER. Has the Commission used this new process yet? And if so, was the supporting staff documentation adequate?

Mr. BURNS. I don't think—because I don't think we have had a particular proposal that has come in front of us as yet. I don't—yes. We haven't had that as yet.

Mr. HARPER. We will ask that when it happens then. How about that?

The new streamline rulemaking plan will include a preliminary evaluation of the cumulative effects of regulation. What else is the Commission doing to address cumulative effects?

Mr. BURNS. Well, part of that effort, which has been ongoing was initiated several years ago, asks that at the front end that there were—that we have a better idea, make sure we have a good idea of what the impacts of adopting a particular rule are on the industry. And so, that when we are in the process of deliberating the rule, we have that in front of us. We have a better consciousness

of that. I think that is probably the—I would say the highlight of the significant things that we would do in that area.

Mr. HARPER. The Commission directed the staff to address whether the advisory committee on reactor safeguards should review the proposed rule. How would this recommendation as a part of the Commission's early involvement in the rulemaking affect the ACRS workload?

Mr. BURNS. I am not sure I have a—the ACRS is an important organization. I am not sure I have a particular impact as yet. The ACRS can help us in terms of providing—it was created to provide this expert panel outside the Commission to advise it. And I think we can fold its recommendations into our deliberation.

Mr. HARPER. You know, in 1980 Congress passed the low-level waste Policy Act providing a framework for States to voluntarily join compacts and then work within the compact to site a low-level waste disposal facility. While this merely addressed low-level waste, it provides relevant experience about a consent-based process for nuclear waste disposal. After the Act was passed in 1980, it wasn't until 1985 that Congress approved the compacts. And it was 1990 before a disposal facility opened in Utah, but only for class A waste, the lowest class of low-level waste. Congress didn't approve the Texas/Vermont compact until 1998, 18 years after the Act passed, many others in the history there. And in light of the limited success and lengthy process for consent-based siting for low-level waste, what gives you confidence that DOE will find an interim storage site for used nuclear fuel and have it operating 8 years from now?

Mr. BURNS. I am not sure that we are particularly in a position to answer that. What——

Mr. SHIMKUS. They are an independent agency.

Mr. BURNS. Well, that is right, Mr. Chair. We are not part of the consent development process either for the low-level waste compacts or this. The one thing—what we have seen is we have seen interest in both an applicant in western part of the State of Texas and in eastern New Mexico who are interested in pursuing applications for independent consolidated storage sites.

Mr. HARPER. I am over my time. And so I yield back.

Mr. SHIMKUS. The gentleman yields back his time.

The Chair now recognizes the gentleman from Illinois. I want to note that the pesky Cubs beat my Cards last night. But the Blues took care of the Blackhawks. So we are even today, and you are recognized for 5 minutes.

Mr. RUSH. It is only the beginning of the season, Mr. Chairman. You have got a lot of hurt coming your way.

Chairman Burns, as you know, my home State, the chairman's home State, is home to more nuclear plants than any other State. And our constituencies have some concerns when they hear that the NRC is requesting a $20 million decrease in the budget for this year that would—then the one that was enacted in last year's budget.

I want to ask you, Mr. Chairman, and each of the Commissioners, can you, for the record, as short of a guarantee, state that the NRC is doing its absolute best to eliminate any and all known threats to nuclear safety in this Nation?

Mr. BURNS. I believe we are, Mr. Rush. One of the things we do is we evaluate operating experience. We take into account information we have in terms of new analysis of, for example, in the seismic and flooding area, and we apply that experience in terms of looking at assurance of the safety of nuclear power plants. So I think that is something—that is at the core of our mission to do that, and I think it is something we strive to do on a day-to-day basis.

Mr. RUSH. Commissioner Svinicki?

Ms. SVINICKI. Congressman Rush, I am confident that the NRC's experts are doing their best in the areas that you describe. And I want to note that although there is a small reduction in our operating reactor activity area in the fiscal year 2017 budget, those reductions are not principally attributable to Project Aim. They are attributable to work and issues that are concluding in fiscal year 2016, and there is not a need to request budget in fiscal year 2017 on some technical issues that will conclude this year. Thank you.

Mr. RUSH. Commissioner Ostendorff?

Mr. OSTENDORFF. Yes, sir. I would agree with my colleagues. I will also add one other perspective from the international community. The Nuclear Energy Agency in Paris that is part of the OECD regime as well as the International Atomic Energy Agency, part of the United Nations, have both issued reports in the last year dealing with Fukushima issues. And our staff's review and the Commission's review of those two reports have not identified any issues that we did not explore as part of the Fukushima lessons learned. And so I just give you that as a data point that the committee may not be aware of.

Mr. RUSH. Commissioner Baran?

Mr. BARAN. Well, Mr. Rush, I agree with my colleagues. Safety and security is our priority. It is our focus. It is our core mission. And when I evaluate a potential efficiency or potential cost savings, what I have at the forefront of my mind is we can't do things that are going to weaken our safety oversight. We can't do things that are going to erode the technical capabilities of the agency. And that is exactly the test that I apply when I am looking at those kinds of questions.

Mr. RUSH. Commission Baran, in my opening statement, I mentioned 10 outstanding Tier 2 and Tier 3 items that remain unresolved from the NRC task force recommendations. Can you and any of the other Commissioners briefly discuss these unresolved issues? Also, can you assure the public that these outstanding items pose no significant threat, and they are actively being addressed?

Mr. BARAN. So going back to the conversation I was having with Mr. Tonko, there are a number of Tier 2 and Tier 3 items—the staff did an analysis of all of those, and they submitted their recommendations for closure to the Commission. A number of the items were closed at that time. For several other items, there is work going on this year. And one of the items was the one I discussed with Mr. Tonko about how are we going to reevaluate external hazards. That workis going on.

And, you know, there are potentially significant safety issues in these Tier 2 and Tier 3 categories, which is why I think it is important that for each one of those items, the NRC staff does a solid

safety analysis to ensure that we have looked at the issue, we have evaluated whetherthere is something there that needs to be done, and have made a decision accordingly. You know, there were issues where I thought the staff could have done a better job on that. And I will give you one. And I guess I would put these in the category of we don't know whether the safety enhancement would have made sense, but I wanted to see a better analysis to really know.

And, so, one example I would briefly give you is just, every plant right now in the country is required to have what is called an Emergency Response Data System. And it provides real-time information to the NRC on various conditions at the plant, the reactor, the spent fuel pool, the weather conditions.

And in the event of an emergency or an incident at the plant, a natural disaster, this would be a mechanism for NRC to have real-time instantaneous data on what is going on at the plant. One of the lessons of Fukushima, and actually from earlier natural disasters is, well, ERDS, this Emergency Response Data System, it is an Internet-based system. And in the event of a natural disaster, it is not clear you would have the Internet connectivity anymore. You might lose this functionality. Well, what would that mean? Well, we could still get information. We would have to do it by phone. We would have to talk to the operators at the site. And when we asked the staff, well, what are the implications of that, the answer was, well, you are probably getting updates every 20 minutes instead of instantaneously automatically every 30, 60 seconds. You are probably getting less information and it may not be as accurate.

So the staff took a look at this as part of the Tier 3 items, and they did an evaluation. And they looked at, Well, what would it take to do a backup system that didn't rely on the Internet? And their initial—it was fairly preliminary. They looked at potential costs, and the costs were not enormous for at least the equipment itself. It was on the order of like a million dollars for the whole fleet nationwide. The staff on that item decided to recommend closing it, not to take further action. And there wasn't really much of an analysis of the pros and cons. And for an issue like that where the costs are pretty modest, to my mind, the time you want to have the system functioning is when you have a natural disaster when you really need it. I wanted to see more of an analysis there. Is there a potential safety enhancement we could have made that would have made plants even safer? I wanted to see more on that.

Mr. RUSH. Well, thank you, Mr. Chairman.

Mr. SHIMKUS. It was important to hear the final answer, and appreciate that.

The Chair now recognizes a great Texan, Mr. Olson, for 5 minutes.

Mr. OLSON. I thank the Chair. And welcome to all our NRC Commissioners, especially Commissioner Ostendorff. It is your last time before this committee.

Our chairman failed to mention that he is a graduate of West Point. You are a graduate of Annapolis Naval Academy. He failed to mention that for the last 14 years, 14 straight years, our Navy has beat Army in football.

Mr. SHIMKUS. Really?

Mr. OLSON. Just to set the record straight.

Mr. SHIMKUS. I didn't know that.

Mr. OLSON. All seriousness, sir. May you have fair winds and following seas in your next endeavor.

Mr. OSTENDORFF. Thank you.

Mr. OLSON. I want to thank you all for moving forward with the South Texas plant's units 3 and 4 in Bay State, Texas with the final safety evaluation report for a combined license for units 3 and 4. Thank you, thank you, thank you. As we say in Texas, much obliged.

My first question is for you, Commissioner Burns. In November, Dominion Power announced it would seek a second license renewal for its Surry Power Station. It would be one of the first American nuclear plants to obtain a second license, 20-year license, since—first one ever. And I hope this is one of many. I want to know is the NRC ready for these next new applications? What specific progress has been made to prepare for a second license extension since our hearing last year?

Mr. BURNS. Thank you for the question, Congressman. First of all, what the Commission before I returned to the agency about a year or so ago, the Commission decided that the basic framework for license renewal that was in place for the first—for the 40 to 60, the basic framework was sound and adopted that. Since then, what the staff has been doing and engaged with the industry and other stakeholders is reviewing the guidance—there is this generic aging lessons learned report that helps in the review process. And that has been out for comment. I think the staff has gotten comments on that as resolving that. The announcement from Dominion, I think, puts the potential for the application a couple years down the road. So I would expect by that time this additional work on the guidance documents will be done, and I think we are ready to entertain those applications.

Mr. OLSON. Great. Is NRC working with the Department of Energy on their research and development efforts to extend the life of our existing fleet of nuclear power plants? How closely are you working with DOE to extend our current power plants?

Mr. BURNS. Yes. Thank you for that. We maintain a communication with DOE on some of the research that they are doing. That helps us and keeps us informed. So we have open communication with the Department of Energy. Obviously, we have different roles, but we are able to take that into account.

Mr. OLSON. Any comments of the three Commissioners? Commissioner Svinicki, Captain Ostendorff, Commissioner Baran, about the issue of being ready for the new renewals, 20-year renewals? Anything to add?

Mr. OSTENDORFF. I will just say that our staffhas been looking at this for some time. The buried piping, buried cables, reactor vessel fluence from neutron exposure. All these different technical issues are well coordinated between—as the Chairman mentioned, between us and the Department of Energy. Also, we work with EPRI, Electric Power Research Institute, on these issues. And so I think we are in pretty good shape.

Mr. OLSON. OK. One further question. Commissioner Burns, last week, I was talking about 21st century nuclear power with the lead

of our power company. I was talking about south Texas, obviously, being a Texan. He said that is the past. The future is small modular reactors. And I want to talk briefly about those reactors. They have unique safety features and designs that the NRC has not seen before. I am curious, how do you plan to make sure that these can have applications on time? You can get these things done quickly. Because these are new for the NRC. Any idea how you are going to get this done?

Mr. BURNS. Well, yes. I think this are a number of things that we are doing. First, what I would distinguish on some of the small modular technology is light water technology, like the South Texas plants and other plants that have been installed in the United States. And, in fact, we are going to get a design certification application from NuScale at the end of this year. It is—and we have been working with them and make sure we have mutual understanding of expectations. The other piece of this is the smaller—sometimes small modular reactors may be referring to advanced reactor technologies that are non-light water reactors. There is experience in the United States with those. But longer term, what we are doing, and one of the things this $5 million in our budget request would help us do is to continue engagement with those who are interested in those technologies, making sure we have got the right framework. Again, this is an area we work with DOE. So I think we will see where the interest goes on this. But I think it is something we can be prepared for.

Mr. OLSON. Thank you. My time—end by saying go Navy, beat Army 15 straight. I yield back.

Mr. SHIMKUS. The gentleman yields back his time.

The Chair now recognizes the gentlelady from California, Ms. Diablo Canyon, for 5 minutes.

Mrs. CAPPS. Thank you, Mr. Chairman, ranking member, to our witnesses for appearing today and all your testimonies.

As was indicated by the chairman, and as some of you know, I do represent Diablo Canyon Nuclear Power Plant in San Luis Obispo, California. This power plant, which is owned and operated by PG&E, is the largest private provider of jobs in that county and a very important part of our economy as well as our energy portfolio. But Diablo also sits very close to two significant earthquake faults, the Hosgri and the Shoreline fault. The Shoreline, which was most recently discovered, actually lies only a few hundred yards from the plant. Given the proximity to these faults, the potential for seismic activity and its impact on Diablo Canyon is ever present. This is especially true in a post-Fukushima era, as we recognize the dangers that seismic activity can pose.

As such, we have responsibility to ensure we are considering these risks when it comes to operating all nuclear plants as safely as possible. And I keep this in mind as we are due very shortly for relicensure of Diablo Canyon.

So my question, I am going to address this to you, Commissioner Baran, it was a pleasure to serve with—to work with you on this committee in a previous lifetime of yours, can you please elaborate on the funding in the fiscal year 2017 NRC budget to implement the lessons learned from Fukushima Daiichi accident. How would

this funding help to make nuclear power plants like Diablo Canyon safer?

Mr. BURNS. Sure. I don't have the number right on hand. I think it is in the order of $15 million or $16 million in fiscal year 2017 for the various Fukushima lessons-learned activities.

One of the key things going on—and this is true at Diablo, but it is true for a number of sites across the country—is the seismic reevaluation, looking at the latest information about seismic hazards affecting different plants. It is a longish process, you know. There was an initial phase where every plant was screened to determine whether a very detailed seismic probabilistic risk assessment needed to be done. Diablo is one of the sites where that is being done. I believe, for Diablo, that would be submitted by September 2017, and that analysis would be—at Diablo or any other plant—would be the basis for determining, are there any additional safety enhancements that would be necessary at a plant to address seismic hazards?

Mrs. CAPPS. Thank you. Ensuring that we are prioritizing safety and transparency is supremely important, and the safety of Diablo Canyon Nuclear Power Plant, all of the nuclear power plants across the country, is really the highest priority for plant employees, many of whom live in the surrounding communities, and all the communities in which these plants are located.

As such, this budget absolutely must prioritize safety, and we must institute the lessons learned from Fukushima and apply the best science in order to meet this need. In my district, and I am sure across the country, community stakeholders are very interested in being better informed and participating in the ongoing discussions surrounding nuclear power plants. However, it has come to my attention that sometimes community members feel they don't have the information to access and productively participate.

So I will start again with you, Commissioner Baran, but I would welcome comments from any of the rest of you on how the fiscal year 2017 budget supports increased transparency and facilitates stakeholder engagement and participation.

Mr. BARAN. I would just briefly say I think it is less of a budgeting issue, and it is more about just a focus on outreach, on having good meetings with communities where they have an opportunity to express their concerns or ask their questions and have the staff ready. We are always trying to improve at this, really listening to those concerns, really focusing on the questions and getting good responses to community members who care about these issues. Some of the issues are really complicated and technical, and we have to do a good job of explaining it in a way that people can understand.

Mrs. CAPPS. Good.

Mr. BARAN. And really taking their concerns to heart, if they have concerns.

Mrs. CAPPS. Thank you.

I have a few seconds if maybe, Chairman, or any of you would like to respond, either to the issue of the comparison with Fukushima and also the transparency.

Mr. BURNS. Thank you, Congresswoman Capps. What I would note is there are a couple of opportunities coming up. I think in

summer 2016, we would have our annual assessment meeting, have a townhall style meeting out near the site. And then also because it is related to the license renewal application, there is a public meeting to discuss the draft supplemental environmental impact statement roughly in September of this year. So I want to highlight those as examples.

I know, last year, you cosponsored a townhall out in the area which we were pleased to participate in.

So I think it is something, as Commissioner Baran says, we can continue to look for opportunities. I think also making sure that we give good information on our Web site and are responsive, hear from you and others in the community, are ways we can improve, so we can continue to work at that.

Mrs. CAPPS. Thank you very much. I yield back.

Mr. SHIMKUS. The gentlelady yields back.

The Chair now recognizes the gentleman from Ohio, Mr. Latta, for 5 minutes.

Mr. LATTA. Thank you very much, Mr. Chairman.

And to the Commission, thanks very much for being here today.

On Monday of this week, Congressman McNerney and I introduced the Advanced Nuclear Technology Development Act, which would require the NRC and Department of Energy to address issues that are currently hindering the development of advanced reactor technologies, such as the need for a predictable risk-informed regulatory framework. The legislation would also codify the Commission's proposal, including the fiscal year 2017 budget request of $5 million for the development of regulatory infrastructure for advanced nuclear reactor technologies that is not subject to the fee-based, which the NRC must recover from the NRC licenses and applicants.

If I could start, Commissioner Ostendorff, with you with a couple of questions, but, first, also just to follow up, thank you for your tenure at the Commission and wish you all the best in your future endeavors.

You have spoken on the need to examine the current regulatory framework to create more certainty for non-light water reactor technologies. Would you please describe the nature of your $5 million proposal? And, for example, what is it specifically intended to address, and what is the expected timeline to develop that regulatory framework?

Mr. OSTENDORFF. Certainly. Thank you for the question, Congressman Latta. The proposal for the $5 million for fiscal year 2017 would basically have us engaged in looking at other technologies that are being discussed in the industry vendor side of the house, would have us participate in outreach activities, and also look at our particular regulatory requirements to ensure that we understand how a prospective application might fit into those requirements.

Let me give you one example that has been discussed earlier this year by our staff, by Dr. Jennifer Uhle, who is in charge of our New Reactors Office, and by others. That is, we are embracing now a phased approach to look at new technology in a way that would provide incremental feedback to a prospective vendor to break it down, not into just one package that comes in 3 years from now,

but in year one, they have two major conceptual design issues they want to discuss at NRC. We are prepared now to provide that type of feedback and do it in a phased way to make it, quite frankly, easier but also recognizing the limitations of venture capital funding for new ideas and new projects. So that is one example of a specific regulatory adaptation we are ready to make that would be facilitated by the $5 million funding if we receive it.

Mr. LATTA. Chairman Burns, the Commissioner recently issued a construction permit for a new facility to generate medical isotopes. Would you please describe how the Commission approached the permitting process and if there are lessons learned that could be applied to the licensing of other non-power reactors or non-light water reactors?

Mr. SHIMKUS. I think he had a hard time hearing your question.

Mr. BURNS. Could you repeat the question? I couldn't quite hear the——

Mr. LATTA. OK. Well——

Mr. BURNS. I understand. I think you are asking about the SHINE application.

Mr. LATTA. Well, right. So I guess, describe how the Commissioner approached the permitting process and if there are lessons learned that could be applied to the licensing of other non-power reactors or non-light water reactors.

Mr. BURNS. Yes, thanks for the question. What it showed I think is some adaptability in terms of the agency looking at something that didn't quite fit, perhaps, the part 50 reactor framework and looking at—that that was a good approach in terms of going forward with the licensing.

Now what they did is use what I will call the traditional two-step approach: construction permit, come back ultimately for operating license.

I think what that does—the advantage of that two-step process was it allowed development finalization of design. What led us to go into the part 52 or one step was a concern about certainty and that type of thing. But I think where you—it was a good example here where you had new technology, where it didn't quite fit the model, that we discussed it with the applicant. We found a place where it could go, and I think it has been successful in terms of getting through the construction permit phase. I don't know if any of my colleagues have anything else to add.

Mr. OSTENDORFF. One thing, a fine point, maybe 2 ½ years ago, our staff came to us with our help—with the help of our Office of General Counsel and said: This part 50, the way it is written would require perhaps some modification or change. They proposed that to the Commission. With the general counsel's help, we approved it, and it was dealt with.

Mr. SHIMKUS. If the gentleman would yield, it almost sounds like a design build type thing instead of the two processes—current construction, you are kind of doing it together in the process. Is that true?

Do you understand design build in construction?

Mr. BURNS. Yes, yes.

Mr. SHIMKUS. Where it is not a two-step? It is designing and building; in essence, one firm operating together in two different operations. No.

Mr. BURNS. Yes, I may not fully—again, I think what it allows is there may be some finalization of the design for the final phase for the operating license, and that is—but that allows them to go forward. It gave them some opportunity in terms of making a safety case, showing that the technology was viable, and some of the details in operation that can be dealt with in the second phase. I think that was the advantage of it.

Mr. LATTA. Thank you very much, Mr. Chairman.

My time has expired. I yield back.

Mr. SHIMKUS. The gentleman yields back time.

The Chair now recognizes the gentleman form California, Mr. McNerney, for 5 minutes.

Mr. MCNERNEY. I want to thank my colleague, Mr. Latta, for introducing with me H.R. 4797. Are you all familiar with that legislation yet? Have you had a chance to look at it?

Mr. BURNS. I have had just a very brief chance to look at sort of the high points of it.

Mr. MCNERNEY. Well, do you believe that the NRC can play an effective role in developing advanced regulatory technology? And in particular, would a memorandum of understanding with the DOE be helpful?

Mr. BURNS. It could be. We have ongoing discussions with the Department, and we maintain awareness of what they may be doing in terms of assistance to new technologies. Again, we have a development role—they have the development role; we have the regulatory role. But across that, I think we have good discussion and can work appropriately together.

Mr. MCNERNEY. How quickly are some of these technologies being developed, the new advanced technologies?

Mr. BURNS. That is a good question, because some of these technologies have existed. What we have not had particularly presented to us—other than, say, for example, a small modular reactor, a NuScale, which is a light water reactor design—we really haven't had a lot of them presented to us. There has been some discussion. So I probably am not well-equipped to understand how far along they are on development. I think some are further along than others, quite honestly.

Mr. MCNERNEY. One of the areas that the NRC may need to improve is—I mean, we have already discussed licensing and outreach—is technical preparation. And I see you have reduced staff by 90 folks. Were those done by attrition? I think you mentioned that some of them were anyway.

Mr. BURNS. Some is attrition. Some we had an early-out buyout last year, so some were buyout as well.

Mr. MCNERNEY. Do you expect to see additional reductions?

Mr. BURNS. Well, yes, given the budget request for fiscal year 2017.

But what I say is what we try—what we have to maintain awareness of and we keep a focus on is, where do we see the demands on in terms of our staff, in terms of workload? And we reach out to the industry to try to tell us, what do you think you are

going to be putting on our plate? So that helps inform our planning process. And that is part of what we would be doing with this $5 million, nonfee-based, in the fiscal year 2017 budget.

Mr. OSTENDORFF. If I may add to the Chairman's comment, Congressman, I think one very positive aspect of your legislation with Congressman Latta is the fact that it excludes from the fee base work on advanced reactor technologies. That is a very constructive and helpful change, because that has been a tension for us to have staff working on areas that are preparatory to receiving applications, so that is a very positive aspect.

Mr. MCNERNEY. So how is the morale of the agency, seeing that you have reductions and will see additional reductions?

Mr. BURNS. I think the overall the morale is pretty good. Before I retired, I had served in the agency 34 years before going to Paris and then coming back as a Commissioner. I saw, across the course of my career, those ups and downs, after Three Mile Island, the early 1990s, when licensing had been done.

This is a pretty resilient staff. It is a high-quality staff, very dedicated to the mission of the agency. Yes, there are some uncertainties, but that is part of what I think our role is and senior leadership's role is, is to work on the morale. But, overall, I think it is good. I think that is reflected in our——

Mr. MCNERNEY. I will ask a question that will make the Chairman happy, I think. Are there any realistic paths for long-term storage of nuclear waste? Is there anything out there that we can hang our hats on that is realistic, given the politics?

Mr. BURNS. Well, I will avoid the politics. But what I mentioned before, we have two potential applicants who—I think we may get the one application this month and another one later on in the year.

Mr. MCNERNEY. For high-level waste.

Mr. BURNS. For high-level waste, consolidated storage of high-level waste. This is the one in western Texas and in eastern New Mexico. So we will see how that proceeds, but we have the authority to license——

Mr. MCNERNEY. Yucca Mountain, is it completely dead?

Mr. SHIMKUS. You have been there. You have seen it.

Mr. MCNERNEY. I want to hear what the Commission says. It looks——

Mr. BURNS. I am not going—I am not going to weigh in on that.

Mr. MCNERNEY. OK.

Mr. SHIMKUS. But I will say DOE has no authority under current law to move on high-level nuclear waste anywhere but current law, which is Yucca Mountain.

Mr. MCNERNEY. OK. Mr. Chairman.

Mr. SHIMKUS. The Chair now recognizes the gentleman form Ohio, Mr. Johnson.

Mr. JOHNSON. Thank you, Mr. Chairman.

And I thank the panel for being with us this morning. I want to talk about a little bit of a different topic. NRC has invoked the adequate protection standard to require a backfit in a provision of the draft rulemaking known as mitigating beyond-design-basis events. Now, by invoking adequate protection, NRC staff doesn't have to submit the rulemaking to the Committee to Review Generic Re-

quirements, or CRGR, make a determination of safety significance, or conduct a cost-benefit analysis. It appears that, in making this determination, NRC staff's draft regulatory analysis did not account for actions already required for licensees to comply with nor did the regulatory analysis appropriately justify the need for a backfit application.

So I am concerned that NRC staff's invocation of adequate protection in this situation is not warranted and, in doing so, undermines the credibility of the NRC and your principles of good regulation.

So, Commissioner Ostendorff, you have previously been vocal about the need for discipline, clarity, and reliability in the Commission's rulemaking process. Why is it important for the Commission to have a high threshold for requiring a backfit?

Mr. OSTENDORFF. Thank you for the question.

Let me just, if I can, talk very briefly about the overall experience from Fukushima issues. Along with Commissioner Svinicki, each of us has voted on 25 separate decisions associated with Fukushima regulatory actions in the last 5 years. Throughout that, we have looked very carefully at ensuring that we have adhered to our historic principles of adequate protection, which is a Commission decision. It is not something our staff decides. We are the only group that can decide adequate protection issues. If it does not meet the adequate protection threshold, then to move forward from a regulatory standpoint requires identification of a substantial safety enhancement that passes a cost-benefit test. So that is the backfit piece you are talking about, Congressman.

And I would offer from my experience that the Commission—I am drawing a line here—the Commission decisionmaking, as a result of Fukushima issues, has adhered to the adequate protection standard and the backfit rule. The only—it is not a——

Mr. JOHNSON. I don't mean to interrupt you, because I don't have a whole lot of time. But adequate protection, that is a qualitative assessment.

Mr. OSTENDORFF. That is correct. Yes, sir.

Mr. JOHNSON. That is not a quantitative objective assessment, like having to submit the rulemaking to CRGR. Correct?

Mr. OSTENDORFF. Yes, sir. But it is a qualitative decision by the Commission, not the staff.

Mr. JOHNSON. Right. Well, given that, though, is that the same standard of discipline and reliability on the rulemaking process when we do a qualitative rather than a quantitative analysis?

Mr. OSTENDORFF. I think the Commission takes this adequate protection notion very seriously. There is Supreme Court case law here, significant Commission precedent. I think the end result of the decisions, though it may not be as predictable as a quantitative analysis, I think the decision——

Mr. JOHNSON. Well, I am glad you said that, because if looking at the NRC's backfit rule, 10 C.F.R.—I have got to get my glasses on—50.109 provides that, before a new requirement can be added to an existing licensed facility, the NRC must demonstrate that the new requirement would result in a substantial increase in the protection of public health and safety, and that the direct and indirect cost of implementation for that facility are justified in view of this

increased protection. How in the world can you meet that standard with a qualitative assessment rather than a quantitative assessment? How can you meet your own rule?

Mr. OSTENDORFF. Well, the——

Mr. JOHNSON. With simply a qualitative adequate protection standard?

Mr. OSTENDORFF. The adequate protection piece which you are—you are not referring to. You are talking about the backfit—there is the adequate protection that does not have the cost-benefit. Then——

Mr. JOHNSON. But your rulemaking, but the backfit rule requires that you do determine cost-benefit analysis.

Mr. OSTENDORFF. That is for something that is not at the level of adequate protection. So if something is required for adequate protection—and we have had this with respect to the station blackout mitigation of beyond-design-basis event rulemaking, as you referenced—costs are not a consideration.

Mr. JOHNSON. Well, I guess when it comes to the backfit rule and requiring—when it requires that facilities fund and pay for backfit control technology, that the taxpayers would expect that we get that higher degree of certainty and cost-benefit analysis, because it is affecting the industry. It affects the industry. It affects jobs. But I have extended my time.

Mr. OSTENDORFF. If I can ask the opportunity——

Mr. SHIMKUS. Talk quickly, quickly.

Mr. OSTENDORFF. If I can ask the opportunity to come back with Congressman Johnson, either in the context of a question for the record or come by to brief him in the office, I would be happy to do that.

Mr. SHIMKUS. Great. Thank you very much.

The Chair now recognizes the gentleman from New York, Mr. Engel, for 5 minutes.

Mr. ENGEL. Thank you very much, Mr. Chairman.

I thank our guests for coming here. As this panel knows, the Indian Point nuclear power plant in New York just outside my district is operating under two expired licenses. Applications to renew these licenses are currently pending. Serious people have serious concerns about the safety of this aging and troubled plant located only 24 miles from our Nation's largest metropolitan area, which, of course, is New York City.

In 2015, Indian Point suffered seven major malfunctions: pump and power failures, a transformer explosion, radiation leaks, a fire, and an oil spill. In early 2016 this year, enhanced levels of radioactive tritium were found in the water of three monitoring wells near the plant, including one well with the radioactivity level increased by 65,000 percent. Then, last month, the plant operator found that 227 of the 832 core baffle bolts—these are the bolts that keep the inner walls of the reactor core from coming apart—were either missing or impaired, degraded by the high levels of radiation inside the reactor.

For these and many other fundamental reasons, I have believed for a long time now, and the Governor agrees with me, that the reactors at Indian Point should be shut down. Indian Point's reli-

censing applications have been pending for years, and yet you have been unable to reach a decision.

Your budget request includes a $1.7 million cut in funding for activities at operating nuclear reactors, which includes the review of pending license renewal applications nationwide. Will this budget request help or hinder your timeline for reaching a decision on Indian Point? And when do you think we can expect that decision? Anyone who cares to answer.

Mr. BURNS. Thank you, Congressman, for the question. Our budget provides for the anticipated license renewal work we have. So it is not a reduction to defer license renewal work. My best understanding of the status of the applications, the renewal applications, is that there is a supplemental environmental impact statement that would be issued in 2016 or September 2016. The baffle bolt issue that you have alluded to is a matter in litigation before—as part of the renewal proceedings, so that may impact where that goes. But I would, again, the next—the other document I expect is this supplemental environmental statement, which would be in September of this year.

Mr. ENGEL. So you don't feel that the budget impedes any decision that will be made?

Mr. BURNS. No. I do not.

Mr. ENGEL. OK. Let me ask one other question. I have so many questions, but let me just say, about Indian Point, before we leave: I just think it is a disaster waiting to happen. I never called for the closing of it, frankly, until we learned that, prior to the tragedy of September 11, 2001, one of those planes flew right over the Indian Point plant on its way to ramming into the World Trade Center. And that really made me look, and I have come to the conclusion that this plant should be shut down.

Let me ask a question about cybersecurity, because I think it is important. This also happened just outside of my district: The Department of Justice recently indicted seven Iranian hackers for their role in a cyber attack on a dam in Rye, New York. Terrorists and hostile foreign actors are looking for vulnerabilities in our infrastructure every day, so we have to be vigilant about these threats.

When it comes to securing our Nation's infrastructure, we need to consider whether we incorporate adequate safeguards against cyber attack, and we need to consider whether the right people are evaluating this question.

So let me ask, when licensing new reactors, do you consult with the Department of Homeland Security to ensure that these facilities are hardened against cyber threats? Have you consulted with DHS about potential cyber threats to Indian Point? Anyone who cares to answer that.

Mr. BURNS. I will do it. I think one of my colleagues may want to add to it. We do consult with the Department of Homeland Security, and also the NRC has had, for about 6 years or so, rules that apply to existing power plants with respect to maintaining cybersecurity. It is within what we call our design-basis threat. One of the things, the differences between the dam in New York and Indian Point and other nuclear plants, is basically the air gap between the essential systems, safety systems in the plant. My un-

derstanding is this dam was actually connected to the Internet, which is not something that is allowed for the essential safety systems within the plant.

So we have some requirements. There is some additional work we expect licensees to do in the coming year. But you are correct: it is something we want to keep a focus on. And I think we are trying to do the responsible thing on cyber.

Mr. SHIMKUS. The gentleman's time has expired.

The Chair now recognizes the gentleman from Missouri, Mr. Long, for 5 minutes.

Mr. LONG. Thank you, Mr. Chairman.

Chairman Burns, as part of the agency's efforts to identify low-priority activities, NRC staff identified nine rulemaking activities to be discontinued. Can you enlighten us and tell us what the considerations were that went into the staff's recommendations?

Mr. BURNS. I think what the staff was focused on is whether those rules—essentially whether they added value in terms of the regulatory scheme. I am not sure whether the Commission—I am blanking as to whether the Commission has completed its deliberation on that paper. When I look at it, I think, from my standpoint, most of those are matters that I think—I thought that we don't need to continue proceeding. But I think what they looked at is, again, whether or not it added a particular value in terms of our regulatory footprint or assuring safety or security on certain matters.

Mr. LONG. Will the Commission encourage staff to expand this level of scrutiny to all regulatory actions as well as maintain the scrutiny into the future?

Mr. BURNS. Yes, I think the Commission will maintain that scrutiny. That is part of the reason for the reintroduction of the Commission's review of rulemaking or proposals at the outset to assure there is Commission endorsement at least at the exploratory stage of going forward. So I think that is an important part of our effort there.

Mr. LONG. In early June, your staff will cohost for the Department of Energy a second workshop to discuss developing advanced nuclear technologies. Will you please describe the purpose of these workshops? For example, what is on the agenda, and what are the goals of these workshops?

Mr. BURNS. I might give you the particular agenda, provide you that for the record. The purpose——

Mr. LONG. The purpose, yes.

Mr. BURNS. The purpose of the workshops has been really to reach out to this community of—that has an interest in potentially pursuing the advanced reactor designs and try to give them information about us, the NRC; us hearing from them about what their concerns are, how we might address them; and also hear from the Department of Energy in terms of DOE type of initiatives, DOE research and the like. So the first workshop was very successful, and I think we are looking forward to the next one. I know I have talked to John Kotek at DOE regarding it and—

Mr. LONG. Any ah-ha moments or takeaways you can relate from that first workshop?

Mr. BURNS. Well, I think the one, again, is this understanding in terms of the phased approach, what we call the phased approach or topical approach, to looking at the designs and how that—from the standpoint of the potential vendors—how that helps them in terms of their need for venture capital and to some assurance that you are not just going down a trail that leads to a dead end, that there is, you know, you have got some idea of where you are going with the particular technology.

Mr. LONG. OK. Thank you.

I have got some extra time. I don't know if Mr. Flores would like for me to yield. He usually has several questions.

Mr. FLORES. I have got several. I will take your time.

Mr. LONG. All right.

Mr. FLORES. I thank the gentleman for yielding.

And, Mr. Chairman, thank you for holding this hearing.

Chairman Burns, I really appreciate the NRC's efforts to right-size itself in light of the fact that the nuclear industry is not growing nearly like all of us would like it to in order to address environmental issues. But I am concerned that, while the NRC talks about trying to right-size itself, it does some things that sort of take your breath away. For instance, 2 days before the end of fiscal year last year, they signed a $20 million contract for new office furniture. Well, let me read it: acquire office systems, conference rooms, and ancillary furniture.

That is $5,500 per employee. That is just amazing. So, at a time of increased budget scrutiny throughout the agency, how is that kind of a contract justified? Do you replace every person's furniture?

Mr. BURNS. Well, I am not sure it is replacing every person's furniture. What we have been doing is we have been reducing the footprint of the buildings that we are in at White Flint. And part of that contract is to restack the buildings to get more employees into the White Flint 1 and 2 buildings and reduce our footprint in the third building.

Mr. FLORES. How do you—most taxpayers, hardworking American family taxpayers have seen their family finances get worse off in the last 8 years. How do we justify this to the taxpayers?

Mr. BURNS. Well, our budget has been reducing over the last few years. The fact of the matter is we do need infrastructure to accommodate our staff that we do have. Again, I would be pleased to provide more detail for the record on this particular contract.

Mr. FLORES. I just say that it looks bad. Two days before the end of the fiscal year, to sign a $20 million contract just really has a bad odor to it.

Yesterday, the House Appropriations Committee approved the fiscal year 2017 energy and water appropriations bill and set NRC funding at $936 million. And $20 million of that is for the nuclear waste fund for Yucca Mountain activities. This funding level seems to be the right fit when you look at the NRC's projected workload, and it still allows it to fulfill its mission. Are you working with your senior leadership team, including the executive director of operations, the chief financial officer, and the chief of human resources officer, to develop a plan that will fit the NRC's operations to fit that budget?

Mr. BURNS. Yes. We worked with our EDO and CFO and our OCHCO director to assure that we implement the budget that we get. What I have identified is, from the President's budget, which was the 970, excluding the IG, is that we have identified through the Project Aim Initiative about $31 million in additional cuts, which brings us down. I haven't fully understood or looked at the House mark. I would say we would have—we need to analyze that some. I would have some concerns, but there may be areas in which we can accelerate some of the additional savings we identified in Project Aim into the following fiscal year. But we work, I think, very hard and very responsibly in implementing those whatever budget mark comes out in the end.

Mr. FLORES. In looking at your budget request for fiscal year 2017, we note, as you said a minute ago, that you reduced your budget request from $990 million, excluding IG, to $970 million, but three-quarters of those savings came from the Integrated University Program, and that is the spending on basic research that provides the seed corn for future advanced nuclear reactor technology. It seems to me like we are hurting ourselves in the future by the way the NRC designed its budget. We ought to be maintaining those investments and taking that from the other less essential areas. Don't you agree with that?

Mr. BURNS. Well, this is an area in which, in terms of the Integrated University Program, where the administration has preferred to consolidate those into other STEM programs, and as a result, the President's budget does not reflect that. What has happened over the number of years now is that when that is appropriate, the agency has been responsible about integrating that into its programs and effectively carrying out the program.

Mr. FLORES. OK. Let me close——

Mr. BURNS [continuing]. We have taken real cuts.

Mr. FLORES. Let me close my time by saying that the basic research is the seed corn for the future. That is not the area that we need to be cutting.

Thank you. I yield back.

Mr. SHIMKUS. The gentleman yields back his time.

The Chair now recognizes the other gentleman from Texas, Mr. Green, for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman.

I thank the Chair and ranking member for holding this hearing.

And I want to welcome the Chairman and Commissioners.

I also welcome back our former Energy and Commerce staffer, Jeff Baran.

The Nuclear Regulatory Commission is an important agency. To look forward to the future, we need to assess our energy mix in the country. We must not overlook the importance of the nuclear power industry. Nuclear power is carbon-free and capable of providing base-load power, but the industry faces economic uncertainty. The nuclear power industry deserves a clear path forward, and the NRC provides a crucial role in determining that path.

Chairman Burns, on November 15, the White House announced a plan to expand nuclear energy opportunities to the U.S. The Gateway for Accelerated Innovation in Nuclear, GAIN, was to pro-

vide the nuclear community with access to a broad range of opportunities and capabilities across the Government complex.

Mr. Chairman, what role did NRC play in the development of GAIN?

Mr. BURNS. Well, thank you for the question. The NRC itself did not develop the GAIN initiative. However, we have a role. I attended the White House Summit on Nuclear Energy and spoke at it. One of the things that we did was this engagement that we talked about here, that the budget request would cover, is being a place where you can contact and make sure you understand the NRC processes to have a discussion point with respect to that, because all of these technologies, ultimately, if they are going to be put into commercial use are going to require an NRC license. So that is our relationship to the GAIN initiative.

Mr. GREEN. The Government Accountability Office reported to Congress the typical NRC light water reactor application costs in the range between $50 million and $75 million, and it takes an average of 41 months. Industry reports state that a new small modular reactor application should be submitted to NRC by the end of the year. If NRC receives a small modular reactor application in December, do you anticipate the same cost and timeframe as reported by the GAO?

Mr. BURNS. I believe the costs—and these are, basically, the licensing fee costs—are similar. We can check on that for the record. In the timeframe, I think, again, we are looking at—about that same type of timeframe, about a 3-, 3 ½-year timeframe for the review. We had an engagement with NuScale over the last couple of years, which I think helps in terms of when they do submit their application at the end of the year, that will help us go through efficiently.

Mr. GREEN. Currently, the NRC has two licensing paths, according to the Code of Federal Regulations, titled part 50 and part 52. In the Commission's view, which licensing path is more appropriate for the small modular reactor technology?

Mr. BURNS. Well, part of it depends on how the vendor or a particular applicant is going to approach the agency. For example, NuScale is using the part 52 process because they want to get a design certification, which then can be referenced by individual applicants. And we have indication of interest at least by one, this Utah, UAMPS, I think, organization, that they may do that. So, ultimately, somebody who will actually site and will operate the plant will need a license from us.

But what NuScale is doing is they want to get the design certification, which then can be referenced anywhere in the country where somebody might wish to try to site the plant.

Mr. GREEN. My understanding is, if the applicant pursues part 52 licensing, exemptions would be required. Are these exemptions identified and worked on in the pre-application process?

Mr. BURNS. Actually, I am not particularly aware of the exemptions, but that I would expect as part of the discussion between the staff, the pre-application discussion. I might be or staff may be able to provide more granularity.

Mr. GREEN. If you could have them get back with us.

In January 2015, the Texas Commission on Environmental Quality sent a letter to the NRC requesting clarification on the State's authority to license the disposal of Greater-than-Class C low-level that may contain transuranic waste. In its response 15 months later, the NRC said it would have to further examine the issue.

Chairman Burns, can you share with the committee what the current status of the Texas inquiry is?

Mr. BURNS. What the Commission decided was to have the staff develop some of the technical basis, looking at some of the technical issues related to that. And I believe they are coming back to the Commission at some point this year, maybe midyear. I may be wrong about that, but that would help inform further discussion with the State regarding whether the licensing would be done directly by Texas or by the NRC.

Mr. GREEN. Mr. Chairman, I have some questions on that application, and if I could submit them?

Mr. SHIMKUS. Yes.

Let me ask unanimous consent that there are 10 days for members to submit questions for the record.

Mr. GREEN. Thank you.

Mr. SHIMKUS. Without objection, so ordered.

The Chair now recognizes the gentleman from Illinois, Mr. Kinzinger, for 5 minutes.

Mr. KINZINGER. Thank you, Mr. Chairman.

And thank you all for being here today and your continued service to the country.

Before I ask my questions, I would like to thank all of you and your staff for your help on draft legislation that I sent over last week that would reform some of the NRC processes currently in place. I welcome any technical expertise that you can provide on this draft and look forward to continuing to work together on this endeavor.

Mr. Chairman, last September, I asked you about the current status of efforts to update an outdated management directive, last revised in 1989, that guides the budget development process. As I pointed out last year, the NRC inspector general found 3 years ago that the Commission had an incomplete planning, budgeting, and performance management process, resulting in a budget formulation that doesn't match up in its formulation and execution. Seven months ago, you expressed optimism that this directive would be in place to develop your fiscal year 2017 budget. What is the current status of this directive?

Mr. BURNS. The Commission has approved the set of management directives that would encompass this issue. There are some changes that we have asked our CFO to make before issuing them as final to reflect some of the marks in the appropriations bill in terms of the control points that were put in. So I expect that could be done very soon.

Mr. KINZINGER. So you think it is on track then. While we are discussing the budget for fiscal year 2017, your agency is already starting to prepare the budget justification for fiscal year 2018. Do I have your assurance that the new management direction will be approved and fully in place—do you expect—by the fiscal year 2018 development process?

Mr. BURNS. It should be, yes.

Mr. KINZINGER. And then you also raised the issue of reexamining current legal restrictions for foreign ownership or control of nuclear facilities in September. We live in a competitive global marketplace, and we are seeing many leaders in nuclear technology and operations take their business elsewhere. This is very—I mean, I have folks that produce part of reactors in my district. I have four nuclear plants myself and five repositories for spent fuel. Do you think policymakers should reconsider how this current restriction is structured?

Mr. BURNS. As I said last September, I think it is worth—it is something worth taking a look at. It basically applies to—the foreign ownership, control, and domination provision applies to reactors or utilization facilities and production facilities, so primarily think about commercial reactors in that sense.

We still have the ability to protect national security through other provisions of the act, so I think it is something that is worth taking a look at.

Mr. KINZINGER. What are some of the considerations that you think should be examined as part of that? You kind of touched on a little bit, but——

Mr. BURNS. I think one important thing is, to the extent that we do have an important responsibility in terms of security and national security as well as the physical security of facilities, I think that is an important issue there.

The question is, is that, as you indicate, in a global market, which the nuclear has certainly become, is there a value added for that provision? I think that is the primary question.

Mr. KINZINGER. You think a study, would that be—if we did a study—beneficial to you, beneficial to policymakers on that provision, the impacts, everything else?

Mr. BURNS. I think that could be useful, yes.

Mr. KINZINGER. That is all I have, Mr. Chairman.

I yield back my minute.

Mr. SHIMKUS. The gentleman yields back his time.

The Chair now recognizes, if he wishes to take it, the gentleman from Virginia, Mr. Griffith—I know, but he has been here for a long time. Do you want to go last, or do you want to go now?

Mr. GRIFFITH. I can do whatever.

Mr. SHIMKUS. You are scheduled to go now if you want to go now.

Mr. GRIFFITH. All right. Then I guess I will go now.

Mr. SHIMKUS. The gentleman is recognized.

Mr. GRIFFITH. Thank you. I appreciate you all being here today.

Chairman Burns, as the guardian of the backfit rule, the Committee to Review Generic Requirements, CRGR—always hate keeping up with those initials—but CRGR embodies the spirit of the NRC's principle of good regulations. However, following a change installed over a decade ago, the Committee to Review Generic Requirements, CRGR, has asserted its authority with less and less frequency, particularly in formal reviews of NRC actions.

I understand that the NRC staff is currently developing a proposal for how and when CRGR reviews regulatory actions. I would ask you to encourage the staff to broaden their proposal and to con-

sider, additionally, potential structural changes to the CRGR membership to provide greater ownership and attentiveness for CRGR members and to ensure the committee operates truly independently.

Now I got all of that out, and I would like for you to just comment on it, in general. But I also would like for you, at some point in your response, can you commit that you will pursue a thorough review of the CRGR?

Mr. BURNS. Yes. Thank you.

Nuclear has lots of acronyms, don't we?

My understanding is the staff is to provide us a copy of its review I think sometime in the early summer, late spring or early summer, with respect to its review. I will take—and I think my colleagues will take—a close look at that to look at, you know, in terms of how the CRGR is performing its function, is it providing a value added that was conceived of when it was I think originated in the 1980s? So I can commit to doing that. I want to see what the staff comes up with. That is one of the reasons in the paper or our approval of the revisions to rulemaking that we ask to see that before making it—taking further steps.

Mr. GRIFFITH. I appreciate that. I hope they will take the broader look. Now maybe it is just a change in culture that needs to occur, but if it does need to have a change in membership or in their outlook, I hope you all will look at that as well. Would anybody else on the panel like to respond to that? Ms. Svinicki? Everybody is pretty much in agreement. All right.

I am going to switch gears completely. One of the large drivers in escalating the cost of the NRC was its mismanagement of office space in the past. Will you please update the committee on the status of your housing strategy and what that will mean for your agency's budget in the upcoming years? Again, Mr. Chairman, if you could answer that.

Mr. BURNS. The details of the actual impact on the budget I may have to provide for the record. We have basically reconsolidated the staff that had been—spread out primarily in the first and second buildings. We have issues—not issues, but we have negotiations about—ongoing in terms of the lease in the second building. We are reducing the footprint in the third building.

One important thing we have there is the Emergency Operation Center, but more of the staff is moving out. I would be pleased to provide for the record a more granular picture of what I think that means for budgeting going forward.

Mr. GRIFFITH. If you could, I would appreciate that.

I will tell you that I represent a district that has some economic issues, a district with many attributes, but the coal industry in particular has been hurting. It used to have textiles and furniture and tobacco. You can imagine that there is a lot of empty space in my district and would ask you just to take a look, if it is something that doesn't have to be in DC and can operate using the modern wonders of the Internet, you may want to look at not just my district but central Appalachia and other areas that are facing some economic problems, because we have a lot of space that is really cheap that you could rent and house some folks in, but I do appreciate you looking at that very much. Thank you.

With that, Mr. Chairman, I would yield back.

Mr. SHIMKUS. The gentleman yields back his time.

The Chair now recognizes the gentleman from Oklahoma, Mr. Mullin, for 5 minutes.

Mr. MULLIN. Well, if we are lobbying for them to move, I want them to move to Oklahoma. We have a lot of space there too. Oil and gas is kind of hurting right now.

Anyway, I appreciate everybody being here.

Chairman, thank you for holding this hearing.

My questions, Chairman Burns, are all going to be directed to you. We can allow whoever wants to jump in at any given time. However, I know your brain has to be hurting. You have been on the hot seat for a while.

As you know, Chairman Burns, five reactors have shut down in recent years, and at least three more closures are expected in 2019. In spite of this, the budget of the Office of Nuclear Reactor Regulation as grown 10 percent since 2012. In both 2014 and 2015 fee recovery rules, the NRC has accounted for the reactor closures and resulting loss of these fees by simply billing the remaining reactors to make up the difference.

A statement that was put out: "The permanent shutdown of the Vermont Yankee reactor decreases the fleet of operating reactors which subsequently increases the annual fees for the rest of the fleet."

My question, Chairman Burns, and to the rest of the Commissioners for that: Is this a fair way to structure fee collections? Does it cost more to inspect fewer? I mean, wasn't the fee set up—the idea of the fees to be able to be adjusted for the amount that you had to take care of, the workload?

Mr. BURNS. Well, the fact of the matter is that the fees are going down, and they are about $300,000 less per unit than they were a couple years ago. What does happen when they transition out——

Mr. MULLIN. Then why was the statement said that that increases the annual fee for the rest of the fleet? That was a statement that you guys put out.

Mr. BURNS. Well, the fact—what I am saying is the overall impact is that there is a reduction. It is true that if you have a reduction in the overall number of operating reactors in the fleet because, by law, we are required to——

Mr. MULLIN. How has it gone down when the corporate support cost has gone up $97 million over the last 10 years——

Mr. BURNS. Well, we are addressing corporate support costs, and we have been reducing corporate support costs. That is what is reflected in our rebaselining. That is what the charge is with our——

Mr. MULLIN. Chairman Burns, you said they are reducing, but I am reading right here that they went up 47 percent over the last 10 years. How is that reducing?

Mr. BURNS. We have reduced corporate support costs.

Mr. MULLIN. How?

Mr. BURNS. How?

Mr. MULLIN. Because they have increased $97 million. How is that—I am not saying that I am the best in math, but I sure understand cost increase. And I am looking at a 47 percent increase over the last 10 years. So you just explained to me how you are

saying it is reducing when we are seeing it going up, and yet we are inspecting a lot less.

Mr. BURNS. Well, I am not sure we are inspecting less.

Mr. MULLIN. Well, you have had five factories shut down in recent years. You have at least three more closures expected in 2019. That is inspecting less.

Mr. BURNS. Yes. We have 100 operating nuclear power plants now. We have a larger number of decommissioning plants, and we have four units that are being constructed that are also inspected during the construction phase. So that is what the workload is in terms of the reactor fleet. The fact of the matter is, as I said and——

Mr. MULLIN. So then explain how costs went down——

Mr. BURNS [continuing]. I would be pleased to provide for the record, is that the fees, the annual fees for the reactor fleet, is going down. The fact of the matter is our corporate support costs are going down.

Mr. MULLIN. Well, the facts that I have, they are not showing that and including the statement I will read again that you will increase annual fees to the rest of the fleet. That is a statement that you all put out. And the fact is that I am reading here that we did research on that that says the corporate costs have gone up $97 million. I feel like I am repeating myself, because I am not figuring out how this is taking place. If you are saying they are going down, they have increased $97 million, 47 percent cost increase over 10 years, and that you guys said that—you all said that you are going to increase the annual fees, then you are going to have a lot to explain to me and show me, which evidently we can't do in 30 seconds, of how this math is adding up, because I am not following it.

Mr. BURNS. Well, I would be pleased to provide that for the record——

Mr. BARAN. Could I add just a little bit of context that might help?

Mr. MULLIN. Please.

Mr. BARAN. If we are talking about the timeframe of 10 years ago, that was right before—that was during the period of ramping up for what we thought were going to be a large number of new reactors. So there is no question that there was a period of time where the NRC budget was going up. We are now on the other side of that hill. We are on the other side of that mountain, and the budget's coming down. And so when the Chairman is talking about the decreases, he is talking about fiscal year 2015, fiscal year 2016, fiscal year 2017, as the agency is matching the resources to the workload we really have today that is coming down.

Mr. MULLIN. In 2015 is when the statement come out that said that you were going to increase annual fees.

Mr. BARAN. It was talking about the pool of reactor fees. You have two trends that are kind of pushing in opposite directions. One, it is true that the smaller the fleet, the smaller the number of units that have to cover the cost. On the other hand, the costs are also coming down. And so the total fee amount is coming down. It is shared among a smaller number of operating reactors. You

have kind of trends going against each other and canceling each other out in that regard.

Mr. MULLIN. Thank you, Mr. Chairman.

Mr. SHIMKUS. The gentleman's time has expired.

The Chair now recognizes the gentlewoman from North Carolina, Mrs. Ellmers, for 5 minutes.

Mrs. ELLMERS. Thank you, Mr. Chairman.

This has been a lengthy hearing. And I thank the panel for being here with us today.

Chairman, I will be asking the questions mostly of you, but I am more than happy for any of the rest of the Commissioners to add any input as we go along. Following your appearance before the committee last year, you stated in your response to questions for the record that the Office of Nuclear Reactor Regulations, NRR, was, quote, "conducting an initiative to review and evaluate the existing reactor license amendment process with the goal of reinforcing current expectations and best practices, including examining potential implications that staff turnover on licensing reviews may add to the process."

My question is, can you please provide an update on the status of this initiative?

Mr. BURNS. Yes, thank you for the question. Essentially, within the senior management in the Office of Nuclear Reactor Regulation has continued to focus on this with monthly briefings on performance in the area, continued attention by staff to adherence to the basic procedures, and I think that goes to your point particularly about potential staff turnover and, you know, the need to develop and inculcate into new staff the right processes and procedures. Part of that is focusing on requests for additional information and assuring that they are focused and relevant. The office issued some guidance last year and, I am actually informed, I think within the last day or so issued some additional guidance to address some of these issues. So I think, you know, I commend the office staff and the senior management there to keep a focus on this, because I think that is important. That is how we can carry out what we need to do as a safety regulator in an effective and an efficient way and achieve the safety reviews that we need to do.

Mrs. ELLMERS. So you would basically say, then, that on a regular basis, the Commission is reviewing the staff recommendations?

Mr. BURNS. What the—some of the staff guidance is guidance that they can issue on themselves. I haven't seen this most recent guidance. I think I probably will.

Mrs. ELLMERS. So it is periodically when recommendations——

Mr. BURNS. Periodically. And part of it, I think it is the day-to-day management of the office. If you have got procedures, this is how you do a licensing review. This is how—you know, this the where it is appropriate to ask questions. You got to train your staff to do that.

Mrs. ELLMERS. Were the NRC licensees able to provide input to the NRC staff as they developed this initiative?

Mr. BURNS. I am not sure of the answer to your question. We have a lot of engagement with the industry on a lot of our processes. So I would be surprised if the—you know, what we have

heard, kudos and complaints, haven't been taken into account by staff in the guidance.

Mrs. ELLMERS. So what I will ask, then, is over the following days, you know, I think we have 5 or 10 days of time, if you could provide maybe just some input to the committee on that. Does anyone else on the panel want to, or have knowledge of—OK.

Mr. OSTENDORFF. I wanted to comment. Thank you for the question. To the extent that you are getting at licensing backlog——

Mrs. ELLMERS. Yes. That is basically my next question.

Mr. OSTENDORFF. Well, let me make two comments there. One, we are in a much better place today than we were 2 years ago. Bill Dean, who leads our Office of Nuclear Reactor Regulation, has made significant strides. Not there yet. But the number of backlog items is significantly down.

And, two, for those items that are in a queue, so to speak, we are engaging with industry to get their sense as to what is the highest priority.

Mrs. ELLMERS. OK. So more of a prioritization. Do you have a number? I mean, do you know what the number of backlogged——

Mr. BURNS. I think the backlog, it had been around 100 licensing actions a couple years ago. And it is about 24 now. The other good thing is—progress is that the—their basic goal is to complete 95 percent of the requests within a year. And through the first half of this fiscal year, I think we are at 94 percent. So I think that is a good progress.

Mrs. ELLMERS. I just have a couple of seconds left. And I would like to ask this question on behalf of the Harris Nuclear Power Plant. You know, they have invested significantly over the past years on many different initiatives. And my question to you is, Is there a process in place for them to be accredited for some of the advancements that they have made adjusting to, you know, the regulations and the regulatory process?

Mr. BURNS. Well, I think they are given credit for what they implement. Again, if there are things that they are doing that need to—they need to do or are approaches to meeting NRC regulatory requirements, we certainly inspect that, we acknowledge that. They may choose to do other things as an operator from—either from a business perspective, or because they think from a safety perspective, some other actions might be appropriate.

Mrs. ELLMERS. OK. Thank you. And I thank you, Mr. Chairman, for this time. Thank you to the panel.

Mr. SHIMKUS. The gentlelady yields back her time.

I want to ask unanimous consent to enter Chairman Upton and Chairman Whitfield's opening statement for the record. Without objection, so ordered. We did talk about the 10 days already, and ask unanimous consent on that.

[The statements appear at the conclusion of the hearing.]

Mr. SHIMKUS. And before I close, I would like—Chairman Burns, I know that in a discussion with Chairman Inhofe, you agreed to do, which I think is pretty exciting, this public meeting with stakeholders in the next 3 months as your predecessor, Chairman Shirley Jackson, did in 1998. Have you started doing any planning on that?

Mr. BURNS. Well, part of what I am looking at is exactly what Chairman Jackson did. So I am trying to scope out right now—it has been preliminary—scope out the nature of what the meeting was. I know I had some concerns to make sure we have a broad range of stakeholders. So I am hoping over the next few weeks that I will have a better sense of what this might look like.

Mr. SHIMKUS. Great. I just—you know, I kind of think it is a good idea, and I don't know the whole scope of it either, but I think it would be interesting.

So Mr.——

Mr. TONKO. A couple things.

I would like to ask unanimous consent for our ranking member, Congressman Pallone, to put a statement into the record.

Mr. SHIMKUS. Without objection, so ordered.

Mr. TONKO. And if I have a little bit of time, I will actually get to the questions I wanted to about the Texas application.

I started earlier about the disposal of the greater than class C low level that may contain waste. Fifteen months later, the NRC says it has to further examine it. Can you share with the committee what is the current status of the State of Texas inquiry on that class C? I know it is probably the only application in the country there. So——

Mr. BURNS. Yes. So, as you indicated, we had a communication back with the State. I think I have not spoken—I think Commissioner Ostendorff had actually met or spoken to the State representatives. And he might be able to——

Mr. OSTENDORFF. So, yes. Commissioner Baran and I visited the Waste Control Specialist site in Andrews back in January of this year. We invited the Texas Council on Environmental Quality Commissioners and their technical staff to join us, and they did. We had a very rich discussion. We discussed the NRC response back to the State of Texas. And the State of Texas representatives we dealt with were not surprised by our response. They were pleased that we agreed to work with them to discuss technical issues on the basis to move forward. It was a very constructive meeting.

Mr. TONKO. Well, our committee as a whole, you know, at one time back in the 1980s we had a plan to have a long-term nuclear waste facility, and decision back then was Yucca Mountain. And the other agreement was that we were going to have these interim storage facilities that would take it from all our plants that are now storing it on site. And would this be the first interim storage site that would be permitted if it finally gets done?

Mr. BURNS. Well, it wouldn't be the first one that was actually permitted. The NRC had licensed a site in Utah, but that project did not go forward. What we are able to do is, we are authorized to look at and evaluate the applications. As Chairman Shimkus noted, the question about the relationship, the Department of Energy probably involves some legislative changes. But we would—if the applicants come forward as we expect them to do, we would review the—we would review those applications and make a determination with respect to the, you know, the technical, environmental aspects of the site.

Mr. TONKO. OK. So you anticipate regulatory changes would be necessary to allow the State to license the GTCC waste facility?

Mr. BURNS. Yes, but that—yes. That is one of the questions is, and why we are going to the getting at the staff technical basis because there is some questions about whether or not Texas or whether it is a—there is some—there is some interpretive issues with respect to the existing legislation about the license-ability by Texas versus the NRC, or as the Federal Government.

Mr. TONKO. Well, and at that time location years ago I was a State legislator in Texas when we—there was a permit that the State issued for low-level facilities. And, again, the community out there, the Member of Congress actually has legislation, Congressman Conaway, and I guess from sitting on our committee, you know, we would like to see—you know, we have these nuclear power plants that are holding that storage on their own, and the agreement was, and, of course, the Supreme Court decision also makes it difficult. But ultimately, you get an interim storage, and hopefully, someday get a permanent storage. And, you know, but as I know—I don't know of anywhere in the world, whether it be France or Sweden or anywhere else that has actually a permanent storage, long-term storage. So but that doesn't mean we don't need to continue to work for it. And, again, with the agreement that was made, you know, 40 years ago now maybe almost that, you know, we would have these interim storage facilities like this. And hopefully it would be in different parts of the country also ultimately having a permanent storage.

So thank you, Mr. Chairman. I yield back.

Mr. SHIMKUS. The gentleman yields back his time.

Again we want to thank you for coming. We know it has been a long morning. Again, thank you for your service. And obviously, Commissioner Ostendorff, I know this will be something you will regret, not getting a chance to come up here and spend a couple hours with us and—but we do—we are excited about your future. Thank you. You all have been going a great job. I think the rebaselining, the relooking at that, I know we got nitpicky on a lot of things. You would expect that from public policy guys and in a budget hearing. So thank you for being available and accessible, and we look forward to working with you. And I will adjourn the hearing. Thank you.

[Whereupon, at 12:08 p.m., the subcommittees were adjourned.]

[Material submitted for inclusion in the record follows:]

PREPARED STATEMENT OF HON. FRED UPTON

This morning we welcome back the Nuclear Regulatory Commission to discuss the agency's proposed fiscal year 2017 budget. I'd first like to acknowledge Commissioner Bill Ostendorff for his distinguished record of service. Today is likely Commissioner Ostendorff's last appearance before this committee, as he has announced he will serve as a Distinguished Visiting Professor of National Security at his alma mater, the United States Naval Academy. Commissioner Ostendorff has served as Captain of a Navy submarine, Congressional staffer, Deputy Administrator for the National Nuclear Security Administration, and NRC Commissioner. We wish him luck in his next endeavor.

The Commission's 2017 budget request reflects NRC's ongoing attempt to right-size the organization's funding level and properly align staff resources with the agency's workload, known as Project Aim 2020. This initiative has focused the agency's attention on identifying the highest priority activities in order to safely and effectively oversee our 100 operating nuclear power plants. The breadth and duration of this initiative has been extensive. As the Commission looks to execute Project

Aim's next steps, I hope you maintain the rigorous culture of self-analysis that has developed over the previous couple years.

NRC's responsibility to license, regulate, and inspect our nation's fleet of nuclear power plants is of utmost importance to protect public health and safety. Nuclear power is especially important to folks of Southwest Michigan with the Cook and Palisades plants. The plants not only provide affordable and clean power to the region and beyond, they provide hundreds of good paying jobs and directly benefit local economies as well. Nuclear energy is, and will continue to be an integral piece of our electricity portfolio.

However, we should also recognize the NRC's role to license and oversee other nuclear material, such as medical isotopes and nuclear medicine treatments. In this context, the NRC is a partner in my bipartisan effort to advance breakthrough medical treatments and 21st Century Cures. I was pleased to see the Commission issue a construction permit for a first-of-a-kind facility for medical isotope production in February. I also understand the Commission is actively reviewing another medical isotope application, and there is at least one more expected to be under review. These new technologies and life-saving medical treatments are critical to develop and deploy at a timely pace, and I trust the NRC will ensure competent, efficient review of these applications for the benefit of public health.

PREPARED STATEMENT OF HON. ED WHITFIELD

Nuclear energy is a safe, clean component of our diverse electric generation portfolio. Like coal, market challenges are pressuring nuclear power plants and potential regulatory costs are placing additional economic burdens on the electricity generation sector.

Last September, I expressed concern about the agency's inflated budget and staffing levels, delays in addressing licensing actions, and lack of organizational efficiency. Those issues directly affect NRC licensees, as well as the ratepayers who fund the Commission through annual fees. I recognize that the Commission has subsequently taken some steps to address these issues and applaud you all for your leadership in these efforts.

During my tenure as chairman of the Energy and Power Subcommittee, I have witnessed an overly enthusiastic regulator, primarily the EPA, repeatedly determine it has no bounds when it comes to how or what it regulates. As a contrast, the NRC's rulemaking process and structure is designed to be disciplined and embody its Principles of Good Regulation—independence, openness, efficiency, clarity, and reliability. The ability to promulgate and impose regulations on NRC licensees is a potent statutory authority and one that should be thoughtfully and diligently exercised only when necessary.

In 1981, as a means to assure that the Commission apply a rigorous and credible evaluation to the most significant rulemakings, it established the Committee to Review Generic Requirements, or CRGR. Consisting of senior management representatives throughout the NRC, CRGR was designed to be a check on the most consequential regulatory actions that could be imposed on licensees, known as applying the "backfit rule." However, over time, we see the CRGR no longer functioning as originally intended with respect to backfit reviews, which has been confirmed by the NRC Inspector General and other stakeholders.

Recently the Commission in a vote on its involvement in the rulemaking process missed yet another opportunity to initiate a comprehensive review of CRGR's membership, effectiveness, responsibilities, and how exactly it is functioning. I encourage you to revisit this issue. As one Commissioner noted, it is telling that there has not been a single instance of the staff electing to recommend CRGR review of any rulemaking package since the waiver process was approved by the Commission in 2007.

However, I am pleased that within this vote the Commission, with Congress' urging, reasserted its influence and leadership in the rulemaking process. Providing the Commissioners an opportunity to engage in NRC staff proposed rulemakings at an early stage of the process will allow the agency to more effectively allocate resources to the highest priority actions. This reassertion of authority will also assure that any rulemaking that is initiated has established milestones to hold NRC staff accountable, is fully vetted with a full consideration of alternative courses of action, and have a preliminary assessment of the cumulative effects of regulations. These are important and necessary considerations to preserve credibility in the regulatory process.

FRED UPTON, MICHIGAN
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FOURTEENTH CONGRESS

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May 13, 2016

The Honorable Stephen G. Burns
Chairman
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

Dear Chairman Burns:

Thank you for appearing before the Subcommittee on Energy and Power and the Subcommittee on Environment and the Economy on Wednesday, April 20, 2016, to testify at the joint hearing entitled "Fiscal Year 2017 Nuclear Regulatory Commission Budget."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on May 27, 2016. Your responses should be mailed to Will Batson, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to Will.Batson@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittees.

Sincerely,

Ed Whitfield
Chairman
Subcommittee on Energy and Power

John Shimkus
Chairman
Subcommittee on Environment
and the Economy

cc: The Honorable Bobby Rush, Ranking Member, Subcommittee on Energy and Power
The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment and the Economy

Attachment

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 15, 2016

The Honorable John Shimkus
Chairman, Subcommittee on Environment
and the Economy
Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20515

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy
and Power
Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

The U.S. Nuclear Regulatory Commission appeared before the Subcommittee on Energy and Power and the Subcommittee on Environment and the Economy on Wednesday, April 20, 2016, at the hearing entitled, "Fiscal Year 2017 Nuclear Regulatory Commission Budget." From that hearing, you forwarded questions for the hearing record to Chairman Burns. The responses to those questions are enclosed. If I can be of further assistance, please do not hesitate to contact me.

Sincerely,

[redacted]

Eugene Dacus, Director
Office of Congressional Affairs

Enclosures:
As stated

cc: The Honorable Bobby Rush, Ranking Member, Subcommittee on Energy and Power
The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment and the Economy

The Honorable John Shimkus

QUESTION 1. **At the outset of Project Aim, the Commission requested a Strategic Workforce Plan (SWP) to "ensure that the right people with the right skills are in the right place at the right time." This document was provided to the Commission in February of this year, prior to Commission action on recommendations included in the "Integrated Prioritization and Rebaselining of Agency Activities" report.**

A. How do the FTE reductions included in the Commission's decision on the report align with the recommendations contained in the Strategic Workforce Plan?

B. Will the Chief Human Capital Officer update the SWP to account for the Commission's recent action on the Integrated Prioritization recommendations?

C. What tasks are the FTEs that were identified in the recommendations currently working on?

ANSWER.

A. The Strategic Workforce Plan (SWP) is a continual process used to align the needs and priorities of the Nuclear Regulatory Commission with those of its workforce to ensure the Agency can meet its regulatory and organizational objectives. The SWP will be changed to reflect the Commission's decisions on the Integrated Prioritization and Re-baselining of Agency Activities report as the agency develops office staffing plans for FY 2017 and for future fiscal years.

B. Yes. The SWP will be updated annually to reflect changes in the environment, current workforce, and long-term human capital needs of the agency, including changes resulting from the Commission's decision on the Integrated Prioritizations recommendations.

C. The FTEs identified in Enclosure 1 of SECY-16-0009, "Recommendations Resulting from the Integrated Prioritization and Re-baselining of Agency Activities" represent work to be shed, de-prioritized, or performed with fewer resources. The Commission approved the staff's recommendation on all but three of the 151 items presented in the paper. The majority of this work is scheduled to be shed, de-prioritized, or performed with fewer resources within 6 months of the Commission's decision (and the remaining work will be shed, de-prioritized, or performed with fewer resources 12 to 18 months later). The Commission is aware of its fiscal obligation to align staffing levels with the agency's approved program of work; its decision can be found in the Staff Requirements Memorandum for SECY-16-0009. The agency is moving staff previously assigned to the tasks identified in the approved recommendations to higher priority work primarily through reassignments and targeted solicitations of interest. In addition, the NRC has implemented hiring restrictions and is currently offering early out and buy out incentives to staff in overage areas, which should accelerate attrition in these areas. As workload changes occur, the agency will continue to assess the sufficiency of these staffing adjustments.

QUESTION 2. **The NRC Principles of Good Regulation state: "The American taxpayer, the rate-paying consumer, and licensees are all entitled to the best possible management and administration of regulatory activities. The highest technical and managerial competence is required, and must be a constant agency goal." Contrary to this principle, the NRC has had documented failures in applying best**

practices in managing requests for additional information (RAIs) when reviewing licensing actions.

From 2000 to 2010, the NRC, on average, completed reactor license renewal application reviews in 24 months and issued 16 RAI letters. However, since 2011, the NRC has, on average, taken 40 months to complete license renewal reviews and issued 28 RAI letters. There is a similar trend with the NRC's review of power uprate applications. From 2000 to 2010, the NRC, on average, completed power uprate application reviews in 10 months and required 11 RAI response letters. However, since 2011, the NRC has, on average, taken 20 months to complete update reviews and required 39 RAI response letters.

A. What is the Commission doing to identify the root cause and correct the dramatic increase in the NRC's use of RAIs?

B. Will the Commission agree to take the actions necessary to restore the licensing schedule and RAI discipline in place prior to 2011?

ANSWER.

A. The NRC has guidance in place for developing and issuing RAIs. This guidance is periodically updated to reflect best practices and lessons-learned. For example, the Office of Nuclear Reactor Regulation (NRR), which regulates the operating reactor fleet, has implemented strategies to leverage existing efficiencies in the licensing review processes in an effort to reduce the number of RAIs and the time needed to complete a licensing action, in part, by a renewed focus on adhering to office instructions and standard review plans. As a result,

NRR issued guidance that specifies the staff will develop a draft safety evaluation with open items or "holes" before RAIs are written and sent to the licensee. Each RAI needed to address an open item in the safety evaluation has a clear and documented regulatory basis. Prior to issuance, NRR management conducts a review of RAIs to ensure the questions are within the scope of the licensing action and regulations. Furthermore, NRR leverages appropriate communications such as public meetings and teleconferences, in order to enhance clarity and understanding of the RAIs. Lastly, licensing actions on similar issues will be grouped and processed together, if possible, not only to gain efficiency but also to ensure consistency.

For example, following Senator John Barrasso's questioning of a specific RAI issued to the U.S. Geological Survey research reactor, the staff researched the root cause of unnecessarily requesting foreign ownership, control, or domination information. As a result of its findings, NRR took steps to better inform technical reviewers, including both staff and contractors, of the unique considerations associated with non-routine research reactor reviews. Going forward, technical reviewers will be provided facility-specific information (e.g., facility organization, operating specifications, and core design) so they can correctly implement NRC regulations and guidance when developing and reviewing RAIs for research reactors.

NRR is also taking measures to ensure RAI discipline and licensing review timeliness; however, other factors, have contributed to schedule delays. For example, complex technical issues (e.g., unapproved core neutron fluence calculations, steam dryer analysis, containment accident pressure analysis) have been identified during license renewal and power uprate reviews which have resulted in exceeding the NRC's timeliness goals. Another factor affecting the review of license renewal application was the NRC's August 2012 Order (CLI-12-16), which suspended final licensing actions pending completion of the continued storage rulemaking. Final decisions could not be made until the Continued Storage Rule was approved on August 26, 2014.

B. Yes, the NRC is taking and will continue to take the actions necessary to improve the licensing schedule and the RAI discipline. NRR has already issued interim guidance to enhance the RAI process and has obtained additional resources in the form of staff and contract support including more thorough oversight of these contractors. Some of the key items in the guidance that will add discipline to the RAI process include the following:

- NRR staff review of an application will be limited to the scope of the licensing action, and RAIs shall have a clear nexus to information required to make a safety determination regarding the licensing action.
- At the point when RAIs are transmitted from the technical staff to the NRR project manager, the technical staff is expected to have developed a draft safety evaluation (SE). In addition to ensuring that the RAIs contain both a sound technical and regulatory basis, the technical staff should be able to correlate each RAI to a "hole" in the draft SE that the licensee response is intended to fill.
- NRR management will maintain a focus on RAIs. Before sending a second (and any subsequent) round of RAIs in a specific technical area, NRR management will apply additional oversight to discuss the need for a second round of RAIs and whether alternative methods for gathering the necessary information, such as a public meeting or audit, might be more effective and efficient.

QUESTION 3: **As the existing fleet of nuclear power plants undergo steps to maintain and upgrade plant systems, the issue of digital instrumentation and controls, or I&C, is extremely important to address. Replacing antiquated I&C equipment with modern technology in plant systems can provide significant improvements to safety, reliability, and efficiency of nuclear power plants.**

A. What is the Commission doing to ensure an efficient and reasonable regulatory framework is in place that will facilitate licensees in safely upgrading and modernizing I&C equipment?

B. The Commission recently disapproved staff's recommendation that relied on qualitative factors to require certain standards for digital I&C equipment. However, the Staff Requirements Memorandum in the matter did not acknowledge that the staff attempted to justify their recommendation based on qualitative factors, an issue that has been of central concern to this Committee. Did the Commission agree or disagree specifically with the manner in which staff attempted to apply qualitative factors to their justification to impose additional requirements for I&C?

C. The Commission has directed the staff to develop an integrated strategy to modernize the NRC's digital I&C regulatory infrastructure. Please describe what considerations and components will be a part of that strategy, as well as the expected timeline and opportunity for stakeholders to provide input.

ANSWER:

A. In a Staff Requirements Memorandum to SECY-15-0106, "Proposed Rule: Incorporation by Reference of Institute of Electrical and Electronics Engineers Standard 603-2009, IEEE Standard Criteria for Safety Systems for Nuclear Power Generating Stations," the Commission directed the staff to develop an integrated strategy to modernize the U.S. Nuclear Regulatory Commission's (NRC's) digital instrumentation and control (DI&C) regulatory infrastructure. The Commission gave direction to the staff to consider the broader context of DI&C regulatory

challenges and indicated that NRC requirements and guidance should not pose an unnecessary impediment to advancement in nuclear applications of digital technology. The Commission also directed the staff to engage in public workshops and meetings with relevant stakeholders to reach a common understanding of the DI&C regulatory challenges, potential solutions, and priorities. The integrated strategy is now with the Commission for consideration.

B. The Commission did not take a position on the staff use of qualitative factors in the proposed rulemaking to incorporate by reference IEEE Std. 603-2009 into NRC regulations. Rather, the Commission disapproved the proposed rulemaking and instead directed staff to develop an integrated strategy to modernize the NRC's DI&C regulatory infrastructure. The Commission directed the staff to consider the broader context of DI&C regulatory challenges and include all related activities being pursued by the staff, including incorporation of IEEE Std. 603-2009 into regulations.

C. The integrated strategy is currently with the Commission for consideration. The integrated strategy has near-term and long-term goals to modernize the regulatory infrastructure. The near-term goals address the most critical issues identified by the NRC staff and industry regarding regulatory oversight of DI&C equipment modifications at operating plants. These issues include the following:

- enhancement to the NRC position on potential common cause failures in digital systems (e.g. software and hardware)
- guidance for digital upgrades to plants without previous NRC approval under Title 10 of the *Code of Federal Regulations* (10 CFR) 50.59, "Changes, Tests and Experiments"
- guidance for commercial grade dedication of digital equipment
- revised guidance to improve the efficiency of the license application review process

The long-term goal addresses further efforts to improve efficiency and the evolving digital technologies that will be used in both future operating reactor upgrades and new reactor technologies. In developing the plan, the staff held public meetings and provided copies of the draft plan for comment to obtain stakeholder input. Staff will continue to engage stakeholders throughout the modernization activities and allow for opportunities to formally provide input on key regulatory enhancements.

QUESTION 4. **With respect to the adequate protection exemption to the backfitting rules, the Commission has stressed that the regulations are presumed to ensure adequate protection of public health and safety and "that presumption can be overcome only if significant new information or some showing that the regulations do not address some significant safety issues," and that the need to redefine the level of protection that is adequate should be "rare." Recognizing that there is no prescriptive definition of "adequate protection:"**

A. Should actions imposing a backfit to provide adequate protection, or redefine the level of protection that is adequate, be relatively rare and require significant new information indicating that a safety issue is not adequately addressed by the Commission's current regulations?

B. Absent extraordinary circumstances, should the Commission make the final decision on whether a backfit fits within one of the adequate protection exceptions?

ANSWER.

A. Yes.

B. Yes, except in the rare case that the backfit falls within the Commission-delegated authority and is covered by an existing Commission determination on adequate protection with respect to the matter that is the subject of the backfit consideration.

QUESTION 5. **The NRC is statutorily required to recover approximately 90 percent of funding in fees assessed to holders of an NRC license or charged to a license applicant. These fees [are] charged for service or a "thing of value."**

A. The timing associated with the "fee rule" can impose uncertainties and budgeting challenges for NRC licensees who fund the agency. The NRC releases the draft rule in March, which goes through the public comment period. Then the final rule is published in August at which point the NRC may need to revise its revenue projections to "true up" to the 90% level. This leaves little time for licensees to adequately budget or respond to the final rule. Is the Commission aware of challenges for licensees resulting from timing and a lack of predictability in the fee rule process and how is the Commission addressing those challenges?

B. NRC fees are recovered through two mechanisms. The first category, known as "Part 170 fees," are charged for specific actions associated with NRC licensing activities and are therefore variable depending on the amount of billable work that materializes over the

year. The second category, known as "Part 171 fees," is charged to various classes of NRC license holders on an annual basis. As a result of this construct, if the Commission miscalculates the variable, or Part 170, charges, license holders under the Part 171 end up being charged more. Please describe how you manage this process to provide predictability for licensees.

C. The draft "fee rule" for the current fiscal year calculates the NRC staff "productive hours" to increase this year. I encourage this trend to continue in the upcoming years. How are "productive hours" calculated throughout the organization? For example, does the Chief Human Capital Officer set milestones and track worker productivity to inform this calculation?

ANSWER.

A. The Commission is aware of the challenges that the process and time required to produce the agency's annual fee rule sometimes present to our licensees. However, the NRC must adhere to a number of requirements related to the issuance of its fee rule, while still making every effort to issue the proposed and final rules in a timely manner. The proposed fee rule may be issued using an estimated NRC budget, but the final fee rule cannot be issued until the NRC receives its enacted appropriation from Congress. Also, Section 553 of the Administrative Procedure Act requires the NRC to give the public an opportunity to comment on a rule proposed by the agency, with certain exceptions, before a final rule can be promulgated. The agency must consider comments received during the comment period before issuing the final rule. In an effort to improve the fee setting process, the NRC has reached out to stakeholders to solicit their ideas for improving transparency, predictability, and fairness, and is currently considering alternative methods for fee setting.

B. The NRC's estimates from Title 10 of the *Code of Federal Regulations* (10 CFR) Part 170, "Fees for Facilities, Materials, Import and Export Licenses, and Other Regulatory Services under the Atomic Energy Act of 1954, as Amended," are driven by input from licensees and applicants. This input provides the basis for the distribution between Part 170 fees and fees assessed under 10 CFR Part 171, "Annual Fees for Reactor Licenses and Fuel Cycle Licenses and Materials Licenses, Including Holders of Certificates of Compliance, Registrations, and Quality Assurance Program Approvals and Government Agencies Licensed by the NRC." Updated workload estimates are also captured between the proposed and final fee rule. The predictability of the Part 170 fees is, therefore, dependent, in part, on any changes made by licensees or applicants to their schedules. The NRC estimates the amount of 10 CFR Part 170 fees based on established fee methodology guidelines (42 FR 22149; May 2, 1977). As in previous years, the NRC applied longstanding principles to calculate the 10 CFR Part 170 estimates based on the analysis of workload and financial data.

C. The productive hours assumption reflects the average number of hours that a technical employee spends on mission-direct work in a given year. This excludes hours charged to categories such as annual leave, sick leave, and holidays as well as hours spent in training and accomplishing general administrative tasks. To ensure realism for purposes of fee calculations, the productive hours assumption is calculated using data obtained from NRC time and labor records.

The NRC does not have a full-time equivalency productivity goal.

QUESTION 6. **For the reactors currently under construction, there will likely be more than a thousand separate Inspections, Test, Analyses, and Acceptance Criteria, or "ITAACs," in total, to review and close-out before the reactors can begin operating. Unless managed closely,**

the ITAAC process may be an area where unnecessary and costly delays could occur.

A. On April 1st, the Commission issued a Staff Requirements Memorandum (SRM) approving the ITAAC hearing procedures. The SRM appears that the Commission took some positive steps to improve upon the staff recommendations to be implemented in a manner that complies with the Commission's directions. How will the Commission ensure that the ITAAC hearing procedures are implemented in accordance with the Commission's instructions?

B. What other steps are being taken to ensure that the ITAAC process is as efficient as possible – for example, what can be done to ensure that NRC staff complete their review of ITAAC closure notifications in a timely manner?

C. Is the Commission requesting adequate resources in its budget for these ITAAC activities, and is the Commission prepared for the "wave" of ITAAC closures anticipated to occur as construction at the reactors in Georgia and South Carolina nears completion?

ANSWER.

A. The Commission will ensure that the procedures are implemented in accordance with its instructions through the Commission's involvement in the inspections, tests, analyses, and acceptance criteria (ITAAC) hearing process. For example, the Commission, itself, will decide whether to grant any hearing requests. If a hearing request is granted, the Commission will determine whether interim operation may be allowed during the pendency of the hearing. Also, the Commission will issue an order with the detailed procedures and schedule for the hearing,

including a strict deadline for the hearing decision. A presiding officer may extend this strict deadline only upon a showing of unavoidable and extreme circumstances and must notify the Commission with a justification for the extension. After the hearing decision is issued, the Commission will rule on any petitions for review of this decision. Finally, the Commission retains its inherent authority to take action in individual proceedings to ensure that they are being conducted in a fair and timely fashion.

B. The NRC staff has developed comprehensive processes to handle the large volume of work expected late in the construction schedule (referred to as the "wave" in (C) below). The NRC staff tracks each step of the NRC review process and prepares *Federal Register* notices, as required. The NRC staff has been using this process since 2012, and it continuously looks for opportunities to improve efficiency.

C. The Commission has requested adequate budget resources for completing ITAAC activities and is prepared for the large volume of work expected late in the construction schedule. The NRC staff routinely assesses the expected increase in ITAAC closure work as construction continues at the Vogtle and V.C. Summer sites. The requested budget resources are informed by our current understanding of the increased amount and complexity of work. This area of activity will be monitored and adjustments will be made, as necessary. To account for potential staff turnover, internal ITAAC training programs have been developed to ensure that future staff members are properly prepared to complete ITAAC closure work. Additional staff have also been cross-trained in readiness for surging resources, should that become necessary.

QUESTION 7. **Once NuScale submits its design certification application to the NRC, how will NRC plan to make its review process and fees transparent to the applicant and how will the applicant know that the NRC is on track? For instance, will NRC provide progress reviews**

and reports available to the applicant that clearly indicate whether NRC's review is proceeding as planned – on time and on budget?

ANSWER.

The process for the NRC to review a design certification (DC) application and to bill the applicant is transparent to both the applicant and to the public. When an applicant submits an application, it is subject to an acceptance review for completeness and technical sufficiency. If the application is accepted for review, the NRC issues a schedule to the applicant that includes intermediate review milestones and an estimate of staff hours for completing the review. Documented review products—such as requests for additional information (RAIs), safety evaluation reports with open items, and advanced safety evaluation reports—are the NRC staff's deliverables for intermediate milestones and are all made publicly available. These milestone deliverables are important for communicating the progress of the review. Public meetings with the NRC's Advisory Committee for Reactor Safeguards also serve to convey project progress. In addition, the NRC staff holds public meetings with the applicant throughout the review period to communicate project progress, as well as review challenges.

Unique features of the NuScale reactor design will present novel applications of existing requirements and guidance or will likely require exemptions from existing regulations. To facilitate the anticipated NuScale review, the NRC staff has been engaged in pre-application interactions with NuScale for more than 2 years. These interactions have identified potential regulatory issues that warrant further consideration with regard to their applicability or relevance to the NuScale plant design. As a result, the NRC staff and NuScale representatives have had a number of engagements to further the agency's understanding of the NuScale design and to identify and address key regulatory process issues before NuScale submits its application.

These continued interactions are intended to facilitate the development of a complete application by NuScale along with a timely and focused DC application review by the NRC staff.

Once NuScale submits its DC application, the NRC will conduct a 2-month acceptance review to verify there is sufficient information provided in the application for the staff to conduct its in-depth review and prepare a safety evaluation report. The acceptance review provides the opportunity for the staff to identify potential challenges to the schedule and to estimate staff review hours based on the quality and comprehensiveness of the application. At the completion of the acceptance review, the NRC will develop a baseline technical review schedule. The staff will also provide NuScale with an estimated budget for completing the application review and the design certification rulemaking. Once the NRC begins reviewing the application, costs associated with the application review will be billed to the applicant every 2 weeks.

The status of the DC application review schedule will be tracked and reported using a project management scheduling program. The NRC is aware of concerns expressed by prior DC applicants regarding schedule uncertainty. Consequently, included in the basis for the cost and schedule estimate is the upfront expectation that the applicant provide a complete and high-quality application, with complete RAI responses received on the agreed-upon schedule; and an expectation for the NRC staff to review and identify any issues early and to clearly and promptly communicate with the applicant any quality, technical, regulatory, or schedule issues that may arise.

QUESTION 8. **Openness is one of NRC's Principles of Good Regulation. Technology has made tracking and logistics incredibly transparent. For example, FedEx tracks hundreds of thousands of packages in real-time, everywhere in the world, down to specific locations and when packages are out for delivery.**

Last year, this Committee asked [whether] the Commission would consider developing a tracking system for license amendment requests that would be available for licensees to know in real-time the status of their licensing actions. The Commission's response stated that licensing project managers "maintain a tracking system" and "routinely communicate with licensees regarding licensing actions under review." The response did not address whether the Commission would consider the merits of this proposal. Will the Commission examine options to improve transparency at the Commission, specifically methods to track licensing actions, including the status of project manager review that could be easily accessed by licensees and applicants?

ANSWER.

The routine interactions between licensees/applicants and the NRC project manager provide the same information, and possibly more insights, regarding the status of a licensing review than would a new tracking system. Therefore, the NRC does not consider a new tracking system necessary to provide openness, improve transparency, or perform its regulatory function.

Project managers and licensees have routine communications regarding the status and schedules of licensing actions, which typically include review of basic progress tracking reports. During these conversations, the schedules for each licensing action are discussed, including whether the licensee's desired review schedule can be achieved, when to expect requests for additional information, and when to expect the safety evaluation, if approved. In addition, the project managers and their direct supervisors are accessible to the licensees by phone or e-mail as issues arise.

QUESTION 9. As part of its mandate the Nuclear Regulatory Commission regulates the medical use of certain radiolabeled products that treat cancer and other life-threatening diseases. The NRC's regulations require that an oncologist treating patients with an anti-cancer therapeutic radiopharmaceutical must be licensed as an "Authorized User." It has come to our attention that the current training and experience requirements create unnecessary burdens and barriers for experienced hematologists and oncologists who would like to become authorized to administer patient-ready doses of alpha- and beta-emitting cancer treatments. Under the current framework, hematologists and oncologists who want to become Authorized Users must complete 700 hours of training and experience, including a minimum of 200 hours of classroom/laboratory training in radionuclide handling techniques. This requirement is inappropriate for patient-ready doses of alpha and beta emitters, which pose minimal safety and handling risks prior to and after administration. In addition, the current requirement has prevented otherwise-experienced hematologists and oncologists from becoming Authorized Users. This has led to a shortage of Authorized Users able to administer therapeutic radiopharmaceuticals, particularly in rural areas. The NRC is currently in the process of finalizing its rule on the "Medical Use of Byproduct Material-Medical Event Definitions, Training and Experience, and Clarifying Amendments." This rulemaking presents an opportunity for the NRC to establish a training requirement commensurate with the precautions necessary to administer

patient-ready doses of alpha and beta emitters. How does the Commission plan to address this issue in the final rule to either modify the regulations to reduce the training and experience requirements for these lower-risk products, or describe a process for a separate rulemaking proceeding to specifically address this issue?

ANSWER.

The concerns raised here, as well as opposing views, have been brought to the attention of the NRC staff and Commission and will be addressed in the response to public comments section of the final rulemaking package under development.

These training and experience (T&E) related concerns were reviewed by NRC staff and the NRC's Advisory Committee on the Medical Uses of Isotopes (ACMUI). After review, no changes to the T&E requirements for alpha- and beta-emitting radiopharmaceuticals are included in the current rulemaking now in its final stages. The current rule changes, and clarification of requirements, are in response to other concerns raised by the medical community and the Agreement States over the past 10 years on issues unrelated to T&E requirements for alpha and beta emitting radiopharmaceuticals. Any potential changes to the rule regarding T&E would need to be considered in a future rulemaking, where the regulatory basis could be developed and any changes fully vetted with the medical community and the public during the rulemaking process.

NRC staff will work with the medical community through its usual public process to address any proposed changes to T&E requirements during a future rulemaking. To this end, the ACMUI recently formed a standing subcommittee to evaluate T&E requirements for all types of medical uses, and will provide staff with any recommendations the subcommittee produces.

The Honorable Markwayne Mullin

QUESTION 1. **In both the 2014 and 2015 Fee Recovery Rules, the NRC has accounted for the reactor closures and the resulting loss of those fees by billing the remaining reactors more to make up for the decrease in revenue. For example, the NRC stated in their 2015 Fee Recovery Rule: *"The permanent shutdown of the Vermont Yankee reactor decreases the fleet of operating reactors, which subsequently increases the annual fees for the rest of the fleet."***

A. Is it fair and appropriate to increase fees on operating reactors to compensate for the closure of other plants or is that simply the result of how the NRC's fee recovery is structured under the law?

ANSWER.

The fees assessed to licensees and applicants by the U.S. Nuclear Regulatory Commission (NRC) conform to the Omnibus Budget Reconciliation Act of 1990 (OBRA-90), which requires the NRC to collect approximately 90 percent of its annual budget authority through both user fees and annual fees. The NRC's fee structure is designed to collect fees in the most fair and equitable manner possible as we execute the requirements of OBRA-90.

QUESTION 2. **The NRC's FY 2017 budget shows a reduction of 90 FTE, but a cost reduction of only $4.8 million in the NRC programs. The NRC estimates the average cost of an FTE is $165,000.**

A. A reduction of 90 FTE should yield approximately $14.8 million in savings. If the NRC is reducing its staffing levels, why doesn't it result in more cost savings?

B. The FY 2017 budget proposes 3,537 in FTE. However, NRC testimony elsewhere indicates the NRC will end FY 2017 with 3,344 FTE. How will the NRC ensure that these savings are realized and licensees are not unfairly charged for the cost of empty chairs?

ANSWER.

A. The cost savings achieved by the 90 FTE reduction were offset by a slight increase in contract support and travel and a Government wide pay raise in FY 2017, resulting in a net decrease of $4.8 million.

B. The NRC will base the FY 2017 Fee Rule on the FY 2017 appropriation received from Congress and will include the FTE level approved by the Commission. On April 13, 2016, the Commission issued Staff Requirements Memorandum-SECY-16-0009, "Recommendations Resulting from the Integrated Prioritization and Re-baselining of Agency Activities," which approved 148 out of the 150.6 FTE proposed for reduction. With these reductions, the NRC can operate at an FTE level of $3,342 FTE in FY 2017, excluding the Office of the Inspector General and reimbursable FTE.

QUESTION 3. **The NRC expects to spend $305 million on corporate support spending for 2016. The NRC has budgeted $319 million for corporate support spending in FY 2017 with the potential reduction to $315 if Project Aim efficiencies are implemented. However this amount**

doesn't count $26.3 million in corporate support spending that is proposed to be "re-aligned" to no longer count as corporate support. For an apples-to-apples comparison, this means corporate support spending will increase $36 million in spite of Project Aim.

A. Please provide a detailed description of actions the NRC is taking to achieve actual reductions in corporate support costs that do not involve renaming, realigning, or simply accounting differently for the same costs by transferring them to the business units.

B. Please include when those actions will yield actual savings evident in the size of the NRC's budget and the amount of those savings.

ANSWER.

The NRC is implementing the Corporate Support Resources Realignment described in the fiscal year (FY) 2017 budget request during FY 2016. As a result, a net of $24.6 million was re-aligned to the program business lines in both FY 2016 and FY 2017. Therefore, the $305 million (FY 2016) and $319 million (FY 2017) amounts for corporate support referenced above are comparable. Now that the Commission has approved re-baselining efficiencies, an additional $3.6 million in savings will reduce FY 2017 requirements. After this reduction, the true delta between FY 2016 Enacted and FY 2017 Project Aim re-baselined levels will be $10 million. The NRC is continuing to look for additional efficiencies to apply to the FY 2017 budget.

In a March 24, 2016 memorandum, "Resources Allocated to the Corporate Support Business Line," the EDO and CFO instructed the directors of the large corporate offices to work as a group to: (1) analyze corporate support workload and resources in light of the recent agency re-

baselining and declining programmatic workloads and staffing levels; and (2) recommend further reductions to corporate full-time equivalents (FTE) in fiscal year (FY) 2018 and beyond. To identify further efficiencies in light of workload reductions, the corporate office directors recently concluded a review to compare current support requirements to those in place prior to the 2006 implementation of the National Energy Policy Act of 2005. Resulting proposals for additional corporate FTE reductions, if approved by the Commission, will be reflected in the agency's FY 2018 and FY 2019 budget requests.

QUESTION 4. **The NRC testimony states that $9.9 million in Project Aim savings were applied in the FY 2017 budget, but the NRC's programs only decreased by $4.8 million.**

A. Please explain why the NRC characterizes the $9.9 million as saving if it simply reallocated $5.1 million to be spent in other ways?

B. Of the additional $31 million in Project Aim savings that could be implemented in FY2017, please estimate the portion that will yield actual savings and the portion that will be re-allocated for expenditure in other ways.

ANSWER.

A. The fiscal year (FY) 2017 budget request included a $5 million increase for the NRC to perform activities related to the development of regulatory infrastructure for advanced nuclear reactor technologies. This resulted in a net reduction of $4.8 million as shown in the FY 2017 Congressional Budget Justification.

B. The $31 million that was identified through Project Aim, and approved by the Commission, is considered to be actual expected savings through the identification of work that may be shed, de-prioritized, or performed with fewer resources. There will be no re-allocation of expenditures in other ways.

The Honorable Gene Green

QUESTION 1. **In January 2015, the Texas Commission on Environmental Quality (TCEQ) sent a letter to the NRC, requesting clarification on the State of Texas's authority to license the disposal of Greater-than-Class C low-level that may contain transuranic waste. In its response, 15 months later, the NRC said it would have to further examine the issue.**

A. Can you share with the Committee what is the current status of the State of Texas's inquiry?

B. What guidance and assistance has the NRC provided to TCEQ regarding its request to license a GTCC waste facility?

C. Does the NRC anticipate that regulatory changes will be necessary to allow the State of Texas to license a GTCC waste facility?

ANSWER.

A. On March 9, 2016, the NRC responded to TCEQ's January 2015 letter. The response noted that the Commission had instructed the NRC staff to develop a regulatory basis for the disposal of Greater-than-Class C (GTCC) and transuranic waste within 6 months of the completion of the ongoing rulemaking under Title 10 of the Code of Federal Regulations (10 CFR) Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste." The response also noted that the regulatory basis would analyze whether, in accordance with Section 274c.(4) of the Atomic Energy Act, disposal of GTCC waste presents a hazard such that the NRC should retain authority over its disposal and that this analysis would inform the NRC's final determination regarding TCEQ's jurisdictional questions. Finally, the response noted that

10 CFR 61.55(a)(2)(iv) provides a mechanism by which GTCC waste may be disposed of in a low-level radioactive waste (LLRW) facility licensed under 10 CFR Part 61, and that this case-by-case review is available to parties that seek to dispose of GTCC waste in the near term.

The NRC staff is currently finalizing the ongoing 10 CFR Part 61 rulemaking. The staff has also initiated work to consider the technical considerations that will be the basis for the potential GTCC rulemaking.

B. On March 25, 2015, TCEQ requested the NRC staff perform a peer review of the performance assessment model submitted to TCEQ by Waste Control Specialists, LLC (WCS) on GTCC waste disposal at its Texas site. On August 5, 2015, the NRC provided its peer review comments to TCEQ, which addressed process and technical issues related to the performance assessment.

In April 2016, the NRC, in coordination with TCEQ, performed a special review of the performance assessment model under the auspices of the Integrated Materials Performance Evaluation Program. The model was used for an unrelated disposal of depleted uranium but may provide insights in future potential GTCC activities. On May 16, 2016, the NRC staff issued a publicly available report on the review providing suggestions for improvement.

C. The Commission has directed the NRC staff to prepare a regulatory basis on the disposal of GTCC and transuranic waste, which could result in a rulemaking. The scope of any regulatory changes will become clearer after the regulatory basis is completed. Additionally, the State of Texas may need to revise its regulations to allow the disposal of GTCC and transuranic waste.

QUESTION 2. **Last year, Waste Control Specialists announced it intends to apply to the NRC this year for a license to open a consolidated interim facility in Andrews County, Texas. It is my understanding that this**

would be the first time a private entity has applied for a license to store nuclear waste.

A. Chairman Burns, does the NRC have a plan in place to consider this application? If so, can you provide a brief overview of that process?

B. Has the NRC been working with Waste Control Specialists in anticipation of its application? If so, what assistance has been provided?

C. How long do you anticipate the review process to take?

D. Does the NRC have the resources needed to considered WCS's application in this timeframe?

ANSWER.

Please note that this is not the first time a private entity has applied for a license to store nuclear waste. The Commission issued a license to Private Fuel Storage (PFS) in February 2006; however, PFS was never constructed.

A. Yes, the NRC has a plan in place to consider the WCS application, which was submitted for review in April 2016. The following is a summary of the NRC licensing process that is applicable to staff's review of the WCS application:

- Applicant develops an application and can engage in public pre-application meetings with the NRC (optional, but highly encouraged).
- Application is submitted for NRC review.
- The NRC conducts an acceptance review to determine if the application contains sufficient information to allow the NRC to conduct a detailed review.

- If the application is accepted for review, a notice of docketing, notice of proposed action, and opportunity for a hearing is published in the *Federal Register*, and interested persons are able to submit requests for hearing and intervention petitions. Notices associated with staff's environmental evaluation are also published.
- Once the application is accepted for review, NRC safety, environmental, and security reviews begin.
- If an intervention petition is granted, the hearing process begins.
- Depending on the application, the NRC will conduct an environmental review and document the results in an environmental impact statement.
- During the NRC's review, there will be interactions with the applicant, many in the form of public meetings, for the NRC to ask additional questions regarding the application.
- If the NRC determines that all pertinent regulations are satisfied (and once the hearing process concludes), a license will be issued.

B. Yes. As part of the NRC's licensing process, applicants are encouraged to engage in pre-application meetings to enable the agency to communicate NRC expectations and allow the applicants to describe their intentions and approach. To meet these goals, several pre-application meetings were held with WCS before its application submittal in April 2016. NRC staff also conducted an audit of the draft WCS application in March 2016 and provided information to the applicant about requirements for the contents of the application.

C. The staff is currently conducting an acceptance review. If the application is accepted, the associated safety, security, and environmental reviews could be completed in approximately 3 years after the application is accepted for review at an estimated cost of $5 million for NRC staff plus $2.5 million for environmental contract support. This assumes the application is submitted as described in pre-application meetings with WCS. If a hearing is sought and granted, the

additional time and cost to complete the hearing process will depend on the complexity of the issues.

D. Because of the uncertainty of receiving an application for interim consolidated storage during fiscal year (FY) 2016 budget formulation, the necessary resources to conduct the safety, security, or environmental reviews of the WCS application were not included in the FY 2016 budget. However, the NRC has estimated the agency and contract resources required to complete the associated safety, security, and environmental review activities in FY 2016. The agency is re-prioritizing its staff resources to support completion of this work in FY 2016. Funding for necessary contract support of the environmental reviews in FY 2016 is being sought within the agency. Funding for all associated review activities are included in the FY 2017 budget request and will be included in the budget formulation process for FY2018.

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