

**ENERGY AND WATER DEVELOPMENT
APPROPRIATIONS FOR FISCAL YEAR 2024**

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
UNITED STATES SENATE

ONE HUNDRED EIGHTEENTH CONGRESS

FIRST SESSION

ON

H.R. 4394/S. 2587

AN ACT MAKING APPROPRIATIONS FOR ENERGY AND WATER DEVELOPMENT FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2024, AND FOR OTHER PURPOSES

**Department of Defense—Civil
Department of Energy
Department of the Interior**

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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR FISCAL YEAR 2024

WEDNESDAY, APRIL 26, 2023

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 2 p.m., in room SD-138, Dirksen Senate Office Building, Hon. Patty Murray, (chair) presiding.

Present: Senators Murray, Heinrich, Kennedy, Hoeven, Hyde-Smith, and Britt.

DEPARTMENT OF DEFENSE—CIVIL

DEPARTMENT OF THE ARMY

CORPS OF ENGINEERS—CIVIL

STATEMENT OF THE HON. MICHAEL L. CONNOR, ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

OPENING STATEMENT OF SENATOR PATTY MURRAY

Senator MURRAY. The hearing of the Senate Appropriations Subcommittee on Energy and Water Development will please come to order.

We are here today to discuss President Biden's fiscal year 2024 budget request for the U.S. Army Corps of Engineers and the Bureau of Reclamation.

I know we are all thinking of Senator Feinstein and wishing her a speedy recovery and return and I want to thank Ranking Member Kennedy for being flexible and working with me to make this hearing happen today, I really appreciate it, so that we can keep our appropriations process on track.

Today's hearing marks another important step as we work to return to regular order and pass in a timely bipartisan way our funding bills to keep our families safe, our economy strong, and our Nation competitive with adversaries like China.

Defense spending tends to get a lot of attention, but we cannot forget that our rivers and our waterways are some of the most critical resources we have. Effective water management is essential to keeping our families healthy, our environment thriving and our economy competitive.

We use our water resources managed by the Bureau and Corps to irrigate crops that feed families across the country, to transport those crops and other foods along our rivers and out of our ports to consumers around the world, and to provide habitat for keystone

species that are essential to local economies and ecosystems alike, like salmon in my home State of Washington.

We even count on water and hydroelectric power to literally keep the lights on in cities across the country. So when it comes to our Nation's competitiveness, this is something we can't take for granted. We have to keep our rivers and our waterways clean for wildlife and clear for transportation.

We have to keep our faucets running, we have to keep our ports bustling, our farms irrigated, and our electric grid reliable, and we have to keep our communities safe and prepared for extreme weather events amid the worsening climate crisis with levees and seawalls and nature-based infrastructure to prevent flooding.

The President's budget works to do that with key investments to strengthen our Nation's port and waterway infrastructure, water conservation, and climate change resiliency.

But the President's request is less than we provided last year for the Army Corps of Engineers and the Bureau of Reclamation. I think it's clear we have to build on the progress we are making and not slow down.

So I want to see us grow even bolder to make sure we are making the necessary investments to give these critical projects their due.

I'm glad to see this budget does include much-needed resources for projects to improve navigation through dredging our ports and maintaining waterways, support ecosystem restoration, like in the Columbia River System in Washington, and protecting dangerous species, like the Fish Passage at the Howard Hanson Dam, which will open up a hundred miles of new habitat for our salmon.

The Howard Hanson Project is critical in my State and I'm going to be watching the progress of that very closely because we have to see this work through and there's a lot left to do.

But, in addition to what is outlined in the President's budget, there are other critical projects Congress has already said should be a priority, as well.

So I want to make sure we get funding, like this committee appropriated in fiscal year 2023, for water infrastructure improvements for the Nation Act Programs focused on water storage desalination, water recycling, and environmental restoration projects.

I also want to hear how the Bureau is using and building on drought mitigation funding we provided in the Inflation Reduction Act. This is an issue that is only growing more urgent each year.

We have experienced historic drought conditions recently, which our farmers who are struggling to grow crops, threatens families and wildlife who are left at greater risk of wildfires, and undermines our economy.

We need to tackle this crisis now before there is more lasting damage.

Water is just too important to our families, our economy, and our Nation to take for granted. We cannot afford to shortchange these projects. So I'm glad to have this opportunity to hear from our witnesses today, assess our needs so that we can work in a bipartisan way to pass the funding bill that meets them.

With that, I will turn it over to our Ranking Member Kennedy.

STATEMENT OF SENATOR JOHN KENNEDY

Senator KENNEDY. Thank you, Madam Chair.

First, before I turn to our witnesses, I want to tell Senator Feinstein, if she's listening, I hope you're feeling better today and come back soon. We miss you.

Thank you for being here today. America has been blessed in many ways and sometimes I don't know if it's a blessing or a curse, maybe a little bit of both. In some parts of our country we have too much water and in other parts we don't have enough, and in some parts of our country it's a little bit of both, and we depend on you and your team to manage that and I know that's difficult and I know every member of Congress is an expert on how you ought to do your job. I appreciate that, as well. So let me begin by thanking you.

One of the things I hope to achieve today is getting your thoughts on how we can fine-tune the process that we use to allocate scarce resources to do our cost-benefit analysis.

Sometimes I think we don't spend enough time, our shortcoming, not yours, analyzing the benefit, that we focus too much on the cost. I'll give you an example and I know the Secretary and the General won't recognize this.

We have a levy project in Louisiana called the Morganza to the Gulf Project. Now it's not complete. It's a work in progress, but that's been done, completed rather thus far through a combination of State, Federal, and local money. My people tax themselves to build this levy system.

In 2005 Hurricane Rita came through, terrible, terrible storm, nine-foot storm surge, 11 to 12,000 homes of my people were damaged. That's a lot of people and a lot of homes and a lot of human misery.

In 2019, after we had made progress on the Morganza to the Gulf levy system, another storm, this one Barry, came through, just as bad, same level of storm surge, same level, nine feet, 11 homes were damaged.

So we went from 12,000 homes damaged to 11 as a result of your good work, and I want to talk today about how we factor into our cost-benefit analysis that kind of good work that you have done. So thank you for being here.

Senator MURRAY. Thank you, Ranking Member Kennedy.

And I will now introduce our panel. We have Mr. Michael Connor, who is the Assistant Secretary of the Army for Civil Works; Lieutenant General Scott Spellmon, the Chief of Engineers for the U.S. Army Corps of Engineers; and finally we have Ms. Camille Touton, who is Commissioner of the Bureau of Reclamation.

I want to thank all of you and the public servants in your agencies for their dedication to our Nation's leadership in water infrastructure, water conservation, and commitment to climate change resiliency.

With that, we will proceed with our witness testimonies, starting with Assistant Secretary Connor.

SUMMARY STATEMENT OF HON. MICHAEL L. CONNOR

Mr. CONNOR. Thank you, Madam Chair, Ranking Member Kennedy, distinguished members of the subcommittee. I appreciate the opportunity to be here to discuss the President's request for the Army Civil Works Program. I'll quickly summarize my written statement.

The fiscal year 2024 budget request includes over \$7.4 billion for the Army's Civil Works Program, the largest budget request in history, complemented by an additional \$1.05 billion allocated from the bipartisan Infrastructure Law.

These investments demonstrate President Biden's ongoing commitment to funding the construction of critical infrastructure projects that will strengthen our economy, protect people and property, and restore key ecosystems.

I appreciate just as a threshold matter the robust funding levels from this subcommittee and the bipartisan support that there is for the Army Civil Works Program.

It's important to note that the water resource challenges of today and tomorrow are not like yesterday's. Extreme weather events, whether precipitation, drought, or hurricane-driven storm surge, are increasingly the norm, creating risk to communities, the economy, and natural systems. As a result, understanding vulnerabilities and increasing our preparedness is paramount.

For that reason, the budget provides \$86 million, the largest request again in the Corps' history, for research and development, over \$100 million when accounting for applied R&D activities.

The focus of this work will be on innovative solutions that address the emerging water resource challenges of the 21st Century and achieve cost savings in the Civil Works Program.

The budget focuses on the highest-performing work within the three main missions of the Civil Works Program: commercial navigation, flood and storm damage reduction, and aquatic ecosystem restoration.

In developing the budget, consideration was also given to advancing three key objectives that reflect Administration priorities. First, decreasing climate risk for communities and the environment; (2) promoting environmental justice in underserved communities and Tribal nations; and (3) strengthening the nation's supply chains.

With respect to climate, the Corps has always been in the resilience business and the budget's proposed investments include more than \$1.4 billion for construction of flood and storm damage reduction and aquatic ecosystem restoration projects.

For the second priority, the budget supports the Administration's Justice 40 Initiative through investments in 23 studies and in the construction of 33 projects to help disadvantaged and Tribal communities address their water resources challenges.

Supply chains remain a priority which Civil Works supports through its Commercial Navigation Program. The budget facilitates safe, reliable, and sustainable commercial navigation to support U.S. competitiveness and improve the resilience of our Nation's manufacturing supply chain.

Overall, the budget includes over \$3.4 billion for the study, design, construction, and operation and maintenance of inland and

coastal navigation projects. Of this amount, over \$1.7 billion is derived from the Harbor Maintenance Trust Fund.

As alluded to earlier, flood and storm damage reduction is at the center of the Army Corps' actions to support the Administration's goal of tackling the climate crisis.

Accordingly, the budget contains nearly \$2 billion for flood and storm damage reduction, including funding to provide technical and planning assistance to local communities to enable them to understand and better manage their flood risks.

Equally important to building community resilience is the work of the Aquatic Ecosystem Restoration Mission. The budget includes \$653 million for AER, including \$415 million to continue progress in restoring America's Everglades while building climate resilience in South Florida.

We've also included \$93 million to support salmon recovery efforts in the Columbia River Basin.

Other significant investments include \$655 million for the construction of a critical dam safety project at Prada Dam in California and \$350 million for replacement of the Cape Cod Canal Bridges. Importantly, the budget also includes \$235 million to continue construction of the Sioux Locks Project.

In total, the fiscal year 2024 Construction Program is funded at more than \$2 billion.

Of course, the budget also focuses on maintaining the key features of the vast water resources infrastructure that the Corps owns and manages. Specifically, the 2024 budget funds the O&M (operation and maintenance) Program at over \$4.4 billion. For the Investigations Program, the 2024 budget provides a \$139 million, including \$36 million for technical and planning assistance.

Wrapping up the budget summary, it's significant that the 2024 Regulatory Program is funded at \$221 million to protect the Nation's waters and wetlands and provide efficiency in permanent processing, a very high priority for the Administration.

The Recreation Program is funded at \$275 million to ensure the Corps, as one of the leading providers of the Nation's outdoor recreation, can continue to effectively serve the public's desire to experience the great outdoors.

In summary, the Civil Works budget makes critical investments in water resources that will benefit the American people and promote greater prosperity and economic growth for decades to come.

I look forward to your questions. Thank you.

[The statement follows:]

PREPARED STATEMENT OF MR. MICHAEL L. CONNOR

Chairman Feinstein, Ranking Member Kennedy, and distinguished members of the committee, thank you for the opportunity to be here today to discuss the President's Budget request for the Army Civil Works program.

The fiscal year 2024 Budget request includes over \$7.4 billion for the Army Civil Works program—which is the largest request in history—complemented by an additional \$1.05 billion from the Infrastructure Investment and Jobs Act—or IJJA. These investments demonstrate President Biden's ongoing commitment to funding the construction of critical infrastructure projects that will strengthen our economy, protect people and property, and restore key ecosystems. It will also create good paying jobs that provide the free and fair chance to join a union and collectively bargain. Overall, we believe in smart investments that yield high economic and environmental returns, while, also reducing deficits and improving our country's long-term fiscal outlook.

It's important to note that the water resources challenges of today and tomorrow are not like yesterday's. Weather extremes are increasingly the norm, creating risk to communities, the economy, and natural systems. As a result, understanding vulnerabilities and increasing our preparedness is of paramount importance. For that reason, the Budget provides \$86 million—the largest request in Corps' history—for research and development. The focus of this work will be on innovative solutions that would help achieve significant cost savings in the civil works program and address the emerging water resources challenges of the 21st Century, including climate change.

The Army Civil Works Budget focuses on the highest performing work within the three main missions of the Civil Works program:

- commercial navigation,
- flood and storm damage reduction, and
- aquatic ecosystem restoration.

In developing the Budget, consideration was also given to advancing three key objectives that reflect the Administration's priorities: (1) decreasing climate risk for communities and increasing ecosystem resilience to climate change based on the best available science; (2) promoting environmental justice in underserved and marginalized communities and Tribal Nations in line with the Justice40 Initiative; and (3) strengthening the supply chain.

With respect to the first Administration priority, climate-focused investments include more than \$1.4 billion for construction of flood and storm damage reduction and aquatic ecosystem restoration projects, over \$64 million to improve climate resiliency and/or sustainability at existing Corps-owned projects, and \$35.5 million for technical and planning assistance programs with an emphasis on actions to help local communities identify, understand, and address their flood risks including work that would directly benefit disadvantaged communities by improving their resilience to climate change. The Budget also funds the continuation of studies to investigate climate resilience along the Great Lakes coastlines as well as in Central and Southern Florida.

For priority two, the Budget supports the Administration's Justice40 Initiative through investments in 23 studies, and in the construction of 33 projects to help disadvantaged and tribal communities address their water resources challenges—including funding for the Tribal Partnership Program. The Army is committed to helping to achieve the broader goals of the Administration regarding equity and environmental justice and will continue to improve outreach and access to Civil Works information and resources, including technical and planning assistance programs; maximizing the reach of Civil Works projects to benefit disadvantaged communities; and, ensuring that updates to Civil Works policies and guidance will not result in a disproportionate negative impact on disadvantaged communities.

Supply chains remain a priority, which the Civil Works supports through its Commercial Navigation program. The Budget facilitates safe, reliable and sustainable commercial navigation to support U.S. competitiveness and improve the resilience of our nation's manufacturing supply chain to support American jobs and the economy. In support of the Administration's commitment to our nation's coastal ports and inland waterways, the fiscal year 2024 Budget includes over \$3.4 billion for the study, design, construction, operation and maintenance (O&M) of inland and coastal navigation projects. Of this amount, over \$1.7 billion is derived from the Harbor Maintenance Trust Fund for eligible projects with an emphasis on operation and maintenance, including dredging, of completed projects and over \$1 billion will be used to maintain and improve navigation on the inland waterways.

Flood and storm damage reduction is at the center of the Civil Works program's actions to support the Administration's goal of tackling the climate crisis. Accordingly, the Budget contains nearly \$2 billion for flood and storm damage reduction, including funding to provide technical and planning assistance to local communities to enable them to understand and better manage their flood risks. The Budget proposes to assist these local efforts, with emphasis on non-structural approaches.

Equally important to building community resilience is the work of the aquatic ecosystem restoration mission (AER). The Budget includes \$653 million for AER, including \$415 million for the South Florida Ecosystem Restoration (SFER) program, which will enable significant progress in restoring America's Everglades while building ecosystem resilience to climate change in South Florida. The Budget also includes \$93 million to support salmon recovery efforts in the Columbia River basin, another priority within the AER program.

Other significant initiatives include \$655 million for construction of a critical dam safety project at Prado Dam, and \$350 million for replacement of the Cape Cod Canal Bridges. Additionally, to facilitate action on Cape Cod, the Budget includes a legislative proposal that would allow the Corps to transfer funds to the Common-

wealth of Massachusetts to design and construct the replacement bridges. Ultimately, the ownership of these bridges will be conveyed to Massachusetts, which will be responsible for future operation and maintenance. Also, of significant note, the Budget includes \$235 million to continue construction of the Sault Ste. Marie (Replacement Lock) project in Michigan.

In total, the fiscal year 2024 Construction program is funded at more than \$2 billion. While most of this funding is in the Construction account, over \$37 million is in the Harbor Maintenance Trust Fund account, and nearly \$64 million is in the Mississippi River and Tributaries account. By significantly increasing funding for construction for crucial infrastructure projects, this budget will help us get things done and ensure momentum on much needed infrastructure improvements across the nation. The Army also has allocated the \$50 million provided for construction in 2024 in the IIJA for shore protection projects that will support coastal communities and improve their resilience to storm and climate change impacts.

As I wrap up the discussion on construction, I want to acknowledge that there is no funding proposed from the Inland Waterways Trust Fund (IWTF) in this year's budget in view of the \$2.5 billion made available in the IIJA for construction, replacement, rehabilitation, and expansion of inland waterways projects. The IWTF is a very valuable funding source and I anticipate there will be ongoing and significant use in the future beyond the investments provided by the IIJA.

Of course, in addition to new projects, the Budget focuses on maintaining the key features of the vast water resources infrastructure that the Corps owns and manages, and on finding innovative ways to rehabilitate it or divest it to others. The Budget invests in operating and maintaining the Corps' existing infrastructure and improving its reliability and performance. Specifically, the fiscal year 2024 Budget funds the Operation and Maintenance program at over \$4.4 billion, consisting of over \$2.6 billion in the Operation and Maintenance account, nearly \$1.7 billion in the Harbor Maintenance Trust Fund account, and nearly \$154 million in Mississippi River and Tributaries account. The allocation of funding among projects for maintenance reflects a risk-informed approach that considers both project and project component conditions and the potential consequences of a failure. The Budget also gives priority to the maintenance of coastal ports and inland waterways with the highest commercial traffic. Additionally, the Budget is complemented by \$1 billion for operation and maintenance in 2024 from the IIJA.

For the Investigations program, the fiscal year 2024 Budget provides \$139 million, consisting of nearly \$130 million from the Investigations account and over \$9 million in Mississippi River and Tributaries. Within those amounts, the Budget includes \$35.5 million for technical and planning assistance programs. These programs help local communities, including disadvantaged communities, identify and address their flood risks, including flood risks associated with climate change.

Continuing with the budget summary, it's significant that the fiscal year 2024 Regulatory Program is funded at \$221 million to protect the nation's waters and wetlands and provide efficiency in permit processing. And the Recreation program is funded at \$275 million to ensure the Corps—one of the nation's leading Federal providers of outdoor recreation—can continue to effectively serve the public's desire to experience the great outdoors.

To summarize, the Budget makes critical investments in water resources that will benefit the American people and promote greater prosperity and economic growth for decades to come. From solving water resources challenges facing communities, to nurturing sustainable aquatic ecosystems, the Corps is delivering on its mission to serve the public.

I am very honored to implement the President's priorities for the Army Civil Works program and excited to be a part of a great team—serving our Nation.

Thank you for inviting me here today. I look forward to your questions.

Senator MURRAY. Thank you.
General Scott.

**STATEMENT OF LIEUTENANT GENERAL SCOTT A. SPELLMON, CHIEF
OF ENGINEERS AND COMMANDING GENERAL, U.S. ARMY CORPS
OF ENGINEERS**

General SPELLMON. Good afternoon, everyone.

Chairwoman Murray and Ranking Member Kennedy and distinguished members of the subcommittee, I am honored to testify before you today and thank you for the opportunity to discuss the fis-

cal year 2024 budget of the U.S. Army Corps of Engineers, another record appropriation for our Nation's Civil Works Program.

So today I look forward to discussing the status of important Corps projects and programs as well as answer any questions the committee may have regarding our fiscal year 2024 budget.

Most importantly, I look forward to continuing to work with this committee, the Congress, and the Administration to address the Nation's critical water resource infrastructure needs.

We greatly appreciate the committee's continued support of the Corps program with recent record high appropriations, including the \$1.4 billion of additional funding provided late last year as part of the Disaster Relief Supplemental Appropriations Act of 2023.

The Corps Civil Works Program has experienced significant growth over the past several years. This substantial level of investment enables critical water resource projects to be studied and constructed and it allows us to further develop innovative approaches to address some of our most pressing challenges through focused research and development.

The fiscal year 2024 budget reflects a targeted approach to continued investing in our water resources programs, to promote climate resiliency which will benefit the Nation's economy, environment, and public safety now and well into the future.

The budget also supports the Assistant Secretary's priorities for the Corps by upgrading our Nation's waterways, protecting communities and ecosystems, better serving disadvantaged communities, investing in science and research and development, and, finally, sustaining and improving our communications and relationships with our many partners.

The 2024 budget, taken with other recent funding, provides the Corps with what the Secretary calls a transformational opportunity to deliver water resource infrastructure projects that will positively impact communities across our great Nation.

We are also taking advantage of this opportunity to do two things. First, transform our organization and our decisionmaking processes to safely deliver quality projects on time and within budget and, secondly, to identify risks to how we are delivering our program.

Our teams are hard at work seeking out new and better ways to mitigate or eliminate these risks so we can further strengthen the safety and security of communities across the country and territories.

By evolving our policies, programs, and operations and placing increased focus on research and development, we are working to overcome impacts of challenges, such as sea level rise, changes to precipitation patterns and hydrology, and other effects of climate change, including improvement to the resilience of Corps-owned and operated infrastructure.

I will conclude by saying the Corps does not accomplish anything on its own. Delivering successful Civil Works projects is a shared responsibility. It's a team sport. We draw from our engineering expertise and build upon our relationships with our non-Federal partners, our project stakeholders, and Congress to enable us to succeed.

I look forward to continuing our great collaboration as we continue to pursue our vision engineering solutions for our Nation's toughest challenges.

So thank you, Chairwoman Murray, Ranking Member Kennedy, and Members of the Committee. Again, I look forward to answering any questions you may have.

[The statement follows:]

PREPARED STATEMENT OF LIEUTENANT GENERAL SCOTT A. SPELLMON

Chair Feinstein, Ranking Member Kennedy, and Members of the Subcommittee, I am honored to testify before your committee today, along with the Honorable Michael Connor, Assistant Secretary of the Army for Civil Works, regarding the President's Fiscal Year 2024 (FY 2024) Budget (Budget) for the Army Civil Works Program.

Through the Civil Works program, the United States Army Corps of Engineers (Corps) works with other Federal agencies, and with state, tribal, and local agencies, as well as others, to develop, manage, restore, and protect water resources, primarily through the study, construction, and operation and maintenance of water-related infrastructure projects. The Corps focuses on work that provides the highest economic, environmental, and public safety returns to the Nation. The Corps also regulates development in waters of the United States and works with other Federal agencies to help communities respond to, and recover from, floods and other natural disasters.

The Corps uses its engineering expertise and its relationships with project sponsors and stakeholders to develop innovative approaches to address some of the most pressing water resources challenges facing the Nation. I am committed to the Secretary's priorities for the Army Civil Works program, including investing in the Nation's coastal ports and inland waterways to facilitate waterborne transportation and strengthen economic growth; helping communities to manage their flood risks and adapt to climate change; restoring aquatic ecosystems in ways that will make them more sustainable and more resilient to climate change; ensuring that the Civil Works program will better serve the needs of disadvantaged communities; investing in science, research, and development to deliver enduring water-resources solutions; and strengthening communications and relationships to solve water resources challenges. I am absolutely focused on ensuring that we deliver studies and finish quality projects safely, on time, and within budget. These priorities will ensure a better return on taxpayer investment and improve the lives of all Americans. Under my oversight and direction, and with the leadership of Assistant Secretary Connor and his team, the Corps is committed to efficiently and effectively executing the Civil Works program.

SUMMARY OF FISCAL YEAR 2024 BUDGET

The Civil Works program is performance-based and focuses on high-performing projects and programs within its three main water resources missions: commercial navigation, flood and storm damage reduction, and aquatic ecosystem restoration. It uses a targeted approach to invest in our water resources and promote climate resilience, which will benefit the Nation's economy, environment, and public safety—now and in the future. This Budget invests in Tribal Nations, as well in economically disadvantaged communities that are marginalized, underserved, or overburdened by pollution, including those in rural areas.

The Budget includes \$7.413 billion in discretionary funding for Civil Works activities throughout the Nation, the largest budget in history.

INVESTIGATIONS

For the Corps Investigations program, the FY 2024 Budget includes \$130 million in the Investigations account and \$9 million in the Mississippi River and Tributaries account. The Corps uses these funds to evaluate water resources problems and opportunities, design projects within the three main Civil Works mission areas, and support related work. The Budget includes \$35.5 million for planning and technical assistance programs, where the Corps shares its expertise with local communities including disadvantaged communities to help them identify and understand their water resources problems and increase their resilience to, and preparedness for, flood risks.

CONSTRUCTION

For the Corps Construction program, the Budget includes \$2.015 billion in the Construction account, \$37.152 million in the Harbor Maintenance Trust Fund account, and \$64 million in the Mississippi River and Tributaries account.

The goal of the Civil Works program is to produce as much value as possible for the Nation from the available funds. Projects are primarily funded based on their economic, environmental and safety returns. The selection process includes giving priority to investments, on a risk-informed basis, in dam safety assurance, seepage control, and static instability correction work at dams that the Corps owns and operates, and work to address significant risk to human safety, as well as construction of dredged material disposal facilities for high and moderate use segments of commercial deep-draft, shallow-draft, and inland waterways projects.

In developing the FY 2024 Budget, we also gave consideration to projects that provide climate change benefits to disadvantaged communities. To advance priorities in community resilience, environmental justice, and with Tribal Nations, FY 2024 is the first time construction funding for Environmental Infrastructure and the Tribal Partnership Program has been included in the Budget .

The Budget provides \$415 million for the South Florida Ecosystem Restoration (SFER) program, the Everglades, as well as \$93 million to support salmon recovery efforts in the Columbia River basin and \$235 million for the Sault Ste. Marie (Replacement Lock) project in Michigan. The largest request within the Construction Account is for \$655 million for the construction of a critical dam safety project at Prado Dam in California.

OPERATION AND MAINTENANCE (O&M)

All structures age and can deteriorate over time, causing a potential decline in reliability. As stewards of a large portfolio of water resources projects, the Corps is working to sustain the benefits that the key features of this infrastructure provide.

The Corps continues to improve the efficiency and effectiveness of the operation and maintenance of its large portfolio of water resources projects. The Corps does so by targeting its investments in infrastructure maintenance, repair, and rehabilitation on a risk-informed basis. It invests in the highest priority needs with emphasis on the key features of the infrastructure that the Corps owns and operates, and in work that will reduce long-term O&M costs in real terms.

Generally, the O&M program supports completed works owned or operated by the Corps, including operation and maintenance of locks and dams along the inland waterways; maintenance dredging of inland and coastal Federal channels; operation and maintenance of multi-purpose dams and reservoirs for flood risk reduction and related purposes such as hydropower; monitoring of completed navigation and flood damage reduction projects; and management of Corps facilities and associated lands, including serving as a responsible steward of the natural resources on Corps lands.

For the Corps O&M program, the Budget includes \$2.630 billion in the Operation and Maintenance account, \$1.688 billion in the Harbor Maintenance Trust Fund account, and \$154 million in the Mississippi River and Tributaries account. These funds will be used in conjunction with the \$1 billion provided in the Infrastructure Investment and Jobs Act for operation and maintenance work in FY 2024.

RESEARCH AND DEVELOPMENT

Through the research and development program, we are making investments to tackle future challenges and advance technological development in support of the Corps Civil Works mission. The Budget includes a historic \$86 million investment in research and development activities, or over \$100 million including technology transition and data collection. This investment demonstrates the Administration's commitment to engineering innovation to deliver enduring water resource solutions for the Nation. This investment will allow the Corps to continue addressing the most pressing knowledge gaps practitioners face while doing their jobs in the field, such as operational, data-driven methods to improve navigation channel maintenance, the beneficial use of dredged material, and flood and storm risk management modeling. This investment also includes funding to advance longer-term research and development needs including: \$10 million to accelerate the Forecast-Informed Reservoir Operations Assessment, which will further our understanding of atmospheric river impacts on flood risk management, water supply, and other water uses; and \$25.5 million to inform and improve our overall asset management strategy, with a focus on work that has the potential to achieve significant cost savings in the civil works program.

REGULATORY PROGRAM

Through the Regulatory program, the Corps protects the Nation's waters including wetlands, and regulates development that could impede navigation, while allowing reasonable development to proceed. The Budget proposes funding for the Regulatory program to enable the Corps to protect and preserve these water resources. The FY 2024 Budget provides \$221 million for this program.

EMERGENCY MANAGEMENT

The FY 2024 Budget includes \$40 million in funding for the Flood Control and Coastal Emergencies account to enable the Corps to prepare for emergency operations in response to natural disasters. The Budget for the emergency management program also includes \$5.5 million for the National Emergency Preparedness Program.

FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM

The FY 2024 Budget provides \$200 million to clean up specific sites contaminated as a result of the Nation's early atomic weapons development program.

CONCLUSION

The FY 2024 President's Budget for the Army Civil Works Program represents a continuing, fiscally prudent investment in the Nation's water resources infrastructure and restoration of aquatic ecosystems. The Army is committed to a performance-based Civil Works program, based on innovative, resilient, and sustainable risk-informed solutions.

Thank you, Chair Feinstein and Members of Subcommittee. This concludes my statement. I look forward to answering any questions you and other Members of the Subcommittee may have.

Senator MURRAY. Thank you.
And Commissioner Touton.

DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

STATEMENT OF THE HON. CAMILLE CALIMLIM TOUTON, COMMISSIONER

Ms. TOUTON. Good afternoon. My name is Camille Calimlim Touton, and I'm the Commissioner of the Bureau of Reclamation.

Thank you, Chair Murray, Ranking Member Kennedy, and members of the subcommittee for the opportunity to discuss the President's budget for the Bureau of Reclamation, and thanks to, Chair Feinstein for her continued leadership on Western Water.

The Bureau of Reclamation is the largest supplier and manager of water in the Nation and the second largest producer of hydro-power. Reclamation's mission is to support \$66.5 billion in economic activity and 472,000 jobs.

Meeting our mission means addressing drought resilience, water security, climate change adaptation, ecosystem health, and issues of equity.

The need to secure, maintain, and modernize our Nation's infrastructure is an Administration priority and we have a once-in-a-generation opportunity to utilize our fiscal year 2024 \$1.4 billion budget request with that of the Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act (IRA). The issues we face today are unprecedented, as we experience the worst drought in the 120-year history of this organization. Record snowfall and rain across parts of the West this year, and particularly in California, have brought some relief but are not a resolution to our years-long, if not decades-long drought.

Snowpack is at 164 percent of average in the Colorado River Basin, but the reservoirs are collectively at 30 percent. In California's Central Valley we experienced the 3 driest consecutive years on record, only to be followed with 9 atmospheric rivers in late December and January.

The cyclical nature of Western hydrology highlights the need for immediate actions as well as thoughtful planning and on-the-ground work to make both our infrastructure and our operational decisions more resilient to withstand future water resource variability.

Reclamation's 2024 budget priorities reflect our commitment to drought planning and response activities to promote water security, and this budget acknowledges the need to continue to develop and deploy science-based drought and climate change adaptation strategies.

Reclamation's WaterSMART and Science Technology Programs directly contribute to these Administration priorities, including \$22.5 million for R&D (Research and Development) science and tech.

We must also plan for our infrastructure. Our dams and reservoirs, water conveyance systems, and power generation facilities serve as the water and power infrastructure backbone of the American West. However, as with all infrastructure, these features are aging and in need of critical maintenance.

Our 2024 budget includes \$105.3 million for extraordinary maintenance combined with our BIL investments of \$825 million in 2022 and 2023—and that includes our aging infrastructure announcement of \$585 million earlier this month.

We are constructing our largest dam safety modification project at BF Sisk Dam in California, supported by our 2024 budget request of \$210 million for dam safety, which includes \$182.6 million for the implementation of dam safety modification actions.

This funding not only addresses BF Sisk Dam but also El Vado in New Mexico and 10 additional projects in the West, in Washington, Oregon, Montana, and North Dakota.

We are able to leverage this funding to more effectively address West-wide needs in an accelerated manner due to the \$500 million in BIL funding.

We must also address our infrastructure needs and consider economic inequities and the needs of rural and underserved communities. Reclamation is establishing and rebuilding water infrastructure for underserved populations by ensuring that clean drinking water is provided to our communities through our rural water investments.

Our 2024 budget request includes \$57.8 million and as with our Dam Safety and Aging Infrastructure Programs, our Rural Water Program leverages the one billion in BIL funding to accelerate completion of these long-needed projects, of which we've allocated \$698 million.

Our budget also includes \$35.5 million for Reclamation's American Affairs Program to enhance our technical assistance to Tribes. And, lastly, Reclamation's budget request supports the Administration's legislative proposal for Indian Water Rights Settlement implementation efforts.

Reclamation will continue to manage the drought in real time and plan for the future with a focus on people, partnerships, and investments, and Reclamation is committed to working with Congress and our partners and stakeholders in carrying out our mission, and our fiscal year 2024 budget supports these actions.

I again thank the subcommittee. I'm happy to answer any questions.

[The statement follows:]

PREPARED STATEMENT OF CAMILLE CALIMLIM TOUTON

Thank you, Chair Feinstein, Ranking Member Kennedy, and members of the Subcommittee for the opportunity to discuss with you the President's Fiscal Year (FY) 2024 Budget for the Bureau of Reclamation. I am Camille Calimlim Touton, Commissioner for the Bureau of Reclamation.

The issues we face today are unprecedented as we experience the worst drought in the 120-year history of this organization. This challenges Reclamation's ability to deliver water and produce hydropower in the way we have in the past. Climate change has made it likely that we will continue to experience the same, or worse, hydrology in the future. Record snowfall and rain across parts of the West—and particularly California—have brought some relief. While we are thankful for the benefits, we must not forget the cyclical nature of western hydrology. Therefore, this is not a time for Reclamation, the States and Tribes to take our foot off the gas. It is an opportunity to get ahead of the planning. Reclamation will continue to manage the drought in real time, focusing on our enduring priorities of People, Partnerships, Investments—and Hydrology in the West.

Reclamation manages water for agriculture, municipal and industrial use, the environment, and provides flood control and recreation for millions of people. Reclamation's projects and programs serve as the water and power infrastructure backbone

of the American West, constituting an important driver of economic growth in hundreds of basins through the Western States. Reclamation's activities support economic activity valued at \$66.6 billion, and support approximately 472,000 jobs.¹ Reclamation delivers 10 trillion gallons of water to millions of people each year and provides water for irrigation of 10 million farmland acres, which yields approximately 25 percent of the Nation's fruit and nut crops, and 60 percent of the vegetable harvest.

Reclamation's fundamental mission and programs—modernizing and maintaining infrastructure, conserving natural resources, using science and research to inform decisionmaking, serving underserved populations, and staying as nimble as possible in response to the requirements of drought and a changing climate—position it as an exemplar for the Biden-Harris Administration's core tenets. The Bureau of Reclamation's Fiscal Year 2024 budget provides the foundation to meet our mission, and to manage, develop, and protect water resources, consistent with applicable State and Federal law, and in a cost-effective and environmentally responsible manner in the interest of the American public. Reclamation remains committed to working with a wide range of stakeholders, including water and power customers, Tribes, State and local officials, and non-governmental organizations, to meet its mission.

Reclamation is requesting a gross total of \$1,449,314,000 in Federal discretionary appropriations, which is anticipated to be augmented by over \$2.4 billion in other Federal and non-Federal funds for FY 2024. Of the total, \$1,301,012,000 is for the Water and Related Resources account, which is Reclamation's largest account, \$66,794,000 is for the Policy and Administration account, and \$33,000,000 is for the California Bay Delta account. A total of \$48,508,000 is budgeted for the Central Valley Project Restoration Fund.

Activities to Support Tribal Programs & Tribal Water Rights Settlements: Reclamation tackles the challenges of racial equity and underserved communities through investments in Tribal water rights settlements, continuation of the Native American Affairs technical assistance program, rural water projects, and investments in specific projects for underserved communities through programs such as WaterSMART. The Bipartisan Infrastructure Law PL 117-58 (BIL) and Inflation Reduction Act appropriations both invest substantial portions of its funding to underserved populations, and rural and Tribal communities.

The Fiscal Year 2024 discretionary request also includes \$35.5 million for the Native American Affairs program to improve capacity to work with and support Tribes in the resolution of their water rights claims and to develop sustainable water sharing agreements and management activities. This funding will also strengthen Department-wide capabilities to achieve an integrated and systematic approach to Indian water rights negotiations to consider the full range of economic, legal, and technical attributes of proposed settlements. Finally, funding also supports Reclamation efforts for Tribal nations by supporting many activities across the Bureau, including some rural water projects, the Yakima River Basin Water Enhancement Project, the Klamath Project, and the Lahontan Basin project, among others.

Conservation and Climate Resilience: Reclamation's projects are able to address the Administration's priorities to address conservation and climate resilience through funding requests for the WaterSMART program, funding to secure water supply to our refuges, and proactive efforts through providing sound climate science, research and development, and clean energy.

The WaterSMART Program serves as the primary contributor to Reclamation's and the Department of the Interior's Water Conservation Priority Goal. Since 2010, projects funded under contributing programs, including WaterSMART Grants, Title XVI (Water Recycling and Reuse Program), California Bay-Delta Program, Yakima River Basin Water Enhancement Project, and Desalination construction projects have achieved a total of 1,682,005 acre-feet water savings.

Through WaterSMART, Reclamation works cooperatively with States, Tribes, and local entities as they plan for and implement actions to address current and future water shortages, including drought; degraded water quality; increased demands for water and energy from growing populations; environmental water requirements; and the potential for decreased water supply availability due to climate change, drought, population growth, and increased water requirements for environmental purposes. This includes cost-shared grants for water management improvement projects; water reclamation and reuse projects; watershed resilience projects; the Basin Study Program; and drought planning and implementation actions to proactively address water shortages. The FY 2024 request includes \$62.9 million for the WaterSMART Program.

¹U.S. Department of the Interior Economic Contributions Report—Fiscal Year 2019.

Climate Science: Reclamation's FY 2024 budget for Research and Development (R&D) programs includes \$22.5 million for the Science and Technology Program, and \$7.0 million for Desalination and Water Purification Research—both of which focus on Reclamation's mission of water and power deliveries. Climate change adaptation is a focus of Reclamation's R&D programs, which invests in the production of climate change science, information and tools that benefit adaptation, and by yielding climate-resilient solutions to benefit management of water infrastructure, hydropower, environmental compliance, and water management.

The Desalination and Water Purification Research program addresses drought and water scarcity impacts caused by climate change by investing in desalination and water treatment technology development and demonstrations for the purpose of more effectively converting unusable waters to useable water supplies. The Science and Technology program invests in innovation to address the full range of technical issues confronting Reclamation water and hydropower managers and includes the Snow Water Supply Forecasting Program that aims to improve water supply forecasts through enhanced snow monitoring and water management to address the impacts of drought and a changing climate.

Modernizing and Maintaining Infrastructure: Reclamation's water and power projects throughout the western United States provide water supplies for agricultural, municipal, and industrial purposes. Reclamation's projects also provide energy produced by hydropower facilities and maintain ecosystems that support fish and wildlife, hunting, fishing, and other recreation, as well as rural economies.

Dam Safety: Reclamation manages 489 dams throughout the 17 Western States. Reclamation's Dam Safety Program has identified 361 high and significant hazard dams at 241 facilities, which form the core of the program. Through constant monitoring and assessment, Reclamation strives to achieve the best use of its limited resources to ensure dam safety and maintain our ability to store and divert water and to generate hydropower.

The Dam Safety Program helps ensure the safety and reliability of Reclamation dams to protect the downstream public. Approximately 50 percent of Reclamation's dams were built between 1900 and 1950, and approximately 90 percent of the dams were built before adoption of currently used, state-of-the-art design and construction practices. Reclamation continuously evaluates dams and monitors performance to ensure that risks do not exceed the Federal Guidelines for Dam Safety Risk Management and the Public Protection Guidelines. The Dam Safety Program represents a major funding need over the next 10 years, driven largely by necessary repairs at B.F. Sisk Dam in California. The B.F. Sisk Dam is a key component of the Central Valley Project, providing 2 million acre-feet of water storage south of the California Sacramento-San Joaquin River Delta. Reclamation is modifying the dam to reduce the risk of potential failure resulting from potential overtopping in response to a seismic event, using the most current science and technology to develop an adaptive and resilient infrastructure. In addition to B.F. Sisk, Reclamation has identified 12 projects with anticipated modification needs through 2030, as well as 5 additional projects that will be assessed for potential risk reduction efforts prior to 2025.

The proposed budget also requests \$105.3 million for specific Extraordinary Maintenance (XM) activities across Reclamation in FY 2024. This request is central to mission objectives of operating and maintaining projects to ensure delivery of water and power benefits. Reclamation's XM request relies on condition assessments, condition/performance metrics, technological research and deployment, and strategic collaboration to better inform and improve the management of its assets and deal with its infrastructure maintenance challenges. Reclamation was also appropriated \$3.2 billion in the BIL, and the allocation plan for FY 2024 funding has been provided to Congress as mandated.

Renewable Energy: Reclamation owns 78 hydroelectric power plants. Reclamation operates 53 of those plants to generate approximately 15 percent of the hydroelectric power produced in the United States. Each year on average, Reclamation generates about 40 million megawatt hours of electricity and collects over \$1.0 billion in gross power revenues for the Federal Government.

Reclamation's FY 2024 budget request includes \$3.5 million to increase Reclamation hydropower capabilities and value, contributing to Administration clean energy and climate change initiatives and enhancing water conservation and climate resilience within the power program.

Section 70101 of the BIL established the Indian Water Rights Settlement Completion Fund (Completion Fund), making \$2.5 billion available to the Secretary of the Interior to satisfy Tribal settlement obligations as authorized by Congress prior to enactment of the BIL. In FY 2022 and FY 2023, the Department allocated \$2.26 billion of those funds, \$608.5 million of which supported Reclamation's Tribal settle-

ment implementation actions. Additional funding from the Completion Fund will be allocated in FY 2024. In addition to the Completion Fund, FY 2024 represents the fifth year of Reclamation Water Settlements Fund (RWSF) allocations, which provide \$120 million in annual mandatory authority for Reclamation Indian water rights settlements. Funding made available by previous mandatory authorities, such as that authorized in the Claims Resolution Act, remain available for settlement implementation, while the ongoing operations and maintenance requirements of the Arizona Water Settlement Act are expected to continue to be supported within the Lower Colorado River Basin Development Fund.

The investments described in Reclamation's FY 2024 budget, in combination with BIL and the Inflation Reduction Act implementation and prior year efforts will ensure that Reclamation can continue to provide reliable water and power to the American West. Water management, improving and modernizing infrastructure, using sound science to support critical decision-making, finding opportunities to expand capacity, reducing conflict, and meeting environmental responsibilities are all addressed in this FY 2024 budget request. Reclamation continues to look at ways to plan more efficiently for future challenges faced in water resources management and to improve the way it does business.

Thank you for the opportunity to summarize the President's Fiscal Year 2024 Budget Request for the Bureau of Reclamation.

Senator MURRAY. Thank you so much.

We will now begin our round of 5-minute questions and I ask my colleagues to keep track of the clock.

Commissioner Touton, I want to start with you. Last Congress, as you know, we passed the Inflation Reduction Act, which included \$4 billion in funding for Reclamation to address declining water levels because of the drought primarily, of course, in the Colorado River Basin.

We're all thankful, of course, this year for much-needed rain and snow and as you and I have talked about, one wet season does not counter the driest 23-year period ever recorded in that basin.

We do need long-term solutions to effectively manage that water and adjust for the impacts of climate change.

Can you explain how the supplemental environmental impact statement that was released earlier this month fits into those efforts and highlight other steps that you are taking to increase our water security and resilience?

Ms. TOUTON. Thank you for that question, Madam Chair.

With regard to the Colorado River Basin and the Inflation Reduction Act, within 60 days of the President signing the Inflation Reduction Act into law, we had a request for proposals for what we call short-term bridging water and we're happy to announce as part of that, earlier this month, we announced a 125,000 acre-foot commitment by the Gila River Indian Community which amounts to about \$50 million. What that means in Lake Mead is about two feet of elevation in the short term.

We've also committed \$250 million for the Salton Sea to mitigate impacts to the Sea as the result of conservation efforts and less water in the system, and we've also committed \$125 million for our System Conservation Program in the Upper Basin.

As it relates to the Supplemental EIS (Environmental Impact Statement) that we released earlier this month, the efforts that we have—whether in short-term bridging water or our long-term investments in sustainable infrastructure—help to keep water levels higher in Mead and our ability to keep levels high so that we can continue to operate, whether that's through voluntary measures or investments in infrastructure. Moreover, they help with the process

of coming to a consensus solution in the basin, to which we remain committed.

Thank you for your support.

Senator MURRAY. Thank you.

As you know, the Columbia River Basin provides significant habitat for salmon and other endangered species. It irrigates 600,000 acres of farmland. It serves as a water highway and provides electricity to the majority of the region.

I wanted to ask Commissioner Touton and Assistant Secretary Connor. I know your teams have been working diligently to reach a new agreement with Canada on the Columbia River Treaty. As those negotiations continue, would you commit to keeping me updated on the progress of that and let us know if there's anything we can do to assist your efforts?

Commissioner? Assistant Secretary?

Mr. CONNOR. Madam Chair, —

Senator MURRAY. Yes?

Mr. CONNOR [continuing]. Yes, absolutely, a modernized treaty is incredibly important. We will keep you informed. I'm committed to that.

Ms. TOUTON. Yes, as well, Madam Chair. Thank you.

Senator MURRAY. Thank you.

This is so important. We have to stay apprised of this progress and we need to keep moving on this. So I appreciate that.

Assistant Secretary Connor, I consistently hear from our ports and harbors across the country about the importance of the Harbor Maintenance Trust Fund. That is exactly why I reached across the aisle to unlock some additional Trust Fund dollars for some of our critical harbor work.

I worked with the donor ports, like Seattle and Tacoma, to find targets for distributing those Trust Fund dollars. That funding is really key to ensuring high-quality port infrastructure and maintaining our national competitiveness.

But the budget this year does not appear to meet all the Harbor Maintenance Trust Fund targets. What steps are you taking to make sure the targets are met?

Mr. CONNOR. Thank you, Madam Chair.

I will just say I appreciate our conversation on this very subject about a month ago. We did not include the 12 percent set-aside for energy and donor ports and I appreciate the sensitivity of the dialogue that you engaged in and the statutory provision that was included that reflects the balance that Congress feels is important.

So I'm committed now to ensuring as we move forward, you know. The threshold issue is our priority has always been to maintain authorized channels at their authorized depths and widths and that's going to be an ongoing effort as priority one, but understanding the balance that the Congress has sought through those provisions in WORDA I'm committed to ensuring that in the next budget cycle we are looking—and I think this will help in the next work plan cycle, that we identify the donor ports and the energy supporting ports, that we identify what are those expanded uses that they anticipate that they've identified as needs so that we have that roster, that inventory of needs, and I'm committed to

doing that and issuing guidance to ensure that we have that information available for the next decisionmaking process.

Senator MURRAY. Well, as you know, I'm going to be watching that very closely.

Mr. CONNOR. Yes.

Senator MURRAY. All right. Thank you.

Senator Kennedy.

Senator KENNEDY. Thank you, Madam Chair.

Could you put that up for me right quick? Thank you, ma'am.

General, I know you can't see that, but it's a page from your website and let me read you the relevant sentence. It says, "The Mississippi River and Tributaries Project," which, of course, is how we pay for flood control and levies, "The Mississippi River and Tributaries Project has prevented more than \$1.5 trillion," not billion, trillion, "in flood damages since 1928 or \$95 for every \$1 invested."

This is from your website. How was this compiled, that data compiled, General?

General SPELLMON. Yes, sir. So it's simply taking the cost of the project and comparing it to the benefits that you're describing, structures saved, acres preserved, recreation opportunities. So it's a comparison between the—simple math between the cost and benefits.

Senator KENNEDY. So you have the ability at the Corps, your economists and others, to calculate losses, potential losses?

General SPELLMON. Yes, sir, we do.

Senator KENNEDY. And what this is telling me is that without the Corps of Engineers work funded as I described with respect to levies and flood control, the American people would have sustained damages of \$1.5 trillion, is that right?

General SPELLMON. Yes, sir, I believe that's correct.

Senator KENNEDY. Okay. Here's what I'm getting at, General. If you have this ability and I believe you do, I'm not suggesting this isn't accurate, I'm very grateful that this is accurate, and I'm very grateful to the Corps, but if your folks have this ability to put a value on the potential losses that we are averting, why doesn't that play a bigger role in your cost-benefit analysis when you're looking at the feasibility of a project?

General SPELLMON. Yes, sir. So this is clearly—it's a great question. Clearly something the Corps has to get better on in comprehensive benefits.

So I'll just give you two areas, sir, where we are trying to improve. We have a number of fund risk management projects and navigation projects that have national security implications. We're working on one in North Dakota, in Minot. You could use this Sioux Locks as an example.

The Port of Nome in Alaska, it's a remote subsistence harbor, but the Coast Guard and Navy can use that. So we're challenged on those type of projects to quantify the national security benefit.

We have flood risk management projects today in Selma, Alabama, or in Princeville, North Carolina, that preserve cultural and historic properties, and we struggle to put a monetary value on that, but it's something with the Secretary's leadership, sir, we absolutely get—it's something we have to improve upon.

Senator KENNEDY. Well, General, I misspoke. I said \$1.53. The real figure is \$2.73, which your work has prevented, \$2.73 trillion in damages, and your economists—you stand by that number, I assume?

General SPELLMON. Yes, sir.

Senator KENNEDY. And your economists have a way to come up with that number.

General SPELLMON. That's correct.

Senator KENNEDY. It just makes no sense to me if we can quantify the losses that would be prevented by building a flood control project that we wouldn't make that one of the determining factors in the cost-benefit analysis. I mean, I gave you the statistic, the Morganza to the Gulf Levy System prevented damage, flooding, to 12,000 homes, and you can quantify that. Don't you think we ought to change the formula a little bit?

General SPELLMON. Well, sir, the way you're describing a loss prevented is a benefit of these projects. The Morganza example, I would argue, sir, we have many of those—we have many Morganzas across the country that we have to get better on in resourcing.

Senator KENNEDY. Let me ask you one quick question in the time I have left.

The price of the Comite River Diversion Canal has gone up \$500 million. How? I know inflation, but wow!

General SPELLMON. Yes, sir.

Senator KENNEDY. What are we going to do about that?

General SPELLMON. Sir, you've inflation down. The thing that we were taking on—this is a great example where we have to get better at communicating to the committees and to Congress and the Administration the cost estimates that we give you in the Chief's Report in Paragraph 11 and we give you a number with some decimal points on it for a project that may be constructed down the road, but what we don't give you is the percent design that that cost estimate is based on.

So in a 3-year study, a district might get to a 10 percent level design or a 4-year study, they might get to 25 percent, and then as that design is matured, like it is now today in Comite, you're finding that there are additional requirements that we get as we get deeper into the geotech, into the sizing of some of these structures. That's what we're experiencing here and it's something we've got to get better on in communicating to you.

Senator KENNEDY. How do we get that number? We got a hell of a mess here, General. Okay. My people expect this to be done. We brought it in on time. I mean, then all of a sudden, bam, \$500 million. How we going to get this price down?

General SPELLMON. Sir, you have our commitment that we're going to work through this. We're committed to finishing this. I don't have all the answers here today. I can share my commitment that we will get this done.

Senator KENNEDY. Thank you. Thank you, Madam Chair.

Senator MURRAY. Thank you.

Senator Heinrich.

Senator HEINRICH. Thank you, Madam Chair.

Commissioner Touton, I want to ask you about how you're balancing the drought relief efforts across the West and I think it's clear that as reservoir levels in the Colorado Basin have dropped, it's really captured the attention of the country, but for the Colorado Basin there are many other basins in the West that are experiencing the same dynamic, right?

We are just dealing with less precipitation, less snow pack, less water in these systems than we were 50 years ago.

Ms. TOUTON. Yes.

Senator HEINRICH. And that's not drought because it's not temporary. It is aridification. It is the result of climate change and it is going to be at that level or potentially worse for the foreseeable future.

So how are you making sure that you're addressing that issue across basins in places like the Rio Grande that have equally stressing situations in their systems right now?

Ms. TOUTON. Thank you for that question, Senator.

What you have outlined is exactly what we're—not only are we seeing in the Colorado River Basin but across the West. Our facilities were built in the notion that our largest reservoir would be snowpack, that it would fall, that it would stay there and not melt early and that when it would melt, it would end up in our rivers and therefore our reservoirs. That is not what we're seeing for the most part. It's drier, snow is falling at higher elevations, and when it does melt, it's sooner and the grounds are dry.

Taking into account what you saw in your home State last year with the Rio Grande, for the first time in 40 years, parts of the Rio Grande ran dry. So, what are we doing about it? First, we're maximizing the efforts that we have in the short- and long-term both in our budget request but also with investments from the Bipartisan Infrastructure Law, with WaterSMART efficiencies, and the lining of canals being more efficient for water usage.

But we're also looking at it from a long-term perspective. You and I have talked about how that's not necessarily the solution for every place and that our ability to recharge our aquifers also means that we have an ability to make sure our streams are available.

So, part of our announcements that we made, as well, is a NOFO (Notice of Funding Opportunity)—a Notice of Funding—for Aquatic Ecosystem Restoration.

So our ability to look at these holistically and these are short-term tools, but then we're investing in the infrastructure. We're really proud of our aging infrastructure investments. We had as part of that \$30 million for the Rio Grande for aging infrastructure and we are looking at the Inflation Reduction Act. It says \$4 billion for the Colorado River and basins at comparable levels of drought.

So, as we're working through the Colorado River, we're working on a lot of things, including that provision, on how we can utilize that for long-term projects.

Senator HEINRICH. Assistant Secretary Connor, I want to ask you. You're super-familiar with the infrastructure in the Rio Grande Basin, with your background, but when we authorized all of that infrastructure and I suspect this is true across many basins in the West, you kind of had a one-off approach.

You might have one reservoir that was for flood control, you had a different reservoir that was for storage, and as we come under more and more pressure and there's less and less water in the system as a whole, we really need to be able to manage the basin as a whole, coordinating all those pieces of infrastructure.

Last year the Corps was directed to work with the National Academies to study reservoir management and operational issues within the Rio Grande Basin so that we could come up potentially with a more comprehensive management strategy. How is that progressing?

Mr. CONNOR. It's progressing in pieces rather than that holistic approach that you've described, Senator, and I absolutely agree and I think this builds upon the Commissioner's point.

We don't have the luxury anymore of having single purpose projects doing individual things. So we've got to tie this together and that requires the Bureau working with the Corps of Engineers and vice-versa so that we can make our current infrastructure work harder, that we have better science and understanding of the system, that we ensure when we're doing flood control that we no longer just channel water away that can't be used, we need to incidentally restore our ground water for environmental benefits, and we have to look if we can't pick up water and specifically incorporate that in managed aquifer recharge.

So I get back to your fundamental question, we've got authorities for studies, the Upper Rio Grande Water Operations Manual. We're proceeding to continue to refine that based on new authorities. Now we can use Abiquiu for water storage as well as flood control purposes. We're storing water from El Vado under a deviation now because that's undergoing a safety of dam project.

We just need, I think, to think about an overarching study or approach that ensures we're integrating. In the meantime, we're going to cobble these things together and talk to each other and figure out these multi-benefit approaches we can move forward with the current infrastructure system.

Senator HEINRICH. Thank you, Madam Chair.

Senator MURRAY. Thank you.

Senator Hyde-Smith.

Senator HYDE-SMITH. Thank you, Madam Chairman, and thank you for convening this meeting, and thank you guys for being here and your willingness to serve, as well.

I want to talk a bit about the Yazoo Backwater Levy Enlargement, specifically the need to enlarge the existing Yazoo Backwater Levy.

Often when people hear Yazoo Backwater Project, they immediately assume we're talking about the unconstructed pumping station which is a very important issue that must be resolved, but the pumps are just one part of the comprehensive Yazoo Backwater Area Project.

Authorized features include levies, floodgates, drainage channels, and the pumping stations, but the Yazoo Backwater Levy was completed in 1978. It is essentially an extension of the Mainline Mississippi River East Bank Levy and it runs along the West Bank of the Yazoo River.

This latest system, along with the Steele Bayou Floodgate, serves as the first line of defense of the nearly 2,000 square miles of the Yazoo Backwater Area when the Mississippi River is high and backs up into the Yazoo River.

When the river is high and the area receives above average rainfall, interior water is trapped inside the levy system almost like a bathtub and we have a destructive backwater flood. As we've seen time and time again, like the catastrophic flood of 2019 and many others since 2008, until a pumping station is constructed and operational in the Yazoo Backwater Area, we have to ensure the structures we have in place are as strong as possible and during that historic flood of the Mississippi River in 2011, the historic Backwater Levy came within inches of over topping.

If that happened, the area would have been inundated with more than 16 feet of water. Let me repeat that. The area would have had more than 16 feet of water.

From the beginning, the Corps has said the Yazoo Backwater Levy would need to be raised at some point during the 50-year project life in the recommended plan, but unfortunately the President's fiscal year budget in 2024 does not include any funding to enlarge the Yazoo Backwater Levy but two million could be used for that purpose according to the Corps' fiscal year 2024 Total Capability Estimate.

Secretary Connor or Lieutenant General Spellmon, either one, please explain to the subcommittee the magnitude of the flooding that would occur should the Yazoo Backwater Levy ever overtop.

Mr. CONNOR. Yes, ma'am, I'll start. So you're correct that we became within two inches of this occurring in the 2011 event. This would be major flooding. So you have to assume in these conditions that the Steele Bayou structure is closed and the Yazoo River is high and so we would have a condition where the precipitation is gathering behind the other structure in those communities in addition to water coming over top of the levy.

As you described in 2019, those conditions in the current arrangement could last for months.

Senator HYDE-SMITH. Okay. And I've submitted a fiscal year 2024 funding request to enlarge the Yazoo Backwater Levy.

Please explain to the subcommittee that the Yazoo Backwater Levy is a separate completed feature of the Yazoo Backwater Project and said funds would indeed be used to enlarge the levy, which has nothing to do with the construction of the pumps.

Mr. CONNOR. Yes, ma'am. The levy enlargement is a separate feature of the system and we would use the money provided to begin the design of that levy enlargement.

Senator HYDE-SMITH. Okay. In other words, comparing funding to enlarge the levy to funding to construct the pumps is like comparing apples and oranges. They are completely different project elements. Am I correct in saying that?

Mr. CONNOR. Yes, ma'am. They are different project features.

Senator HYDE-SMITH. And do you agree the Yazoo Backwater Levy needs to be enlarged?

Mr. CONNOR. Ma'am, today it's just under six feet below its designed height and so this next enlargement would take it up an-

other two feet, consistent with the MR&T System. That's the next planned levy raise for this system, but, yes, I agree.

Senator HYDE-SMITH. Great. Thank you so much. My time is almost up. I'll yield.

Senator MURRAY. Senator Hoeven.

Senator HOEVEN. Thanks, Madam Chairman.

Commissioner Touton, thanks for coming. We appreciate it very much. You've reviewed the issue in North Dakota, the water supply project. It's very important that Reclamation help us with funding that project.

Are you willing to continue to work to help us fund that project?

Ms. TOUTON. It was great to see you. North Dakota is beautiful in the summer and I look forward to working with you on that project.

Senator HOEVEN. Well, you're invited again. It was great to have you out there.

One more technical question is the funding to comply with the Boundary Waters Treaty for biota treatment is being taken out of Section 7 instead of out of Section 1, which is taking away some of the ongoing funding in Section 7.

Are you willing to work with us on that see if you can't get that addressed?

Ms. TOUTON. Our teams are already working on that, Senator, and I'm happy to report back and continue to work with you on that issue.

Senator HOEVEN. Thank you, and I want to note and thank your responsiveness. I appreciate it very much. Thank you.

Ms. TOUTON. Thank you.

Senator HOEVEN. Secretary Connor, Dakota Access Pipeline, with which you're very familiar, moving more than half a million barrels a day of energy, by the way, sweetest crude from North Dakota that our Nation badly needs right now.

Please, give a status update on getting the EIS process completed. As you know, it's been operating safely now for years, and what do you anticipate for completion of the EIS process?

Mr. CONNOR. Absolutely. I'll provide an update, Senator. So as a result, as you know, but just for the record, in 2000 the Corps was ordered to go back and do a full EIS. So right now we are at the stage where we have produced an administrative draft EIS, shared that with cooperating partners, such as the State of North Dakota, and also we went ahead and shared that with all the Tribes who have registered interest. So we've got about six cooperating agencies as well as 30 Tribes now who have reviewed it, provided us comments.

We are currently taking into account and incorporating those comments, having some additional technical discussions with the goal of coming out with a draft environmental statement for public review by the end of June. So it's a little shift from the schedule that you and I have previously talked about and it was because of the request for an additional review period of the administrative draft EIS.

So we will put it out for review, probably 45 or 60 days. I anticipate we'll get additional requests for time. We're prepared to go out a little longer than that but my conversations with you and the

Governor, I know we need to get our work done here and do the full analysis and we've tried to incorporate, you know, a better assessment of spill risks, spill response, Tribal trust interests, so that we can fully evaluate potential impacts as well as disclosing just the overall greenhouse gas emissions and social costs to carbon parties of the administration.

So we've now done that. We're taking comments. We'll get it out the end of June and hopefully move forward to get to a final EIS.

Senator HOEVEN. And you understand the importance of the project and getting the EIS completed?

Mr. CONNOR. Absolutely understand, Senator.

Senator HOEVEN. Thank you, Mr. Secretary.

General, I'm looking forward to your visit to the Fargo-Morehead region next month and your meeting out there, and I want to thank you for having your meeting, your Corps USACE meeting out there for three days next month.

This is an incredible project and frankly do you consider this, the Red River Valley Flood Protection Project, really a national model and are you committed to completing it and getting it done on time and as planned?

General SPELLMON. Yes, sir. We're absolutely committed to completing this project. I don't often get to report on schedule within budget, but this was our project delivery team of the year. So we're going to take all 42 district commanders and our 13 general officers out there to see how they did it but looking forward to this visit, sir.

Senator HOEVEN. Thank you. And in the case of Minot, you mentioned Minot earlier, your continued creativity is going to be needed in Minot. You've shown that in working with the Minot Air Force Base, the only dual nuclear base in the Nation, so it truly is a national security issue, but also for completing the flood protection particularly for the lower-income areas with some of those back channels and some of those kind of things, you have some programs that we're going to need to use, as well.

Your people in the region have identified them and so your strong support for some of the ideas the region's bringing forward from your office would be very helpful in completing that comprehensive flood control project.

General SPELLMON. Yes, sir. We certainly want to get after resourcing some of the innovation that the district has come up with in some of these communities that you're describing.

Senator HOEVEN. And you're committed to supporting that?

General SPELLMON. Yes, sir.

Senator HOEVEN. Thank you, appreciate it. Thank you, Madam Chair.

Senator MURRAY. Senator Britt.

Senator BRITT. Thank you, Madam Chairman.

Thank you all for being here today. We certainly appreciate your time and your willingness to be in front of this committee.

We know that the U.S. Army Corps of Engineers is responsible for the design, construction, and maintenance of both military construction and Civil Works projects across our great Nation.

I appreciate your consistent commitment to construction projects at military installations, including those at Fort Novosel outside my home town of Enterprise, Alabama.

Secretary Connor, thank you for visiting the Port of Mobile last week. I know that the Port and the Mobile District welcomed the opportunity to show you around.

In 2019 the U.S. Army Corps of Engineers approved what was called the General Re-Evaluation Report, examining the costs and benefits and the environmental impacts of deepening and widening the Mobile Bay Ship Channel to accommodate larger vessels and allow two-way traffic.

In June of 2020 the U.S. Army Corps and the Alabama State Port Authority signed a Project Partnership Agreement and the fiscal year 2020 U.S. Army Corps Work Plan fully funded the Channel Deepening and Widening Project.

In September of 2020 the Mobile District of the U.S. Army Corps of Engineers awarded the first of now seven phases of construction for this project. As of today, Phase 1 and Phase 3 of the project is complete. Phase 4 of the project is scheduled for completion in June of 2024, while the remaining four phases are scheduled to be done concurrently starting later this year.

The full project is scheduled to be completed by March 2025. The deepening and widening of the Mobile Ship Channel will bring unprecedented economic growth of the entire State of Alabama and to the communities surrounding the Mobile Bay.

Once deepened, the public and private terminals of the Port of Mobile will be able to accommodate larger ships and more frequent scheduling, handling a wide range of cargo, including mined materials, manufactured goods, bulk cargo, containerized cargo, and agro-business cargo.

Mr. Secretary, from your standpoint, is the project to deepen and widen the Mobile Ship Channel on schedule for completion by March of 2025?

Mr. CONNOR. Senator, yes, the project is still on schedule. Can I just say fantastic facility, fantastic tour last week, pretty impressive the capabilities there, and the diversification in the port as far as the cargo that it brings in and out.

I know there is an issue with utility easements that we're working through with Phase 4 and that's the other thing I just wanted to mention. I think it's great levels of communication with the port as well as State officials all helping to work through those utility issues.

So I think we need to keep up attention on that to be able to get to ensure that we get the construction activity done, but everything that I learned last week is we're still on progress.

Senator BRITT. Thank you so much and thank you for your compliments to the great work that's done there.

There have been many men and women who've been very intentional about how we can grow and how we can make sure that it was benefiting a multitude of people and places and servicing that community and the surrounding States. So thank you so much for saying that and I know that all parties are committed to working through any necessary paperwork, anything that needs to be done

to make sure that we stay on time and we meet that March 2025 deadline.

The Port of Mobile is expected to receive \$5.4 million in fiscal year 2023 in the work plan for the Port Energy Funds. Port Energy Funds are funds provided to ports across the Nation at which energy commodities comprise more than 25 percent of the tonnage moved through the port.

This year it is my understanding that the U.S. Army Corps has revised guidance for the use of Port Energy Funds, such that if a port is receiving these funds and it wishes to use them for dredging material and management activities, it is either not allowed or requires the U.S. Army Corps Headquarters to sign off.

This is different from past practices. In past MOUs (Memoranda of Understanding) the Port of Mobile has been able to use the Port Energy Funds for berth dredging and surveying, post-dredging, hauling, berth dredge materials, and offsite upland sites requiring testing of these materials and just a wide variety of things.

I believe that the U.S. Army Corps should maintain its past practices of allowing energy ports like the Port of Mobile to be able to use their Port Energy Funds to dredge and engage in dredge material management activities and that this new guidance is overly restrictive to operations and maintenance of the Port of Mobile.

Mr. Secretary, will you commit to reviewing this new guidance and ensuring that the Port Energy Funds can be used for both dredging and for dredged material management activities?

Mr. CONNOR. I will absolutely—

Senator MURRAY. Before you give an answer to that question, Senator Britt, I have to go to another committee hearing. Senator Murkowski's on her way. I know you'll not say no, but would you mind holding the gavel until Senator Murkowski gets here?

Senator BRITT. I would be honored. Thank you.

Senator MURRAY. Thank you very much.

Senator BRITT. Thank you, Madam Chairman.

Senator MURRAY. I will turn that over to you until she gets here.

Senator BRITT. Thank you so much.

Senator MURRAY. Thank you.

Senator BRITT [presiding]. This is the first time, Number 99 out of 100.

[Laughter.]

Senator BRITT. It's going to take quite some time before I get to do something like that again. Thank you.

Mr. CONNOR. Senator, I'll just say I was a staff person in the Senate when I think Barack Obama was 99th.

Senator BRITT. Okay. Well, there you go, there you go.

Mr. CONNOR. I'm absolutely committed to relooking at the guidance. I think there's two questions. The beneficial use of dredged material, dredged material management is that within the definition of expanded uses under the statute, and then I think my predecessor, we might have some guidance out there that might be causing issues.

So I will go back and look at that because, quite frankly, one of the most impressive aspects of last week's tour was the—and General Spellmon gets all the credit for setting a high goal for bene-

ficially using dredged material and that has a lot of advantages and environmental benefits and I saw a lot of that last week.

We want to incentivize that. We don't want to minimize that. So I will go back and look at that guidance.

Senator BRITT. No, and we're really proud. That's something that we've tried to do and, you know, I'm sure you saw it there with the creation of the island and creating the ecosystems, you know, allowing thousands of birds to nest and including the Brown Pelican there that was removed from the Federal Endangered Species List in 2009.

So certainly want to make sure that we're being responsible and so I appreciate you leaning into that, as well.

And on that note, you know, I'm going to raise this issue. I know that permitting approvals do take time and that you and your staff continue to work with the Port of Mobile just to make sure that we're doing what we need to do to get this done on time and meeting the needs of the community.

General SPELLMON. Ma'am, I'll just say we completely acknowledge the space requirements there. So this is a 1,200 acre beneficial use site. We are working with EPA (Environmental Protection Agency) and the port on the permitting requirements.

Ma'am, I don't see any issues. We'll get this done.

Senator BRITT. Okay. Thank you so much.

I'll tell you what. That concludes my questions. We have General Hubbard waiting and I'm not used to even getting through a portion of my questions. So this is—you know, who knew, but would love to talk to you. I know that you're responsible not only for Civil Works but Military Construction, as we mentioned earlier.

Can you share with the committee any challenges that you're having in this space, anything that you believe that needs to be brought to our attention?

Mr. CONNOR. Ma'am, the Number 1 challenge and the Number 1 opportunity that we have in the Corps of Engineers today is our workload. If you go back to the early '90s through 2000, we had about a \$15 billion program that was across Civil Works, Military Construction, and all the other government agencies that we do work for and today's not \$15 billion. If you add that all up, it's about \$92 billion and we largely have the same size workforce, slightly larger.

Last year we hired 5,000 new engineers on to our team and we lost 4,000 to retirements and transfers. So it's certainly the Number 1 challenge but it's also an opportunity in that we're looking for more innovative ways to get after our projects. We're working more with industry, working more with architect-engineer firms in our designs, and we're having to break a little bit of internal culture, but I think it's all healthy.

Senator BRITT. Yes, Mr. Secretary, thank you.

General SPELLMON. If I could just add on to that, I think, you know, in addition to the issues and the workload and the ways the organization is trying to adjust and using our assets across the entire enterprise, those are incredibly important.

I think also one of the challenges that we face is not just the magnitude of the costs and cost increases and the personnel to carry out the work, but, quite frankly, we have some very well-in-

tended rules that we operate under with respect to fully funding projects or investigations, such as through the bipartisan Infrastructure Law, such as BBA-2018, and, quite frankly, we've had significant cost increases not just in construction activity but even in the investigations as the work gets more complex.

So I think, you know, some flexibility or just recognition and Congress has already done this. We had some restrictions of having to finish projects with BBA-2018 funding. We got some relief in the last Omnibus Appropriations Bill. So we were able to supplement those BBA-2018 funds with additional resources from the bipartisan Infrastructure Law and move forward with the critical project on California's shorelines.

So I would just say I think that's a dialogue that we need to continue to have with the professional staff and with Senators about where we're not able to complete work, which just gets us high centered and that's in nobody's best interests, whether it's investigations or construction activity.

Senator BRITT. Absolutely. And, General, can I dig down? So you had 4,000 people retire.

Mr. CONNOR. Ma'am, it was an arrangement of retirements, folks transferring to private construction work, folks going to work for other Federal agencies, so a large transition over the past year and a half in our workforce.

Senator BRITT. And so what all does the plan entail to recruit and to kind of fill that gap?

Mr. CONNOR. Yes, ma'am. So we have really energized not only our recruiting campaign, I mean, we were advertising in Time Square here just a few months ago, but also our retention campaigns within the—I mean, this is a unique agency within the Federal Government. Seldom are our projects alike. They're very, very complicated and that's how we sell when we recruit. This is rewarding work that we're doing on behalf of the Nation.

Senator BRITT. Excellent, excellent. Thank you.

General SPELLMON. Can I just say I'm attending Infrastructure Task Force meeting later on after this hearing and so I was just getting the read-out on some of these statistics with respect to engineers in particular.

So I think we anticipate, you know, based on the levels of resources we have normally and even increasing that we would, you know, have an 8 percent increase on the number of engineers that we need and I think even anticipating that, the statistic that I was just given earlier today was that we're still going to be something across not just government but the private sector something like 40,000 engineers short of where we need to be to carry out the anticipated level of infrastructure design/construction activity over the next several years and we're graduating less engineers and so we're losing ground in that way.

So, in addition to hiring and I think we're competing well, it's the retirements and the exit that a lot of folks are making. We need to somehow get the younger generation more interested, more willing to enter into the engineering field and profession because we need them.

Senator BRITT. Yes, absolutely. We'll do a little recruitment tool then and tell people we need more engineers and certainly what an incredible way to serve our country.

You mentioned Selma earlier in your remarks. Can you tell me a little bit about what is going on there and what the plans are?

Mr. CONNOR. Yes, ma'am. The good news is we're fully funded for preliminary engineering and design and we'll have our designs complete in October of this year and we'll use that design, ma'am, to fully inform what our first size of the first construction contract.

I've had the opportunity to visit this project. Everybody on this project is excited about this work ahead. The next task is to wrap up the designs and then we look forward to moving out on construction.

Senator BRITT. Excellent. As you know, Selma is not only an important place in Alabama but obviously a historic marker for our Nation and so certainly appreciate your attention to that project.

And you also have responsibilities to manage recreational areas. Am I right in saying that?

Mr. CONNOR. Yes, ma'am. Hundreds of them across the country.

Senator BRITT. Yes. So tell me, I know a lot of those are subject to damage and other things. Can you share with the committee how you prioritize those fundings, kind of across your business line, particularly within that area?

Mr. CONNOR. Yes, ma'am. Very challenging mission and we have some great rangers in the Army Corps of Engineers that get a lot of mileage out of the dollars that we appropriate—we give them, and certainly it's just always very, very competitive.

When I give my recommendations to the Secretary every fall for the next year's budget, life safety always goes to the top and then we have legal mandates, national security requirements that lead into our economic and environmental returns, and we certainly always want to finish what we start and that's very, very challenging for our recreation sites.

We do the best we can. We try to get the maximum use out of every dollar that we are given. It is challenging, but the public, the amount of public that comes out to our recreation sites along the water just seems to grow every year and it's a program that we're extremely proud of.

Senator BRITT. Excellent. Well, I think this was part of being new. I think this was a test to see if I could finish this out.

I wanted to thank you all for coming today. This will end our hearing. I'd like to thank the witnesses and my colleagues for participating in today's hearing.

I look forward to working together on this year's appropriations bill to ensure that we are providing the Army Corps and the Bureau the resources that they need.

ADDITIONAL COMMITTEE QUESTIONS

I will keep the hearing record open for 1 week. Committee members who would like to submit written questions for the record should do so by 5 p.m. Wednesday, May 3.

We appreciate the Army Corps and the Bureau for responding to them in a reasonable time period.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO HON. MICHAEL L. CONNOR

QUESTIONS SUBMITTED BY SENATOR LISA MURKOWSKI

Question. Port of Nome: The Port of Nome project is a strategic asset for national security, search and rescue, maritime commerce and environmental protection. In recent weeks, we have heard senior military leaders testify before Congress as to the need for a deep draft arctic port. Yet, this project is a civil works project and I worked to deliver the \$250mm from the ILJA to fund the first phase of the project and good progress has been made on that. Meanwhile, section 8312 of WRDA 2022 amended the cost share to change the project 90% Federal and 10% non-Federal sponsor.

Mr. Connor and General Spellmon, will the U.S. Army Corps of Engineers fully fund the completion of the project through its construction budget and workplan from FY25 on?

Answer. The Administration is committed to considering this project for funding, along with other programs, projects, and activities across the Nation that are competing for the available Federal resources. The Corps is committed to completing the Port of Nome Modification project.

Question. Considering the cost share modification, I expect the administration's budget requests and construction work plan funding to account for this change with no delay in budgetary resources. Will the Administration honor the WRDA provision for budgeting purposes?

Answer. Budgeting for this project will be in accordance with the new cost share under the amended authority.

Question. Congressionally Directed Spending. Mr. Connor, last year I was able to secure Congressionally Directed Spending for a couple of worthy projects in Alaska that had been languishing in the Civil Works queue for years. Obviously, this was much appreciated and a good example why this CDS process is good for states, like Alaska, whose projects do not compete well in the overall Corps budget process. We were excited to see them in the FY23 Omnibus, only to be surprised to find these projects were not included in the President's FY24 Budget Request. If there is no money in the President's Budget request, I do not see how these projects can be continued in the FY24 work plan. My expectation, and I believe the expectation from my colleagues in Congress, was that the Corps would pick-up these projects once they received a CDS.

Whose decision was it to abandon these CDS requests in the Budget Request and why were they not included in the President's Budget Request?

Answer. The FY2024 Budget was completed before the FY2023 appropriations were passed; therefore, CDS projects newly funded in FY2023 were not considered for funding in the FY2024 Budget but will be considered for future budgets and potential work plans.

Question. I think we can all appreciate the substantial risks intermittent funding poses to projects especially in my state. Do you intend on funding my CDS requests to completion?

Answer. Enacted CDS projects will be considered for funding in future President's Budget request and potential work plans, along with all other worthwhile programs, projects, and activities across the Nation in competition for limited Federal resources.

QUESTIONS SUBMITTED TO LIEUTENANT GENERAL SCOTT A. SPELLMON

QUESTIONS SUBMITTED BY SENATOR CHRISTOPHER A. COONS

Question. As expressed in the Federal statute that formed the Delaware River Basin Commission (DRBC), Public Law 87-328, the Commission's five members are responsible for financially supporting DRBC's operations. The United States share of this signatory member funding is \$715,000, representing 20 percent of member contributions. This percentage is based upon an equitable agreement among the Commission's four member states and the United States, and the Corps of Engineers is the Federal member.

Section 5019 of the Water Resources Development Act of 2007 as amended (121 Stat. 1201, 128 Stat. 1306) reads:

“The Secretary shall allocate funds to the Susquehanna River Basin Commission, the Delaware River Basin Commission, and the Interstate Commission on the Potomac River Basin to fulfill the equitable funding requirements of the respective interstate compacts.”

As recently as the FY2023 appropriations bills, Congress included the following phrase in the Joint Explanatory Statement:

“The Congress has made clear its intent that the Susquehanna, Delaware, and Potomac River Basin Commissions be supported, and the Corps is encouraged to budget accordingly in future budget submissions.”

Since this payment is a statutory obligation, why does the President’s Budget not include funding for the DRBC, or any other river basin commission or interstate compact where the Corps is a signatory?

Answer. Consistent with statutory requirements, the Corps has requested funds for the River Basin Commissions through its yearly budgetary process as part of the General Expenses account for participation in the commission meetings. As part of the President’s budget development process, the River Basin Commissions are considered for funding, along with many other worthwhile programs, projects, and activities across the Nation in competition for limited Federal resources.

Question. Since the Corps of Engineers has not included funds for the River Basin Commissions in almost 30 years, in complying with the statute, have you or any of your predecessors filed the report required by section 5019? If not, why not?

Answer. The Administration budgets for the Corps’ participation in the Commission meetings in the General Expenses account.

QUESTIONS SUBMITTED BY SENATOR LISA MURKOWSKI

Question. Tribal Consultations and Craig Harbor: General Spellmon, my understanding is the U.S. Army Corps of Engineers has adopted Tribal Policy Principles to guide your work. These principles are included on your website and characterized as part of your mission. I want to focus on the principles that deal with tribal consultation specifically. The Corps has committed to both pre-consultation which requires the U.S. Army Corps of Engineers to involve Tribes collaboratively, before and throughout decisionmaking, to ensure the timely exchange of information, the consideration of disparate viewpoints, and the utilization of fair and impartial dispute resolution processes. The Corps is also committed to government-to-government consultation to fulfill its obligations to consider the potential effects of Corp programs on natural and cultural resources, and Section 810 of the ANILCA outlines the procedures for all Federal agencies to evaluate impacts on subsistence uses and needs, and means to reduce or eliminate such impacts (16 USC 3120). I am concerned that the Corps does not appear to have followed these principles regarding the Craig Harbor project in Southeast Alaska to the detriment of the community there and the Craig Tribal Association ending the project for the near future after millions of dollars of Federal, state and city money was spent. In this specific case, the feasibility report was completed in 2015 and did not include tribal consultation. Six years later tribal consultation was attempted retroactively in the context of the Validation Report, which I think you will agree is not the ideal context for conducting tribal consultation on a project.

Is there a process or procedure for how to conduct tribal consultations for projects that are midstream in the Army Corps process?

Answer. Tribal consultation under Section 106 occurred throughout the feasibility phase of the project. The Alaska District consulted with Craig Tribal Association four times under Section 106 consultation efforts and three times under informal, in person nation-to-nation consultation efforts between 2012—2015. Consultation under Section 106 was reinitiated in 2020, during the start of the pre-construction engineering and design (PED) phase. An in-person meeting to continue negotiations on the Section 106 Memorandum of Agreement was held in 2020 and two additional Section 106 consultation efforts led to the formal request for nation-to-nation consultation in 2021.

Question. Can you—should you—proceed with a project, at whatever phase, if consultation obligations have not been fulfilled or if all parties have not responded to requests for participation.

Answer. Pursuant to Section 106 of the National Historic Preservation Act (Section 106), the Corps is legally required to consult with federally recognized Tribes at certain phases of all Corps activities; initial project phases cannot be concluded without fulfilling this required Tribal consultation. It would be inconsistent with Federal statutory requirements for a Corps project to proceed without consultation

or without robust evidence of attempts to provide Tribes the opportunity to respond to requests for participation. In this instance, Tribal consultation under Section 106 occurred four times during the feasibility phase of the project and four times during the Pre-construction Engineering and Design phase of the project.

Question. Is there a requirement for a Memorandum of Agreement to be signed before proceeding? Would it be prudent to make that a Corps policy if it isn't already?

Answer. Corps policy is to follow all applicable legal requirements under Section 106 of the National Historic Preservation Act (NHPA). A Memorandum of Agreement (MOA) is required to resolve adverse effects to historic properties as the project was designed at the time of the Pre-construction Engineering and Design phase and Validation Study. In accordance with the regulations for the Protection of Historic Properties at 36 C.F.R. Part 800, the MOA for this project needs to be executed prior to non-planning actions. If the location, size, scope, or other factors in the project design change, consultation under Section 106 of the NHPA would be re-initiated and the Corps' assessment of effects to historic properties reevaluated to determine whether an MOA is required to resolve adverse effects to historic properties.

Question. General Spellmon, a report from Congressional Research Services in 2021 stated, "An ongoing challenge for USACE is that numerous authorized studies and construction projects remain unfunded. USACE has an estimated \$109 billion total construction backlog." I heard about that, and as part of the Bipartisan Infrastructure Framework my colleagues and I worked on clearing a small portion of that backlog—we provided \$17.1 billion of supplemental appropriations. Another piece that may help clear that backlog would be to address some of these older reports and determine which are relevant.

How many Chiefs Reports are over 10 years old? 50? 100 years old?

Answer. The following is a list of projects authorized in Water Resource Development Acts based on recommendations from Chief's Reports and does not include projects that may have been authorized elsewhere. Of note, this list was developed based on resources and information available in a centralized manner; a more comprehensive response would require additional time and resources to conduct.

WRDA	Chief's Reports Authorized
2022	25
2020	46
2018	12
2016	30
2014	34
2007	46
2000	2(28 ¹)
1999	30 (15 ²)
1996	31(13 ³)

¹ 28 projects were authorized subject to completion of a Chief's Report by December 31, 2000.

² 15 projects were authorized subject to completion of a Chief's Report by December 31, 1999.

³ 13 projects were authorized subject to completion of a Chief's Report by December 31, 1996.

Question. At what point do they become obsolete?

Answer. Projects that have been authorized by Congress remain authorized until they are deauthorized by law, such as in accordance with the periodic deauthorization provisions found in Water Resource Development Acts.

Question. Is there a process for reviewing these Chiefs Reports and removing them from the queue once they no longer reflect the need of that community?

Answer. For those projects that have been authorized but have not been constructed, Water Resources Development Acts provide direction for the Secretary to undertake a process that may result in project deauthorizations. Criteria found in WRDA limited the projects subject to this deauthorization process to projects that were authorized by Congress prior to 2007 and have not had any obligation of funding for the past ten fiscal years. The number of authorized projects that fit the criteria is very small.

QUESTIONS SUBMITTED BY SENATOR JOHN HOEVEN

Question. The Army Corps of Engineers is conducting an environmental impact statement (EIS) for the Dakota Access Pipeline (DAPL) and the Line 5 Tunnel Project, two energy projects that are vital to our nation's economic and national se-

curity. For DAPL, the Corps is responsible for reviewing a 0.21-mile crossing of the Missouri River. For the Line 5 Tunnel, the Corps is reviewing a 4.5-mile tunnel under the Straits of Mackinac. The Corps currently estimates that it will take over 4 years to complete an EIS for each project. Why is the Army Corps unable to meet the Biden administration's own goal of 2 years for completing an EIS for DAPL and the Line 5 Tunnel?

Answer. Line 5 requires a Department of Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. Following the end of the scoping period, the Corps established a detailed schedule with the steps needed for information gathering and review. These include the collection of information associated with compliance with Section 106 of the National Historic Preservation Act. The updated schedule includes more accurate review and comment periods on relevant documents for cooperating agencies, federally recognized Tribes, and Section 106 consulting parties. The updated schedule also provides for robust Tribal consultation as outlined in Presidential directives and in the memo from the Office of the Assistant Secretary of the Army for Civil Works. The updated schedule delivers an open, transparent and public process that objectively evaluates alternatives to render a decision within the scope of the Corps' authorities.

DAPL has requested the Corps to issue an easement under the Mineral Leasing Act to cross Corps-managed Federal land at Lake Oahe. Tribal engagement and consultation regarding the DAPL crossing of Lake Oahe is critical to fulfilling the Corps' NEPA requirements, including coordinating with various Tribes and the State of North Dakota. The Corps extended the schedule to specifically ensure that Tribal concerns were heard, understood, and addressed in the Draft Environmental Impact Statement.

Question. The U.S. Army Corps' mission is to, "deliver vital engineering solutions, in collaboration with our partners, to secure our Nation, energize our economy, and reduce disaster risk." Do you agree that an efficient and reliable permitting process is needed to support this mission? Given that multiple projects under review by the agency are impacted by delays that drive up project costs, how can we make the permitting process more predictable and reduce the risk of litigation, while maintaining reasonable environmental safeguards?

Answer. Yes, the Corps agrees that an efficient and reliable permitting process is needed to support Corps missions. The Section 408 program verifies alterations to authorized Corps civil works projects will not be injurious to the public interest and will not impair the usefulness of the project. In September 2018, Engineer Circular 1165-2-220 was issued, which provides clarification and a more formal process, including delegation of all decisions from Headquarters, elimination of the 60% minimum design requirement so information requirements can be scaled to the scope of the request, and a 30-day Completeness Review and 90-Day Technical review and decision timeline for each 408 request. The mission of the Regulatory Program is to protect the Nation's aquatic resources and navigation capacity while allowing reasonable development through fair and balanced decisions. The Program's "end state" is to issue balanced, timely, and transparent regulatory decisions, rooted in sound science and compliant with applicable laws. The Bipartisan Infrastructure Law allocated an additional \$160 million to the national regulatory program to assist in eliminating the backlog of old actions, re-energize initiatives that will ultimately help streamline the processes, become more transparent, technologically advanced, public focused, and timelier in making final permit decisions.

QUESTIONS SUBMITTED BY SENATOR BILL HAGERTY

Question. Last time you were before this Subcommittee, we discussed border wall construction policy and contracts. At the time, you told me there were roughly 20 vendors with which the Corps of Engineers was negotiating with to terminate contracts related to a misguided executive order issued on January 20, 2021. I have heard from small businesses in Tennessee who have been affected by often contradicting directives—between USACE directed pauses and termination from the Corps. This company tells me that to date, no action has been taken on the Termination for Convenience Settlement Proposal. The Army Corps of Engineers failure has had real consequences and inflicted real pain on small businesses including those in Tennessee.

Has USACE paid any contractor for "standby time" ordered under Section 1 of the Proclamation, which required a "Pause in Construction and Obligation of Funds" at the Border Wall. If the USG did issue a standby directive and contractors have not been paid for complying with the USACE directive, what authority does the USACE have to withhold payments?

Answer. The agency is not withholding payments. We are evaluating requests, to include properly submitted requests for costs associated with “standby time,” following the process prescribed in the Federal Acquisition Regulation (FAR). As part of the process, requests must be submitted in compliance with the FAR and are audited by the Defense Contract Audit Agency (DCAA) before the contracting officer can make a determination regarding payment to prime contractors. The Corps has made payments to some contractors for standby costs in accordance with the process described above.

Question. Are there funds included in the USACE appropriations funding requests, specifically intended to make Contractors whole for contract ‘pauses’ and subsequent terminations in 2021 for work performed at the Border Wall?

Answer. There are no Corps-specific appropriations requests to execute the southern border barrier program. The border barrier program is funded with Department of Homeland Security appropriations, Army Operations and Maintenance funds (through 10 USC 284), and Military Construction funds (through 10 USC 2808). Under each of these lines of appropriation, there are obligated, but unexpended funds that may be utilized to pay allowable, allocable, and reasonable suspension and termination costs.

Question. What are the funding mechanisms available to ensure timely and prompt payment of outstanding monies due as a result of the USACE’s contract ‘pauses’ and subsequent termination of Contracts under the Proclamation?

Answer. Prime contractors have an obligation to submit complete and fully supported termination and equitable adjustment requests in a timely manner in accordance with the FAR. Simultaneously, Federal agencies have an obligation to evaluate such requests with assistance from DCAA as needed. Incomplete or unsupported requests can delay evaluation. Once the Corps determines that a contractor is entitled to compensation, the contractor submits a formal request for payment, which would be subject to the Prompt Payment Act. All parties are expected to act in good faith to resolve equitable adjustment requests and termination settlement proposals.

Question. Why has the Government failed to respond (pay, reject, etc.) to standby work invoices and or respond to numerous formal requests for Information concerning the status of these invoices?

Answer. The Corps is evaluating termination settlement proposals, including any costs asserted in connection with “standby time,” following the process prescribed in the FAR. As part of the evaluation process, requests submitted in compliance with the FAR are audited by DCAA before the contracting officer can make a determination regarding payment to prime contractors. USACE strives to respond in a prompt manner to all prime contractor inquiries. All communication regarding subcontractor information requests and compensation must be with our prime contractors.

Question. Why did USACE Fort Worth District mandate that all Contractors stop work and remain in standby mode on 20 January 2021, and also order them “Not to demobilize,” yet USACE refused to provide a new contract line item level (CLIN) or line item authorizing payment for the unilateral orders for this “new” standby mode, whereby all contractors would have been able to invoice and get paid for this work?

Answer. Pursuant to the Presidential Proclamation dated 20 January 2021, USACE temporarily suspended all border barrier contracts and paused immediately the obligation of funds related to construction of the southern border wall. The suspension notices covered demobilization activities to prevent or minimize further obligation of funds.

Contractors seeking “standby” costs would do so by making a request under the suspension of work clause asserting an unreasonable period of suspension, or, if appropriate, as part of a termination settlement proposal. Establishing a new CLIN to reimburse contractors for valid suspension costs is not the appropriate mechanism to address this matter.

Question. Does the USACE have sufficient funding to cover all costs associated with Executive Order 13767?

Answer. The precise costs of suspension and termination of these contracts will be determined via negotiations with each prime contractor. As described above, the termination process includes a submission of a complete and adequate termination settlement proposal by each prime contractor, audit by DCAA, evaluation by the Corps, and culminates with negotiation of a fair and reasonable settlement amount. It is only when this process is completed for each contract that the Corps can determine whether the funds currently available are sufficient to cover all costs associated with the suspension and termination of these contracts.

How does the USACE, plan to keep this committee informed on its progress to resolve these payment issues to small businesses negatively impacted by these contradicting directives?

Answer. Upon request, the Corps can inform the committee as termination settlement negotiations for border barrier contractors are finalized and any required contract modifications executed. Any payments made by the Corps will be to prime contractors. Please note that most small businesses working on USACE border barrier contracts are subcontractors.

QUESTIONS SUBMITTED BY SENATOR SUSAN M. COLLINS

Question. Proposed Change to U.S. Army Corps of Engineers Maine General Permit. I have heard concerns from constituents in Maine about changes proposed by the New England District (NAE) to the Maine General Permit. The NAE uses state general permits in each New England state rather than the nationwide regulatory permits. NAE is proposing updates to the Mitigation Standard Operating Procedures in a manner that would significantly affect the Maine General Permit, which was last updated in 2020. Under the changes being developed, the threshold at which compensatory mitigation for adverse impacts to aquatic resources is triggered in Maine would be reduced from 15,000 square feet to 5,000 square feet. My constituents are concerned about the financial burden of these changes on many Maine residents and small businesses. According to one licensed site evaluator in Maine, if a home builder in Cumberland County wants to construct a driveway to his property that has a 5,200 square foot wetland impact, the home builder would owe the Corps \$75 for the permit fee. Under the changes being developed, that same home builder would be faced with \$30,576 in wetland compensation fees in addition to the \$75 permit fee. NAE has told local stakeholders that this change is necessary because approximately 110 acres of wetlands, representing 0.00048% of the land area in Maine, have been lost over the last 5 years without compensatory mitigation.

While conserving our wetlands is important, is the Corps aware of the substantial financial impacts this change to the mitigation threshold would have on Maine residents and businesses?

Answer. The New England District has considered the regulated public's needs in its determination to modify its mitigation policy. The Corps' regulatory mission requires that the Corps balance reasonable development while protecting aquatic resources. The change to establish the compensatory mitigation requirement for impacts greater than 5,000 aligns with neighboring states and the Corps' national program. This consistency brings predictability, which has tremendous public service value. The Corps' mitigation policy does not preclude the need to consider mitigation requirements on a case-by-case basis. The Corps will make every effort to ensure that we work closely with the public during this transition.

The fee referenced by the site evaluator is for the purchase of mitigation credits through Maine's compensatory mitigation provider, Maine Natural Resource Conservation Program (MNRCP). The Corps' affiliation with MNRCP is to ensure that the compensatory mitigation projects that are constructed as a result of the sale of credits are consistent with the 2008 Mitigation Rule. Applicants sometimes prefer this mitigation method as it is quick and shifts the responsibility to provide compensatory mitigation to MNRCP. However, there is no requirement from the Corps to utilize this program.

Permit applicants can propose their own compensatory mitigation for impacts to aquatic resources. This can be fulfilled by restoring, enhancing, creating, or preserving wetlands onsite or offsite. Compensatory mitigation is only an option if unavoidable adverse impacts remain after all appropriate and practicable avoidance and minimization has been achieved.

Question. Why is every state in New England required to have the same permit when the states have such vastly different financial, geographical, and natural resources?

Answer. Every New England state operates under a different set of General Permits that considers the economic, geographic, and resource differences across the states, yet the programs of each state need to operate within the same framework within the New England district. General Permits can be tailored to a specific state to ensure the process is streamlined and reduces duplication with the State agencies. General Permits recognize the role that states play in addressing certain components of the Corps regulatory review, including compliance with laws governing water quality certification and coastal zone management. The General Permits are available for impacts that will not result in more than minimal individual and cumulative impacts to the aquatic environment.

The New England District's accountability for consistency and transparency is not limited to the six states in its area of responsibility, but also with the other 41 Corps districts and nine divisions located throughout the United States and associated territories. In 2007, the Corps published the Nationwide Permits (NWPs), establishing that compensatory mitigation would be required when adverse impacts exceed 0.10 acre (4,356 SF) to ensure that no more than minimal individual and cumulative impacts occur. This standard remains in current NWPs. The NWPs mitigation threshold allows for reasonable development and provides a tool for avoidance, minimization, and compensation. The revision of the district's mitigation standard operating procedures would allow the district to be more consistent with national policy and ensure the continued use of all New England district General Permits.

Question. Camp Ellis Beach. Section 8342 of the Water Resources Development Act of 2022, enacted in December 2022, increased the maximum amount of Federal funds that may be expended for the Camp Ellis Continuing Authorities Program project in Saco, Maine. Work cannot begin on this project until a Project Partnership Agreement is signed.

What is the timeline for signing the Project Partnership Agreement?

Answer. The Corps is expeditiously developing a Project Partnership Agreement (PPA). Upon approval, the Corps will provide it to the City of Saco for review and execution.

Question. Can you commit to prioritizing this project?

Answer. Yes.

SUBCOMMITTEE RECESS

Senator BRITT. We stand adjourned. Thank you.

[Whereupon, at 3:04 p.m., Wednesday, April 26, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR FISCAL YEAR 2024

WEDNESDAY, MAY 3, 2023

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:03 a.m. in room 192, Dirksen Senate Office Building, Hon. Patty Murray (chair) presiding.

Present: Senators Murray, Tester, Durbin, Shaheen, Merkley, Coons, Baldwin, Heinrich, Kennedy, McConnell, Murkowski, Graham, Hoeven, Hyde-Smith, Hagerty, and Britt.

DEPARTMENT OF ENERGY

OFFICE OF THE SECRETARY

STATEMENT OF HON. DAVID TURK, DEPUTY SECRETARY

ACCOMPANIED BY HON. JILL HRUBY, UNDER SECRETARY FOR NUCLEAR SECURITY, ADMINISTRATOR OF THE NATIONAL NUCLEAR SECURITY ADMINISTRATION

OPENING STATEMENT OF SENATOR PATTY MURRAY

Senator MURRAY. The Hearing of the Senate Appropriations Subcommittee on Energy and Water Development will, please, come to order.

We are here today to talk about President Biden's fiscal year 2024 budget request for the Department of Energy, including the National Nuclear Security Administration.

As Senator Feinstein, of course, continues her recovery, I want to thank Ranking Member Kennedy for being flexible and working with me to keep these hearings rolling, and keep our appropriations process on track.

For our country to keep families safe and stay competitive, and my colleagues have heard me say this many times now, ". . . we have to work in a timely, bipartisan way, and live up to our responsibility here to provide the funding our Nations needs."

That is why it is so important that we are continuing to hold these hearings and return to regular order for the first time in years. After all, our competitors, like China, are not waiting for us to work out our differences and fund our government, and they certainly aren't considering trashing their Nation's credit, or cutting the investments that keep them competitive, like some House Republicans are suggesting we do.

Our adversaries are doing everything they can to get ahead. So, if we are going to continue to lead on the world stage, we have to lock arms, work together, and make sure our funding keeps pace at this critical moment. And if we want to stay ahead we can't just focus on defense spending, we have to invest in the many other programs that keep our country strong, and safe, and competitive.

Today's hearing is a prime example, because the work happening across the Department of Energy has tremendous implications for our national security and our global competitiveness. The Department of Energy supports critical programs to keep our energy supplies cheap, clean, and abundant so people can go about their day, and everyone, from mom and pop shops, to large corporations, can do their business.

DOE (Department of Energy) keeps our energy grid secure, it reduces our dependence on foreign energy, it drives down energy prices, and a lot more. And the Department is leading the way on scientific discoveries, supporting cutting-edge research, like the research happening at the Pacific Northwest National Lab in my Home State of Washington. Advancements within our national lab system, like those we regularly see at PNNL (Pacific Northwest National Lab), send a message to the world that our Nation is still a global leader in scientific discovery.

It is also a reminder to us all why we must continue investing in research. We cannot seed ground and let countries like China get ahead of us and capitalize on the defining discoveries of the future. As long as those discoveries are happening in America, then the jobs that follow should stay in America too. And I am sure we all agree on that.

The Department has a key role in this, as it does in helping our country lead in the green energy space. The climate crisis is a national security threat, an economic threat, and if we invest in research, in green manufacturing, and bringing those jobs here to our shores, it is also an opportunity to make sure the U.S. remains the energy superpower of the 21st century.

Congress has made promising progress on this in recent legislation, between investments in hydrogen power in the Bipartisan Infrastructure Law, the Inflation Reduction Act's policy to usher in a boom in green manufacturing for batteries, and electric vehicles, and more, and advancements in fundamental scientific research through the CHIPS (Creating Helpful Incentives to Produce Semiconductors) and Science Act authorizations.

But there is more work to be done. And this budget request shows the Biden Administration is committed to making the investments we need to maintain our competitive edge. I am pleased to see President Biden is calling for healthy increases for the Department of Energy, so we can improve our grid, an existing energy infrastructure, develop and deploy new technologies, lower our emissions and tackle the climate crisis, and of course, safely, maintain our nuclear resources.

I am also pleased that yesterday DOE, Washington State Department of Ecology, and EPA (Environmental Protection Agency), announced the conceptual agreement in Hanford Site Holistic Negotiations. I look forward to receiving some detailed briefings regard-

ing the actual terms and revisions, alongside my colleagues in the Washington State Delegation.

To that end, while I am glad to see this budget request includes the largest proposal ever, to see the essential cleanup efforts at Hanford Site in Washington State, I am concerned that at the same time this budget increases nuclear weapons activities by 10 percent, while increasing nuclear nonproliferation and environmental cleanup efforts by less than 1 percent.

These programs are too important to be treated as an afterthought. Just as safely maintaining our Nuclear Weapons Program is a critical responsibility, so are our nonproliferation and legacy nuclear waste cleanup efforts which help keep risks in check.

So, I look forward to discussing with our witnesses, how we make thoughtful choices here, and make sure our nuclear deterrence, energy advancements, and research enterprise, are getting the funds that they need, because the Department of Energy does play an absolutely crucial role in protecting our country, and helping us stay in motion, stay competitive, and stay ahead of competitors, like China, that are close on our heels.

Thank you. And with that, I will turn it over to Ranking Member Kennedy.

STATEMENT OF SENATOR JOHN KENNEDY

Senator KENNEDY. Thank you, Madam “Double” Chair. I agree with just about everything my colleague said, except for the part where she criticized Republicans, but other than that—She did say so. I want to thank all of you for being here. I just wanted to share a few general thoughts with you. In America you can believe what you want, but I am a big believer in free will and responsibility.

A French philosopher of the last century, very famous, tough to read, but if you plow through his works he had a lot to say. Called Jean-Paul Sartre, said, “To be is to act”. He said, “All we are is the sum of actions”. And so, despite what we say, what you do is what you believe, and frankly, everything else is just cottage cheese.

Now, in government, where you spend your money is what you believe. Forget the rhetoric, follow the money. Follow the money. I am a big believer in using—and I think it is the answer to many, not just of the problems of the United States, but our neighbors’ problems across the world, at least in terms of energy. I believe that we should use technology to make all forms of energy more available, cheaper, and cleaner, all forms of energy.

I support green energy, I support nuclear, I support hydroelectric energy, I support geothermal, I support oil and gas, in terms of trying to provide for a cleaner environment I think it is worth pursuing geoengineering.

And I say all of that because I look at your proposed budget, keeping in mind, that what you do is what you believe, and in government, where you spend your money is what you believe. You are proposing that we increase funding for green energy by 38 percent, I support green energy, I think it is going to have to learn how to stand on its own two feet, but I support it. But you only increase funding for fossil energy by 2 percent, and you actually cut nuclear energy funding by 12 percent.

Now, pull up that first slide for me. Here, I will just hold it.

[The information follows:]



Office of
NUCLEAR ENERGY

Office of Nuclear Energy

Nuclear Power is the Most Reliable Energy Source and It's Not Even Close

MARCH 24, 2021



[Office of Nuclear Energy](#) > Nuclear Power is the Most Reliable Energy Source and It's Not Even Close

Nuclear energy is America's work horse.

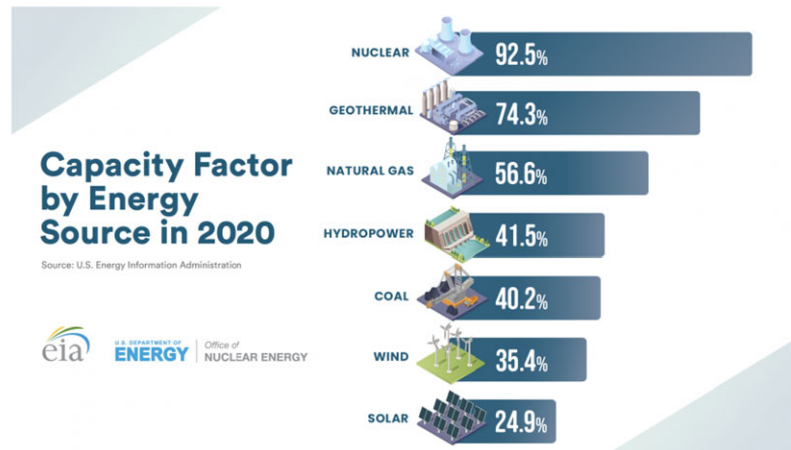
It's been rolling up its sleeves for six decades now to provide constant, reliable, carbon-free power to millions of Americans.

Just how reliable has nuclear energy been?

It has roughly **supplied a fifth of America's power** each year since 1990.

To better understand what makes nuclear so reliable, take a look at the graph below.

Nuclear Has The Highest Capacity Factor



As you can see, nuclear energy has by far the **highest capacity factor** of any other energy source. This basically means nuclear power plants are producing maximum power more than 92% of the time during the year.

That's about **nearly 2 times more** as natural gas and coal units, and almost 3 times or more reliable than wind and solar plants.

Why Are Nuclear Power Plants More Reliable?

Nuclear power plants are typically used more often because they require less maintenance and are designed to operate for longer stretches before refueling (typically every 1.5 or 2 years).

Natural gas and coal capacity factors are generally lower due to routine maintenance and/or refueling at these facilities.

Renewable plants are considered intermittent or variable sources and are mostly limited by a lack of fuel (i.e. wind, sun, or water). As a result, these plants need a backup power source such as large-scale storage (not currently available at grid-scale)—or **they can be paired** with a reliable baseload power like nuclear energy.

Why Does This Matter?

A typical **nuclear reactor produces 1 gigawatt (GW) of electricity**. That doesn't mean you can simply replace it with a 1 gigawatt coal or renewable plant.

Based on the capacity factors above, you would need almost two coal or three to four renewable plants (each of 1 GW size) to generate the same amount of electricity onto the grid.

Suggested Read: [What is Generation Capacity?](#)

*Updated July 2022

Senator KENNEDY. This is from your website, okay, “Nuclear Power is Most Reliable Energy Source and it is Not Even Close”, and that is true, particularly in terms of capacity factor. Okay.

So, how come you are not funding it that way? How come? I mean, these advanced, small, modular nuclear reactors have enormous potential. And if I read, this is part of your website, I would say, wow, the Department agrees. But your proposal for funding falls millions and millions and millions of dollars short.

LNG (Liquefied Natural Gas), LNG, do you know what most countries do when they don't have natural gas, they use coal, they burn wood. We should be encouraging LNG. I am hoping to hear today what you are doing to make—to cut some of the red tape.

But those are my general thoughts. I don't want to end on a negative note. Thank you for being here. I am looking forward to your testimony.

And I am thinking about Senator Feinstein, and Secretary Granholm, if they are listening now—well if they are listening now I would tell them both to get a life, okay—but if they—but I just want them to know that I hope they are feeling better. And I look forward to seeing both of them back soon.

Thank you, Madam Chair.

Senator MURRAY. Thank you very much, Ranking Member Kennedy.

I will now briefly introduce our panel. We have David Turk, Deputy Secretary of the Department of Energy, who is here filling in for Secretary Granholm who, we all hope is feeling better, and Jill Hruby, Under Secretary for Nuclear Security, Administrator of the National Nuclear Security Administration.

We will begin with the witness testimony from Deputy Secretary Turk. You have 5 minutes for your testimony.

SUMMARY STATEMENT OF HON. DAVID TURK

Mr. TURK. Well, Chair Murray, Ranking Member Kennedy, Members of the Committee, I am honored to be with you all today to

discuss the President's fiscal year 2024 budget request for the Department of Energy.

Over the past 2 years, it has been my great privilege, and I really want to underline "privilege", to support Secretary Granholm, to support Administrator Hruby, and all our Department of Energy colleagues on our incredibly, incredibly important missions.

And thank you, Senator Kennedy, for the well wishes. And our Chair as well, for Secretary Granholm. I just spoke with her before this hearing. I think she is actually paying attention to this hearing, just because she is so dedicated to the cause, but she is feeling much better. And I am happy to be here.

Senator KENNEDY. I think there are some Jeopardy reruns on, which would be much more interesting.

Mr. TURK. And we all thank you, all of us at the Department, thank you for your leadership and support, from strengthening our energy security, reshoring our supply chains, catalyzing American innovation through cutting-edge research and development, including in our labs, like PNNL, that Chair Murray knows so well, to maintaining a strong nuclear deterrent. Together, we have taken critical steps to ensure the United States can outmaneuver aggressors, out-compete our rivals, and create new jobs and opportunities for all our people.

The President's budget request for fiscal year 2024 will empower us to drive these endeavors forward, even in the face of emerging and historic challenges.

And I completely agree with you, Chair Murray, on how critical this moment is, right now, in particular.

Vladimir Putin has injected extreme volatility into global markets, and left working people in the United States, and I would say around the world as well, to bear higher energy costs. In response, we are pursuing a strategy of energy security through partnerships and energy diversity. We are aggressively tackling climate change head-on like never before in our country's history, thanks to the historic legislation passed in the last Congress.

Congress, in fact, has made the United States the world's most attractive destination for investment and clean energy. We are backing unprecedented deployment of cost-competitive clean technologies, solar, wind, electric vehicle storage, we are funding demonstration like never before of next-generation dispatchable sources, clean hydrogen, advanced nuclear, and carbon capture.

We are building a more resilient, reliable grid that can integrate these clean solutions, while better weathering disruptions, and cyber attacks, and we are shoring up our supply chains so that no adversaries will be able to threaten our access to energy. And that is all to the benefit of American companies, American communities and American workers.

Over the past 2 years, for example, planned investments in America's battery, solar, and wind supply chains have reached over \$100 billion.

This will support thousands and thousands of new jobs across our country, and it will allow Americans to take pride in purchasing technology stamped, "Made in the USA."

We know that we also need to double down even further on science and innovation. This is not the time to back off our science efforts, it is the time to double down on that part of our portfolio.

In fact, we are proposing the largest ever budget for our Office of Science, including over \$1 billion for fusion research. Our Office of Fossil Energy and Carbon Management is advancing a suite of CCUS (Carbon capture, utilization and storage) technologies, as well as technologies for recovering critical minerals from carbon sources. The more we can improve performance, reduce costs, the faster we can deploy, lowering bills, and improving the lives of our fellow Americans.

This budget also prioritizes DOE's National Security responsibilities. Russia's aggression and China's nuclear expansion have reinforced the essential role of nuclear deterrence.

In response, the President requested an appropriation for NNSA (National Nuclear Security Administration) that supports the simultaneous modernization of our stockpile and our infrastructure. Importantly, the budget will also allow the NNSA to build the Federal workforce needed to meet our increasing mission requirements, a particular priority for Administrator Hruby, appropriate priority, in my judgment.

And the request would deepen activities regarding arms control, nonproliferation, counterterrorism, and the safe use of civil nuclear power.

In addition, this budget also requests over \$8 billion for environmental management. This funding allows us to treat radioactive tank waste, and address contamination issues at Hanford, and across all of our sites.

And as our Chair knows, and just recognized, yesterday we reached a milestone, in announcing a conceptual agreement between us, the EPA (Environmental Protection Agency), and Washington State's Department of Ecology, for how we will manage millions of gallons of tank waste at the Hanford site in a safe, effective, and achievable manner. And thank you, Chair, for all your leadership on this issue, for many, many years.

Lastly, I want to particularly highlight a small but very vital portion of our budget, "departmental administration", this covers a broad range of work critical to our success, including independent data analysis, policy coordination, financial management, general counsel, internal safety and security and cross office coordination, something particularly important in a Department of our size.

While this account amounts to just over 2.8 percent over fiscal year 2024 request, your support here has an outsized benefit on achieving all of our missions.

Let me conclude with another thank you for your past and for your future support for all that the Department of Energy, and our passionate, our dedicated team, have done, and can do further to help our fellow Americans.

Administrator Hruby, and I, look forward to all of your questions.

[The statement follows:]

PREPARED STATEMENT OF DAVID M. TURK

Chair Murray, Ranking Member Kennedy, and Members of the Committee, it is an honor to appear before you today to discuss the President's Fiscal Year (FY) 2024 Budget request for the Department of Energy ("the Department" or "DOE").

Serving the American people as the Deputy Secretary of Energy, I am entrusted with the awesome responsibility to lead a highly talented DOE workforce. I am continuously amazed by their steadfast dedication to our mission and the innovative solutions they bring to some of our nation's most pressing problems. As a result of their tireless efforts, the Department has made significant strides in ensuring America's security and prosperity by addressing our energy, environmental, and nuclear security challenges through transformative science and technology solutions.

Together, we have advanced the energy, economic, and national security of the United States. We are cementing America's place as a trailblazer in the clean energy economy of the future and a leader in the fight against the climate crisis. The scientists and engineers at our National Laboratories, the crown jewels of the nation's research and innovation ecosystem, are paving the way for major scientific breakthroughs that will have an immeasurable impact on the world we live in. Through funding opportunities and in collaboration with States, Tribal nations, institutions of higher education, and local governments around the country, we are helping to create thousands of good-paying jobs in fields that are critical to the success of the American economy.

The National Nuclear Security Administration (NNSA) does extraordinary work to maintain a safe, secure, reliable, and effective nuclear deterrent, reduce global nuclear threats, and provide our naval fleet with militarily effective nuclear propulsion. It has undertaken a needed modernization of our nuclear arsenal and the infrastructure used for production and science.

These new capabilities will position us to execute our challenging missions well into the future. Working closely with allies and partners, the International Atomic Energy Agency (IAEA), and the interagency, NNSA has provided significant support to reduce nuclear risks to Ukraine and the surrounding region since the beginning of Russia's further invasion of Ukraine over 1 year ago.

The Department is committed to advancing this Administration's energy, climate, and nuclear security and nonproliferation goals. I want to thank Congress for the ongoing, bipartisan support for the Department of Energy. The Secretary and I look forward to working closely with the Committee as you consider the FY 2024 Budget for DOE.

BUDGET TOPLINE

DOE's FY 2024 Budget Request is \$51.99 billion, an increase of \$6 billion (13.6 percent) over the FY 2023 enacted level. The Budget addresses some of the critical opportunities we face, making historic investments in cutting-edge research at National Laboratories, strengthening the Nation's nuclear security enterprise, creating jobs, reducing health and environmental hazards for at-risk communities, and strengthening the cybersecurity and resilience of the energy sector, including advancing critical climate goals. This is urgent work DOE is uniquely prepared to continue.

MAKING HISTORIC INVESTMENTS IN CUTTING-EDGE RESEARCH AT NATIONAL LABORATORIES AND UNIVERSITIES

Within the historic investment of \$23.8 billion for NNSA, funding builds on cutting edge science for NNSA's laboratories to contribute beyond the enduring nuclear missions. For example, the FY 2024 Budget Request includes funding to recapitalize radiation and major environmental test facilities at Sandia National Laboratories used to design and qualify Non-Nuclear Capabilities; and prioritizes the High Explosives Science and Engineering facility at Pantex, including capital equipment purchases, construction, and transition to operate.

The FY 2024 Budget Request will also continue funding maturation of next-generation simulation and computing technologies. Additionally, El Capitan, the first exascale computer for national security, is expected to come online at Lawrence Livermore National Laboratory this year. At over two exaflops it will, for a time, be the world's most powerful supercomputer.

The Budget also provides \$8.8 billion for the Office of Science, advancing toward the authorized level in the CHIPS and Science Act to support cutting-edge research at the DOE National Laboratories and the Department's university partners, and to build and operate world-class scientific user facilities.

The Office of Science is uniquely positioned within the Federal R&D structure to capitalize on these investments today to enhance our nation's innovation capabilities and expand to harness its full research potential from this baseline. This level of funding would support critical advancements in emerging technologies like Quantum Information Science, Artificial Intelligence, and the potential of nuclear fusion. These are all promising game changing technologies for which the National Labs already have strong programs and user facilities.

Within funding for Science, the Budget provides: over \$1 billion to achieve fusion on the decadal timescale; provides new computing insight through quantum information science and artificial intelligence that addresses scientific and environmental challenges; expands innovation in the microelectronics ecosystem; leverages data, analytics, and computational infrastructure to strengthen and support U.S. bio-defense and pandemic preparedness strategies and plans; furthers the Nation's understanding of climate change; and positions the United States to meet the demand for isotopes.

Finally, the Budget proposes \$35 million in the Office of Energy Efficiency and Renewable Energy to initiate planning, outreach, and proposal solicitation for a new national laboratory at a Historically Black College and University, Tribal College and University, or Minority Serving Institution. This 18th national lab is expected to focus on a just and equitable transition for all communities and advancing diversity in the STEM workforce; the lab's expected work will be relevant to EERE's mission given its long history of supporting place-based analytical work, research and development, and community engagement and investment in disadvantaged and marginalized communities.

CREATING JOBS BUILDING CLEAN ENERGY INFRASTRUCTURE

The Budget invests nearly \$1.2 billion to support clean energy workforce and infrastructure projects across the Nation, including \$425 million to weatherize and retrofit low-income homes, \$83 million to electrify tribal homes and transition tribal colleges and universities to renewable energy, and \$107 million for the Grid Deployment Office to support utilities and State and local governments in building a grid that is more reliable and resilient and that integrates accelerating levels of renewable energy. The newly established Office of State and Community Energy Programs will launch a new Energy Burden Reduction Pilot with \$50 million to retrofit low-income homes with efficient electrical appliances and systems. These investments, which complement and build upon the extraordinary funding in the Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA), will create good-paying jobs while driving progress toward the Administration's climate goals, including carbon pollution-free electricity by 2035.

ADVANCING ENERGY INNOVATION

To support U.S. preeminence in developing innovative technologies that accelerate the transition to a clean energy economy, the Budget invests \$9.4 billion, an increase of more than 19.7 percent over the 2023 enacted level of \$7.8 billion, in DOE clean energy research, development, and demonstration. These investments would improve clean power technologies, strengthen clean energy-enabling transmission and distribution systems, decarbonize transportation, advance carbon management technologies, and improve energy efficiency in industry and buildings. This funding would also leverage the tremendous innovation capacity of the National Laboratories, universities, and entrepreneurs to transform America's power, transportation, buildings, and industrial sectors.

ACCELERATING INDUSTRIAL DECARBONIZATION

Across the more than \$1.2 billion in discretionary DOE industrial decarbonization activities, the Budget reflects the importance of strategically supporting U.S. industrial decarbonization through innovation, targeted investment, and technical assistance. The Budget supports an across-DOE Industrial Technologies joint strategy team to drive adoption of industrial decarbonization solutions including through the Office of Manufacturing and Energy Supply Chains. It also supports expanded research and development efforts in the Office of Energy Efficiency and Renewable Energy's Industrial Efficiency and Decarbonization Office. Within the \$1.2 billion mentioned above, the Budget includes \$160 million for the Office of Clean Energy Demonstrations to support at least two large-scale industrial decarbonization projects.

STRENGTHENING DOMESTIC AND INTERNATIONAL CLEAN ENERGY SUPPLY CHAINS

The Budget includes a \$75 million investment to launch a Global Clean Energy Manufacturing effort within the Office of Manufacturing and Energy Supply Chains that would build resilient supply chains for energy sector components critical to national and energy security through engagement with allies, enabling an effective global response to the climate crisis while creating economic opportunities for the United States to support the global clean technology market.

In addition, the Administration supports the use of the Defense Production Act at DOE to support rebuilding domestic uranium production and enrichment capacity to establish a secure supply for the Nation's current and future nuclear fleet and also to reduce reliance on foreign supplies of uranium, as well as other clean energy technologies to ensure robust supply chains for electrical transformers and other critical grid components. The Budget also includes \$75 million in the Office of Manufacturing and Energy Supply Chains for DOE to carry out the President's recent determinations under the Defense Production Act.

REDUCES HEALTH AND ENVIRONMENTAL HAZARDS FOR AT-RISK COMMUNITIES

The Budget includes \$8.3 billion for the Environmental Management program and reflects this Administration's strong commitment to clean up and protect communities that supported defense production programs and government-sponsored nuclear energy research. As the largest environmental cleanup program in the world, Environmental Management plays a key role in cleaning the environment, contributing to national security priorities, investing in the future and aiding community efforts to build strong economies, growing jobs, and preparing for a clean energy future. This investment will enable the Department of Energy to treat radioactive tank waste, take down contaminated buildings, and ship and dispose legacy waste and clean soil and groundwater across Environmental Management sites.

The Budget includes broad support for underserved communities, including \$70 million for Community Capacity Building Initiatives in the Office of Environmental Management and NNSA, to address areas of persistent poverty around the Department's sites.

The Budget also includes \$196 million for the Office of Legacy Management to protect human health and the environment by providing long-term management solutions at over 100 World War II and Cold War era sites where the Federal Government operated, researched, produced, and tested nuclear weapons and/or conducted scientific and engineering research.

STRENGTHENING THE CYBERSECURITY AND RESILIENCE OF THE ENERGY SECTOR

The Budget provides \$245 million for the Office of Cybersecurity, Energy Security, and Emergency Response to enhance the security of energy technologies and the energy supply chain. The Budget supports increased assistance to States, local governments, Tribes, and Territories for emergency planning and preparation, including for events caused by the impacts of climate change. An additional \$301 million is provided for the Strategic Petroleum Reserve, including \$49.8 million in additional funding for the Major Maintenance Program for required upgrades to the West Hackberry Physical Security Program.

STRENGTHENING THE NATION'S NUCLEAR SECURITY ENTERPRISE

The Budget makes a historic investment of \$23.8 billion for the Nation's nuclear security enterprise to implement the integrated deterrent described in the President's Nuclear Security Strategy, the National Defense Strategy, and the accompanying Nuclear Posture Review (NPR) through support for a safe, secure, reliable, and effective nuclear stockpile combined with nuclear nonproliferation, arms control, and counterterrorism. In addition, the Budget continues robust, executable funding for the recapitalization of NNSA's physical infrastructure, including essential scientific and production facilities to ensure the deterrent remains viable without underground explosive nuclear testing.

NNSA has a broad and complex array of priorities that reflect its expanded mission and the necessity to adapt in today's changing international environment. Our nuclear deterrent remains the cornerstone of our national defense and an assurance for our allies around the globe. NNSA is currently undertaking five warhead modernization programs and a major infrastructure revitalization effort. Once complete, NNSA's modernized infrastructure will enable us to maintain a safe, secure, and reliable stockpile in the face of a wide array of challenges.

Simultaneously, NNSA is continuing progress on its nuclear security, non-proliferation, and counterterrorism efforts. These critical programs ensure that we

are aligned with our allies and partners to prevent an arms race, advance global stability, thwart state and non-state actors from acquiring nuclear weapons capabilities, and enhance U.S. and global security.

Stockpile Management

The Budget proposes \$5.2 billion in FY 2024 for Stockpile Management to maintain a safe, secure, reliable, and effective nuclear deterrent through five areas that directly support the Nation's nuclear weapons stockpile: stockpile major modernization, stockpile sustainment, weapons dismantlement and disposition, production operations, and nuclear enterprise assurance. The Budget incorporates \$3.1 billion for five major modernization programs that extend the lifetime of the Nation's nuclear stockpile, enhancing security and safety features, and meet modern deterrence needs.

Production Modernization

The Budget includes \$5.6 billion for Production Modernization to support modernizing the facilities, infrastructure, and equipment that produce materials and components to meet stockpile requirements and maintain the Nation's nuclear deterrent. The program encompasses five components critical to weapon performance and sustainment of the Nation's nuclear weapons stockpile: primary capability modernization, secondary capability modernization, tritium and domestic uranium enrichment, non-nuclear component modernization, and capability-based investments. The Budget includes \$2.8 billion to reestablish the Nation's capability to produce 80 plutonium pits per year as close to 2030 as possible and continue ongoing plutonium operations at Los Alamos National Laboratory.

Stockpile Research, Technology and Engineering

The Budget incorporates \$3.2 billion for Stockpile Research, Technology, and Engineering to provide the scientific foundation for stockpile decisions and actions; develop the expert personnel required to support the current and future stockpile; and provide the capabilities, tools, and components needed to support all missions. The funding includes \$1 billion in assessment sciences, which funds experiments focused on design and production requirements, continues the implementation of the Enhanced Capabilities for Subcritical Experiments (ECSE) subprogram, and \$782 million for Advanced Simulation and Computing, which is preparing for NNSA's first exascale high-performance computing capability.

Infrastructure and Operations

The Budget proposes \$2.8 billion for Infrastructure and Operations to maintain, operate, and modernize NNSA infrastructure in a safe and secure manner that supports program execution while maximizing return on investment and reducing enterprise risk. Of this amount, \$650 million is included for infrastructure recapitalization to improve the condition and extend the design life of structures, capabilities, and systems to meet program demands; reduce future operating costs by replacing older facilities with new, more efficient facilities; and reduce safety, security, environment, and program risk. The budget includes funding for the initial phase of the Kansas City Non-nuclear Expansion Transformation (KC NExT), a multi-year effort to increase manufacturing capacity to support the nuclear modernization program. The budget also includes \$718 million in Maintenance and Repair for predictive, preventive, and corrective maintenance activities to maintain facilities, property, assets, systems, roads, and vital safety systems.

RESTORING AMERICAN LEADERSHIP IN ARMS CONTROL AND NONPROLIFERATION

The Budget includes \$2.5 billion for NNSA to reduce nuclear risks and counter the global challenge of nuclear proliferation. As called for in the National Security Strategy, the Budget funds nonproliferation and nuclear risk reduction-related activities across NNSA's Defense Nuclear Nonproliferation, Emergency Operations, and Counterterrorism and Counterproliferation programs, including programs to strengthen the Nation's capability to prevent, counter and respond to nuclear incidents at home and abroad. For the first time in our history, we face two near-peer nuclear powers in Russia and the People's Republic of China (PRC) as well as the expanding nuclear programs of North Korea and Iran. Moreover, Russia's war in Ukraine, nuclear saber rattling, and recent suspension of the New START Treaty are challenging the fundamental framework and principles of the nuclear security and nonproliferation regimes at a time when peaceful uses of nuclear energy are needed more than ever to address critical climate priorities. NNSA is investing in strategic stability, nonproliferation, nuclear and emergency preparedness measures—which are even more important during times such as these when tensions are

high, miscalculation is possible, and strategic competition is escalating. This Budget also supports the research and development of next-generation detection, monitoring and verification tools needed to implement high priority efforts, including elements of the Australia-United Kingdom-United States (AUKUS) partnership, and prevent strategic surprise, supports activities with Ukrainian and regional partners associated with radiological and nuclear security, expands efforts in safeguards and security for new advanced nuclear power reactors, and builds on the bioassurance efforts started in FY 2023.

POWERING THE NUCLEAR NAVY

The Budget includes \$1.96 billion for DOE's Naval Nuclear Propulsion Program to ensure safe and reliable operation of reactor plants in nuclear-powered submarines and aircraft carriers. The Budget prioritizes investments in research and development to maintain American dominance while continuing to support improvements to the Naval Nuclear Laboratory infrastructure. This includes long lead-time technology development for the future nuclear fleet, with support for the U.S. Navy's timeline for the next-generation attack submarine.

SUPPORTING OTHER DEFENSE ACTIVITIES

The Budget provides \$1.1 billion to support defense activities conducted by the Department including Legacy Management (LM), Environment, Health, Safety and Security, Enterprise Assessments, Specialized Security Activities, Hearings and Appeals, and Defense Related Administrative Support (DRAS). DRAS offsets administrative expenses for work supporting defense-oriented activities in Departmental Administration.

ADMINISTRATION AND OVERSIGHT

Energy Information Agency

The Budget includes \$156.6 million for the Energy Information Agency (EIA) to enable EIA to continue delivering the critical energy information products on which its stakeholders rely, including weekly petroleum and natural gas inventory reports, comprehensive monthly forecasts of energy markets, and long-term outlooks for U.S. and global energy production and consumption.

Office of Technology Transitions

The Budget includes \$56.6 million to focus on commercialization of promising technologies. This includes funding the Energy Program for Innovation Clusters (EPIC) to encourage growth of regional energy innovation ecosystems, training National Laboratory scientists and engineers on customer outreach and partnership through the private sector through Energy I-Corps, supporting an Energy Tech University prize, supporting market and commercialization analytics, and coordinating tech transfer. Funding is also included within the Budget for the Foundation for Energy Security and Innovation to accelerate the commercialization of new and existing energy technologies by raising and investing funds through engagements with the private sector and philanthropic communities.

Departmental Administration

The Budget includes \$433.5 million for Departmental Administration to fund management and mission support organizations that have enterprise-wide responsibility for international engagement and promotion of global market opportunities, administration, accounting, budgeting, contract and project management, human resources, congressional and intergovernmental liaison, energy policy, information management, life-cycle asset management, legal services, workforce diversity and equal employment opportunity, ombudsman services, small business advocacy, sustainability, and public affairs. In FY 2024 the Budget funds new statistical and trend analysis capabilities within the Office of Policy, with support from the Energy Information Agency.

Office of the Inspector General

The Budget includes \$165.2 million in discretionary authority. Also, the Office of the Inspector General would receive funding within the Administration's proposed \$150 million in mandatory funding.

CONCLUSION

I want to again thank the Committee for its ongoing and bipartisan support for the DOE mission. Thank you for the opportunity to be here today. I am happy to answer your questions.

PROPOSED DOE FUNDING CUTS TO FISCAL YEAR 2022 LEVELS

Senator MURRAY. Thank you very much. We will now begin a round of 5-minute questions for our panel. I ask my colleagues to keep track of the clock and stay within that.

Deputy Secretary Turk, your budget request for nondefense Department of Energy programs recommends a very healthy increase for the fiscal year 2023. And that funding, as I said, is really critical for programs that support clean energy, and environmental cleanup, and scientific discovery, our national security, our global competitiveness. It is a lot.

House Republicans, as you know, have voted to cut overall funding back to fiscal year 2022 levels or worse. Can you give us some concrete examples of how cutting DOE back to those levels will hurt working-class Americans?

Mr. TURK. Well, thank you, Madam Chair, for the question. I will give you three specific examples of what this means, and I will compare what the House Republicans are proposing versus the fiscal year 2023 enacted; it would be even worse if you compared it to what we are proposing in fiscal year 2024, but just compared to what is already in law on the baselines.

So first on consumers, all that we are doing to try to help lower energy costs for consumers. What the fiscal year 2022 level would be is a \$62 million cut to weatherization, a program incredibly popular. What that translates into is more than 12,000 of our fellow Americans not getting the benefits of that program, in terms of reducing their energy bills, and providing greater efficiency.

The rebates that was such an important part of the legislation that was passed last Congress, and thank you, to Senator Heinrich, and Chair Murray, and many others who were very supportive of that, this means that American consumers will not benefit from those rebates. And our estimates are that American consumers, overall, would benefit \$1 billion in terms of lowering their bills each year, annually, because of that. So that will not be out there benefiting consumers across our country.

On the science side, we have done some estimates of what that reduction in science, and it is a reduction, it is a significant reduction going to that fiscal year 2022 level, what that means is we would have to lay off 5,200 scientists, and others, who work at our labs.

It would mean all the science that we were planning to do, want to do, need to do to be competitive in the world, just as you said, Madam Chair, in terms of China and other countries stepping up, we would have less ability to deal with that.

In fact, we would have 2,600 less users being able to come to all of our phenomenal facilities, and they would have to go abroad, or somewhere else, to do the science that they want to do.

And then third on the competitiveness side, this is a very competitive environment, with China, with other countries around the world, all of those provisions in the historic legislation passed last year, all those provisions, cutting back to the fiscal year 2022 level, at this critical, critical moment as we are getting momentum, the \$100 billion, I mentioned for battery manufacturing, all of that is

pulled back at this critical moment when we are actually making progress.

Senator MURRAY. So, I think it is fair to say that cuts of that magnitude would force your Department to really make some tradeoffs between key priorities, like keeping pace with our competitors' investments in research and innovation, and protecting our nuclear arsenal, and a lot more.

Mr. TURK. Absolutely.

HANFORD CLEAN-UP MISSION

Senator MURRAY. Okay. Thank you. I was encouraged to see an historic request for the Hanford Site in Washington State, especially as compared to fiscal year 2023 which was, as we all know, completely insufficient, and as I talked about, I am pleased that DOE, Washington State, Department of Ecology, and EPA have reached that conceptual agreement after more than 60 mediation sessions.

In the announcement yesterday, DOE said that the President's proposed fiscal year 2024 requests is consistent with those conceptual agreements as it relates to tank waste. That is great news. But let us remind everybody, the Federal Government has a legal and moral obligation to clean up the Hanford Site, and protect Hanford workers. I am certain you understand how strongly I feel about meeting that obligation.

So, I am pleased that your budget builds on the progress we made at the Office of River Protection, specifically on the High Level Waste Facility's Construction, but I am concerned that you are taking on unnecessary risks at Hanford's Richland Office which, we should just not be robbing Peter to pay Paul.

Let me ask you what conditions merited the \$85.3 million decrease to Richland from fiscal year 2023? And what risks would we be taking on as a result of that reduced level?

Mr. TURK. Well, first of all let me completely agree, there is both a legal and a moral responsibility that all of us share, in the Executive Branch and in Congress, and thank you for your leadership again, for many, many years on this issue. I know it is something Secretary Granholm is passionate about, she has been out to Hanford, I have been out to Hanford. I will be going out there in the not too distant future. And certainly, our Environmental Management colleagues live and breathe this every day, in terms of making progress on this front.

The Conceptual Agreement is a big, big deal, and it is great to have reached this milestone, but we have got an awful lot of work going forward. Anyone who has visited Hanford knows we have got a lot of work going forward, for decades, out there.

Of our over \$8 billion budget for the Environmental Management portfolio, \$3 billion of that is for Hanford; that is the largest request in recent history for Hanford. As you said, we need to make thoughtful choices, and when we looked at that \$3 billion envelope in terms of our back and forth with the White House and OM, (Office of Management and Budget), we made choices, we have made thoughtful choices, but we would be eager to have further conversations with you and your staff to make sure that we are all going forward in the way we should at Hanford.

Senator MURRAY. Thank you very much.
Senator Kennedy.

THE COST OF THE U.S. PURSUING CARBON NEUTRALITY

Senator KENNEDY. Thank you, Madam Chair.

Mr. Secretary, thanks for being here. I want to tap your expertise for a moment. Give me; give me your best estimate, just an estimate, I know, of how soon you think the United States of America will be carbon neutral?

Mr. TURK. So, I think, according to the climate scientists around the world, and certainly the cutting-edge scientists that we need to rely on here in the U.S., we have got to get carbon neutral by 2050. And I am very comfortable with that target, and I think that is the appropriate target.

Senator KENNEDY. By 2050?

Mr. TURK. Which is only 27 years. That is not a long time away.

Senator KENNEDY. And how much will that cost?

Mr. TURK. So, the cost that I focus on even more, is all the costs that will happen if we don't get our act together.

Senator KENNEDY. No. The total cost. How much will it cost to get us carbon neutral?

Mr. TURK. It is going to cost trillions of dollars, and it will cost tens of trillions of dollars if we don't get our act together.

Senator KENNEDY. How many trillions?

Mr. TURK. I don't have the estimate or the numbers in front of me, I have seen a variety of different estimates, but it is a large amount. Fundamentally transforming our energy economy—

Senator KENNEDY. Tell me the estimates—

Mr. TURK [continuing]. Is a big deal.

Senator KENNEDY. Tell me the estimates that you have seen?

Mr. TURK. I don't have those numbers, right on hand.

Senator KENNEDY. So, you are advocating that we become carbon neutral, but you don't know how much it is going to cost?

Mr. TURK. So there is an awful lot of estimates out there, it depends on technology improvements—

Senator KENNEDY. You are the Deputy Secretary—

Mr. TURK [continuing]. And other kinds of things.

Senator KENNEDY. You are the expert.

Mr. TURK. I know with certainty—

Senator KENNEDY. Give me an estimate of how much it is going to cost?

Mr. TURK. I know with a certainty, of all the experts I have spoken about, it is cheaper to get our act together, than it is to not get our act together on climate change.

Senator KENNEDY. Okay. Then tell me the cost—

Mr. TURK. It is orders of magnitude.

Senator KENNEDY [continuing]. Versus the cost if we don't do it?

Mr. TURK. I think it is orders of magnitude different. If we don't get our act together—

Senator KENNEDY. I know that. But you don't have a cost? You want us to get there, but you can't tell the American taxpayer how much it is going to cost? Is that your testimony?

Mr. TURK. It is going to save us money, and there is a lot of jobs that a lot of Americans—

Senator KENNEDY. Well, how do we know, if you don't know how much it is going to cost?

Mr. TURK. I would be happy to pull up the latest numbers that I have seen and let you—

Senator KENNEDY. How about \$50 trillion; is that right?

Mr. TURK. It is going to cost trillions of dollars; there is no doubt about it.

Senator KENNEDY. Okay. If we spend trillions of dollars, and we achieve—some of your colleagues estimate \$50 trillion. And it disappoints me that you are not willing to give the estimates.

I hope you are not telling me you have no idea how much it is going to cost, that creates a whole new host of problems. But if it costs \$50 trillion, as some of your colleagues have testified, to become carbon neutral by 2050, and I am all for carbon neutrality, by the way; how much is that going to lower world temperatures? Or how much is that going to reduce the increase in world temperatures?

Mr. TURK. So, every country around the world needs to get its act together. Our emissions are about 13 percent of global emissions right now.

Senator KENNEDY. Yes; but if you could answer my question. If we spend \$50 trillion to become carbon neutral in the United States of America by 2050, you are the Deputy Secretary of Energy, give me your estimate of how much that is going to reduce world temperatures?

Mr. TURK. So first of all, it is a net cost, it is what benefits we are having from getting our act together and reducing all of those climate benefits. We are seeing—

Senator KENNEDY. Let me ask again.

Mr. TURK [continuing]. Hundreds of trillions of dollars right now—

Senator KENNEDY. Maybe I am not being clear. If we spent \$50 trillion to become carbon neutral by 2050 in the United States of America, how much is that going to reduce world temperatures?

Mr. TURK. This is a global problem, so we need to reduce our emissions, and we need to do everything we can to—

Senator KENNEDY. How much, if we do our part, is it going to reduce world temperatures?

Mr. TURK. So we are 13 percent of global emissions right now.

Senator KENNEDY. You don't know, do you? You don't know, do you?

Mr. TURK. You can do the math, we need to—

Senator KENNEDY. You don't know, do you, Mr. Secretary?

Mr. TURK. So we are 13 percent of global emissions, and if we—

Senator KENNEDY. If you know, why won't you tell me?

Mr. TURK [continuing]. Went to zero, that would be 13 percent less—

Senator KENNEDY. You don't know, do you? You just want us to spend \$50 trillion, and you don't have the slightest idea whether it is going to reduce world temperatures.

Now, I am all for carbon neutrality. But you are the Deputy Secretary of the Department of Energy, and you are advocating we spend trillions of dollars to seek carbon neutrality, and you can't—

and this isn't your money, or my money, it is taxpayer money—and you can't tell me how much it is going to lower world temperatures?

Mr. TURK. Very——

Senator KENNEDY. Or you won't tell me? You know but you won't?

Mr. TURK. In my heart of hearts, there is no way the world gets its act together on climate change unless the U.S. leads.

Senator KENNEDY. Tell me how much it is going to reduce——

Mr. TURK. The U.S. needs to lead.

Senator KENNEDY [continuing]. You can't tell me. Either that or you won't.

Mr. TURK. Well, 13 percent, 15 percent off the——

Senator KENNEDY. And that is—the President of the United States needs—I have still got a few seconds. I have got 22 seconds. I am going to use them a different way.

Mr. Secretary, shame on you for not answering my questions.

GETTING PLUTONIUM PIT PRODUCTION BACK ON TRACK

Madam Administrator, how are we going to get plutonium pit production back on track?

Ms. HRUBY. Well, thanks Senator Kennedy. We are doing—the most important thing we have to do to get pit production back on track is get craft workers in the facilities, finish our designs, get craft workers in the facilities, and that is happening. And so, we have got great confidence between changes we are making in our processes, getting people on board, doing equipment pre-buys, particularly for glove boxes, which are limited manufacturers in the United States. That we will be able to make pits. We are going to be late. We are trying to catch up.

Senator KENNEDY. Thank you, ma'am.

Senator MURRAY. Thank you. Senator Heinrich.

IMPACTS OF INCREASED GLOBAL TEMPERATURES

Senator HEINRICH. Secretary Turk, let me give this a try. What is the difference between living in a world with 1 degree of increased—1 degree C, of increased temperature and, say, 3 degrees C of increased temperature and the difference in the cost that we will experience, as a Nation, under those two scenarios?

Mr. TURK. So, the orders of magnitude are so much greater if we don't get our act together, than if we do what we need to do, and we have all those jobs, especially in America, if we lead on the clean energy front, orders of magnitude difference.

IMPACTS OF REPEALING THE INFLATION REDUCTION ACT

Senator HEINRICH. Let us talk about those jobs for a moment. The Inflation Reduction Act was signed into law about 9 months ago, our friends in the House of Representatives have put forward legislation to repeal that, that is despite announcements representing at least \$150 billion in manufacturing investments in the United States, 46 factories, 18,000 jobs that represents, what would be the impact if we repealed the incentives that are in the Inflation Reduction Act?

Mr. TURK. So, I think they would be catastrophic at this absolutely critical moment, as Chair Murray said at the outset. We are seeing the kind of momentum at reshoring American manufacturing across the board, not just with batteries, not just with solar PV (photovoltaic), but across the board, we are seeing that momentum, because Congress has led, because the United States Government is leading, putting in place those kinds of incentives. You take those away, and those jobs are going to go elsewhere, and we are going to see those opportunities.

Senator HEINRICH. 2022 was a record year for factory investment in the United States. Are we expecting the same thing in 2023?

Mr. TURK. We are expecting even more.

Senator HEINRICH. Yes.

Mr. TURK. We are seeing momentum, why would we cut back as—on the moment we are actually succeeding.

NATIONAL LAB STAFFING

Senator HEINRICH. To shift gears a little bit, there is approximately 30,000 folks who are employed at Sandia and Los Alamos National Laboratories, both of those labs have cited workforce retention and recruitment as their primary issue in addressing national security missions.

We appropriated a number of funds through the National Defense Authorization Act and the Appropriation Bills, to try and address that. Has that had a positive impact? And what else can we do to address the retention issues?

Mr. TURK. So let me turn it over to Administrator Hruby.

Senator HEINRICH. Under Secretary—

Mr. TURK. I will just say this is a big, big deal for the Secretary, for myself, for all of us. And there is an awful lot of work we need to do on this front.

Senator HEINRICH. Administrator.

Ms. HRUBY. Thanks, Senator Heinrich. Well, I am happy to report we have made some changes that are helping. We are not going to take our eye off of it. We can't do our job without those 30,000 people, and all the other people in the enterprise. Because of the increases in attrition that we were seeing after COVID, we made a—we authorized a mid-year salary adjustment at the laboratories, plants, and sites. We leaned forward in terms of adding flexibility to benefits that were more consistent with what we—the high tech industry we have to compete with.

We leaned forward in terms of a competitive raise package for 2023, and as a result of those activities, among other things we are trying to do to improve the work environment and the productivity, the overall attrition is close to normal now, at both Los Alamos, and Sandia, and across the complex. We still have pockets where it is quite high.

Senator HEINRICH. Mm-hmm.

Ms. HRUBY. Where it is very competitive. Actually, I am sure the high tech market has helped us. There is always a tradeoff there, but we need to continue to lean forward, and we need to provide the very best work environment, because we have the very best work, so we can keep people, if we can do that. Thank you.

INFLATION REDUCTION ACT AND INFRASTRUCTURE
INVESTMENT AND JOBS ACT IMPLEMENTATION

Senator HEINRICH. Deputy Secretary Turk, let us go back to the IRA (Inflation Reduction Act) for a minute. Can you walk us through implementation and all the things that DOE is doing now to make that legislation a success?

Mr. TURK. So, this is a big, big deal, and big piece of legislation, and certainly, when you put it together with the Bipartisan Infrastructure Legislation, this is the largest climate and clean energy legislation, not just in the U.S. by orders of magnitude, it is the biggest legislation ever in the history of humanity.

And there is an awful lot we are doing at the Department of Energy. So, we have a couple hundred of our folks working with Treasury and IRS (Internal Revenue Service) to bring our expertise to bear on all the tax provision piece of it. We also have about \$100 billion that you all, that taxpayers have entrusted to us, just at the Department of Energy.

That is 70 new programs that we are setting up. Many of them are competitive cost-share programs, like the hydrogen hubs that have gotten so much attention. So we have created new offices, we have created a new Under Secretary for Infrastructure, we have now hired up over 500 people to fill those offices, and taken folks from other parts of the Department to have that instant capacity.

And we are putting out FOAs (Funding Opportunity Announcements) almost on a daily—funding opportunity announcements for companies and communities across the country, almost on a daily, sometimes hourly basis to make sure those opportunities are out there for that real-world impact.

Senator HEINRICH. Thank you.

IMPLEMENTATION OF FUNDING FOR TRIBAL LOAN
GUARANTEE PROGRAM AND INDIAN ENERGY PROGRAMS

Senator MURRAY. Thank you. Mr. Deputy Secretary, ensuring that our Tribes and indigenous communities have access to clean, reliable power is really critical, we recently provided \$75 million in the Inflation Reduction Act for the Tribal Loan Guarantee Program to help our Tribes and Tribal entities deploy clean energy. And we also provided the Indian Energy Program new funding to start electrifying the 30,000 Tribal homes that do not have access to power.

Can you talk about how the Department is implementing those new investments, and making sure that our Tribes and Tribal entities know about this, and have access to those opportunities?

Mr. TURK. So this is a top priority for us. On the Tribal Loan Program, it was terrific to be able to issue loans directly to Tribes. That is not something that we had before, and thanks to Congress we have that ability to do that.

We have been very proactive in all our conversations and reaching out to Tribes, to leaders all across the country, we have literally had hundreds of outreach meetings.

The Head of our Loan Program Office, Jigar Shah, was just out recently meeting with the Head of the Nez Perce Tribe, to make

sure that we are making aware everybody who can take advantage of these programs. And I am told we are, hopefully, on track to have a first loan this summer, with many more to come after that.

And our Indian Energy Office is working all the levers and all the authorities that they have as well, to be very proactive and forward-leaning here.

Senator MURRAY. Well, as you know, Tribes in Washington State, and really across the country, they each have unique energy demands and challenges. Talk to me about how the Department is working, specifically, with Tribes to identify their specific needs and opportunities?

Mr. TURK. Well, I think we—you hit the nail on the head, it is unique challenges, it is uniquely situated. I know in my own meetings you can't make assumptions about what communities or what Tribes need, you have got to listen and put in the actual work, and the sweat equity, to not only do the webinars and do the calls, but actually go out to the communities, to listen to the communities, and to figure out what tools we have in the tool belt to help that particular community, and this particular community, and have it driven by the Tribe itself, as it should be, given the sovereignty of the Tribes.

So that is the approach that we are taking. It is time intensive, it is resource intensive, that is why it is so important to keep the funding streams coming on that front so that we can have the ability to do that kind of proactive outreach, and listening to make sure that we are bringing all the tools that we have to the table to help Tribes.

INDUSTRIAL DECARBONIZATION FUNDING

Senator MURRAY. Thank you. Thank you for your attention to that. You know, industrial emissions made up roughly 30 percent of the U.S. climate emissions, and to address the climate crisis we need to modernize our industrial manufacturing base, and work to reduce emissions across the cement, steel, aluminum, glass, paper, and ceramics industries.

Last Congress, we provided about \$6 billion for that work across multiple DOE program offices and functions; how do you plan to get this industrial decarbonization funding out the door quickly and effectively?

Mr. TURK. Well, we have got the historic amount, the over \$6 billion, and then we also have our regular appropriations request, so we are requesting \$320 million more in our annual appropriations request, all complementary to that \$6 billion as well.

What we are doing is bringing folks across the Department. We have a variety of offices that have expertise that can help in the industrial decarbonization space. The Secretary has launched a Joint Strategy Team on industrial technologies. It literally brings 80 folks from a variety of different offices across the Department, so that we can have a coherent strategy, a proactive strategy on industrial technology.

We have got subgroups for iron and steel, and subgroups for petrochemicals, to break this up into the manageable chunks it needs to be broken up.

We have also had great conversations with our White House colleagues, and our interagency colleagues, to make sure that this is an all-of-government, unified effort going forward.

And we have had terrific discussions with your colleagues, your staff on the committee, about having some modest funding to support these joint strategy teams, so that we can make sure that this continues, and there is a real center of gravity, and institutionalization going forward.

Senator MURRAY. Well, thank you very much; and thank you for being here today.

Senator Heinrich has kindly agreed to take over the gavel for the committee. And I appreciate that. And will give him a chance to settle in here, and turn it back over to him. So, thank you.

TRANSMISSION PERMITTING

Senator HEINRICH [presiding]. We had a recent hearing with Secretary Granholm, where I talked to her fairly extensively about things like “reconducting”, and other transmission, Grid Enhancing Technologies. Can you talk a little bit, Secretary Turk, about the funds that we appropriated through the Infrastructure Law, how those are being used to facilitate the transmission that continues to largely be a permitting and planning challenge, but is obviously one of the primary bottlenecks to getting dramatic amounts of additional clean generation onto the grid?

Mr. TURK. Well, first of all Senator, thank you, for your focus on transmission. This is a big, big deal. And if we don’t get the transmission right in our country we are not going to be successful in all of our efforts. There have been some estimates, some credible estimates, in fact, that of the all the climate benefits we get from the Inflation Reduction Act, a full 80 percent of those won’t come to fruition unless we can do transmission at a higher rate going forward. We are doing about 1 percent per year in terms of enhancements on the transmission side of things.

So, we do have some funding streams, but we created a whole new office, the Grid Deployment Office, to lean in, to use those funding streams to get leverage from those funding streams. But we are also very aware that a key issue here, just as you said, is permitting. And right now, we are not doing what we need to do in terms of permitting in the timelines associated with permitting for new transmission lines across our country.

We are engaged right now in extensive conversations with the White House, with interagency colleagues, our Secretary has spoken about this before, to use an existing law, and a law from 2005, to actually streamline the transmission permitting to have time lines, and very aggressive time lines to really get our act together on the transmission permitting side.

There is also reconducting in a number of key technologies that are very complementary to building new transmission lines, as well, that we are very focused on.

DECARBONIZING THE TRANSPORTATION SECTOR AND ELECTRIC VEHICLES

Senator HEINRICH. Great. You spoke a little bit about the work being done to decarbonize the industrial sector, talk a little bit

about the work that DOE is doing to decarbonize the transportation sector, particularly things like heavy trucking, trains, even aviation.

Mr. TURK. So, transportation is the largest source of our emissions in the country, and we are very focused on this, have been for many years, but have some new tools and new resources in our tool belt. One of those is the funding for building out our charging infrastructure, and we have a joint office. It is a new experiment. A joint office with us and the Department of Transportation, that is working out incredibly well, and we are getting funding to States to get it out the door, to build those EV (electric vehicles) chargers across the country, to reduce that range anxiety, and to make sure consumers across the country, not just in urban areas, but across the country, can benefit from electric vehicles.

We are also working on other parts, not just the passenger vehicle side, just as you said. Trucking, aviation, are incredibly important areas that we can lean in on. We have got a Super Trucks Program that is really leaning in on R&D (Research and Development), and trying to bring technical solutions and reduce those costs so that we can have low-carbon, no-carbon trucking solutions as well.

Senator HEINRICH. Senator Hagerty, would you like to ask a few questions?

NUCLEAR ENERGY IS CLEAN ENERGY

Senator HAGERTY. Thank you, Senator Heinrich.

I would like to first direct my questions to the Deputy Secretary, to talk about small modular reactors. It is a topic that comes up very often as I talk to leaders around the world, and to business leaders as well. And I think you have had some discussion with Ranking Member Kennedy already today, but I would like to just establish a couple of basic points first.

My first question: Does the Department consider nuclear energy clean, sustainable, and carbon-free energy? A yes/no answer would be fine.

Mr. TURK. Absolutely. Nuclear energy is a top priority for us.

Senator HAGERTY. And as I said, my colleague, Ranking Member Kennedy, I think, has already confirmed with you that the Department would state that: "Nuclear power is the most reliable energy source and it is not even close." That is a direct quote, and also to quote, "Nearly two times more reliable is natural gas and coal units, and almost three times more reliable than wind and solar plants." That is from the Department's Office of Nuclear Energy website.

So I would like to come back to you and ask, that given that nuclear energy is clean, carbon free, and more reliable than other energy sources; do you agree that the United States should be encouraging the production of more nuclear power?

Mr. TURK. Absolutely. And we have got a lot of fundings, thanks to Congress, to extend the lifetime of our existing nuclear, which is incredibly important. It is about 20 percent of our overall electricity generation in our country, as you know, Senator. And then also focusing; just as you said, on SMRs; on the small modular reactors, the reactors of the future, top priority for us.

Senator HAGERTY. Well, the demand is clearly there, as I said, as I speak with leaders around the world. I was just in Latin America and talking with leaders there, who are trying to make transitions, and they see this as a great opportunity to partner with the United States of America, and also it is an area that would satisfy important demands while meeting certain climate objectives.

My next question is that, given all of that, why aren't we building more nuclear power plants?

Mr. TURK. So, this is where we have got the \$6 billion in credits to try to extend the lifetime extension of the existing nuclear, and we are working as quick as we can on the Advanced Reactor Demonstration Program, at being the leader in small modular reactors.

And it is not just Latin America. I was in Latin America as well where everybody is focused on SMRs and U.S. leadership in that space, but it is Eastern Europe, and it is a lot of other countries around the world. So, there is huge U.S. domestic opportunities, but there is also a lot of jobs in an export environment as well. So completely agree with you on that point.

Senator HAGERTY. I spent a great deal of time in my previous job working with Japan and their Energy Security and their strategy there. There is also a tremendous demand in developed economies like Japan, in particular. That is why I think it is very important to direct our scarce government resources toward technological innovation, increasing efficiency, and doing things of that nature.

ADVANCING NUCLEAR ENERGY

And my next question is that, do you agree that is in our Nation's interest for the next generation of nuclear reactor technology, and also the related supply chains, and the technologies that are around it, to be developed and pioneered here in the United States?

Mr. TURK. Absolutely.

Senator HAGERTY. My concern is that this administration seems to be more focused on pouring billions of taxpayer dollars into wind and solar, when we have a serious situation where China controls a lot of the natural resources, and a lot of the supplies there, as opposed to being a competitive advantage for America.

Where in contrast, if we look at nuclear power, it is an area where the United States actually does possess a lead we can build a supply chain that doesn't pass through China, but it requires us to develop the next generation of this technology right here in the United States.

In March the DOE released a series of reports that were focused on green energy technologies, including a report focused solely on advanced nuclear. That report stated, and I am going to quote, "It is likely that the first design to reach a critical mass of orders may be a Gen III plus SMR."

I attended an event in March, in which the Tennessee Valley Authority, GE Hitachi, Ontario Power, and Synthos, announced that they are teaming up to advance the global deployment of grid-scale modular nuclear reactor. That first SMR in North America is going to be built in Canada, not in the United States.

However, the next SMR, and the first in the United States, could be built at the Clinch River Site in Oak Ridge, Tennessee. You

might be wondering why I am talking about this. That site in Oak Ridge, that site has an early site permit for SMR that the Nuclear Regulatory Commission has already issued. So, wouldn't deployment in the United States of commercial grid-scale module reactors be a substantial step toward our leadership in this technology?

Mr. TURK. Absolutely. And Oak Ridge in Tennessee, have had a real leadership for decades in this space.

Senator HAGERTY. Mm-hmm. So my question then: Does the Department support this project?

Mr. TURK. So we have been very supportive of projects across the country, we are spending billions of dollars and really prioritizing this, and the quicker we can get this technology available in Tennessee, across our country, and across the world, the better the world will be.

Senator HAGERTY. Does the President's budget request have any funding for this particular project in it?

Mr. TURK. So the President's budget request for this fiscal year took into account that we had some extraordinary funding, especially for the ARDP, the Advanced Reactor Demonstration Program, through the Bipartisan Infrastructure Legislation. So because there was a significant amount of funding there, we made thoughtful choices and thoughtful decisions to make sure that we had a balanced portfolio across all of our—

Senator HAGERTY. In fact, there is zero funding right now.

Mr. TURK. And that—

Senator HAGERTY. And what I want to do is encourage you to accelerate this, because the market opportunity is before us. Thank you.

Mr. TURK. Thank you, Mr. Chairman.

Senator HEINRICH. Senator Murkowski.

Senator MURKOWSKI. Thank you, Mr. Chairman.

And I appreciate the questions from my colleague. Know that I think that this is an area where we can and we should be leading. There is no reason why we should not. So, I am with you in supporting your urging to the Agency, to the Department to advance.

THE INCLUSION OF ALASKA AND HAWAII IN DOE'S 2023 NATIONAL TRANSMISSION NEEDS STUDY AND GEOVISION REPORT

I want to talk, not about nuclear but something that I think doesn't get enough attention, and that is the potential for geothermal. We have got great resources, certainly in my State, but we have them in other parts of the country as well.

Over the past couple months the Department issued two critical studies, one related to geothermal, and one was the National Transmission Needs Study for 2023. I think both of these studies are very important, very timely, but two very glaring omissions. They were national studies, but they somehow or other forgot two States. I just don't understand it. Actually, I find it inexcusable and astonishing that Hawaii and Alaska would not be included, particularly, in a study for geothermal.

When you are thinking about geothermal heat and volcanoes, what do you think of? You think of Hawaii, you think of Alaska. And so, it was remarkable. We saw one briefing provided to Con-

gress, the slide simply showed the resources in the Lower 48, and there was a question mark over Alaska, and over Hawaii.

And in the GeoVision report, the Department cites a couple reasons for the exclusion, and they said: That the modeling was used, primarily—the modeling that was used was primarily designed for the contiguous United States.

Okay. I can kind of get that, but the fact of the matter is, it is Hawaii and Alaska are never going to be part of the contiguous United States, and so if we are going to just completely keep them out of any future assessments, I think we would agree that that is not right, that is not reasonable.

So, I would ask you to commit to conducting a study of the geothermal resources that we have in Alaska and in Hawaii.

Mr. TURK. Well, let me say this, Senator. And I am not sure this is done that often in D.C. hearings, but we need to do better.

Senator MURKOWSKI. Thank you.

Mr. TURK. And I am heading to Alaska in a few weeks as, you know, and looking forward to having whatever meetings you find helpful.

Senator MURKOWSKI. Right.

Mr. TURK. To make sure that I am aware. Our Secretary has been up there as well visiting with you. And making sure that all of us, throughout the Department, not just our Arctic Energy Office, and Erin Whitney, who is our new leader of that office, but all of us at the Department are doing what we should.

On the Transmission Needs Study, we have relied on existing modeling for that need study, it is an interim, and now we are putting the final together, and Alaska will be part of that Final Need Study.

Senator MURKOWSKI. Yes.

Mr. TURK. And we are working on that to make sure. We need to, frankly, work with you, and work with others, to make sure we have the modeling, we have the analysis. Either that we do, or that others do, so that we can make good resource decisions off on that front. But we are making improvements on the Transmission Needs Study.

Senator MURKOWSKI. Okay.

Mr. TURK. And then on the map issue, I spent a significant time, yesterday and today, with colleagues at our Department, we need to do better on that front.

ALASKA'S NEED FOR TRANSMISSION UPGRADES AND FUNDING UNDER
THE GRID RESILIENCE AND INNOVATION PROGRAM

Senator MURKOWSKI. I really appreciate you recognizing that Alaska is not going to be at a disadvantage when it comes to Federal funding, because we are not part of that Transmission Needs Study. So, I thank you for that commitment. I also thank you for committing that you can do better.

And I appreciate the fact that you are coming to the State of Alaska. As you know, Secretary Granholm has had an opportunity to be up North, see one small geothermal community, if you will, we are certainly happy to include you in that site visit. But there is a lot more, certainly, that we can look to.

The Grid Resilience issue, and Transmission Needs Study, the Matanuska Electric Association, and our Alaska Energy Authority, are working together on applications for funding for the Grid Resilience and the Innovation Program, the GRIP Program, you are going to be getting a letter pretty soon from me, and the other members of the delegation, in support of these applications.

But if Alaska was included in the Transmission Needs Study, you would absolutely see that it is in desperate need of transmission upgrades, probably more so than any other region in the country. The Bipartisan Infrastructure Bill funds represents an incredible opportunity for us in Alaska to stabilize an aging grid by bringing it to modern standards, enhancing resiliency in the face of unprecedented natural disasters, climate change, rugged geographic terrain, these improvements are really, I can't underscore enough, how critical they are to preparing our State for a fuel diverse clean energy future, as well as integrating new sources of energy along this.

And so, as you are planning your trip, if we can make sure that this is on your itinerary, we will work with you in advance. I am looking forward to the opportunity to discuss more of these, as well as what we are doing with small hydro, the Arctic Energy Office that you have noted, and then the opportunities for potential, resources related to our critical minerals.

So, with that, Mr. Chairman, I thank the committee.

Senator HEINRICH. Senator Coons.

Senator COONS. Thank you, Chairman Heinrich.

Great to see you again Mr. Deputy Secretary, Under Secretary; Under Secretary Hruby, thank you for your work to advance non-proliferation, and support for our safety, and your efforts to reduce the nuclear risks posed by Russia and Ukraine.

FOUNDATION FOR ENERGY SECURITY AND INNOVATION

Deputy Secretary Turk, thank you. Both to you and, I guess, to all the DOE employees who are working so hard to implement the CHIPS and Science Act, the Inflation Reduction Act, the Infrastructure Law, there is so much to work on.

A key piece, I think, of the CHIPS and Science bill for your Department, was legislation I introduced, along with Senators Graham and Lujan, to create the Foundation for Energy Security and Innovation.

Borrowing off of what several other Federal agencies have a public-private partnership to create a foundation that would channel private investment to accelerate commercialization. The DOE budget request includes \$31 million to launch this new foundation.

I would be interested in: How you expect the FESI (Foundation for Energy Security and Innovation) to serve as a force multiplier, or to expand the Department's activities? And how critical is this initial pump-priming funding to what will be a largely self-sustaining foundation?

Mr. TURK. Well, thank you, first Senator, for your leadership on this issue, and Senator Graham, and several others, who are instrumental in giving us the ability to have this foundation. FESI, is the acronym that we affectionately call it, internally, and we are looking to set this up as quickly as we possibly can.

As you know, earlier this year we sent out a request for information to make sure we are learning lessons from other Departments who have foundations. We are working right now to get the Board up and running, and we will do that this year.

And so, this initial tranche of funding is incredibly helpful to leverage funding that we can get from others, as a complement to all that we are doing.

And let me say a big thank you to your leadership, for the historic legislation that was passed in last Congress. It is both an enormous task, and responsibility on our shoulders, but it is an honor to be part of a Department implementing this historic opportunity for all our fellow Americans.

SUPPORTING CLEAN HYDROGEN AND HYDROGEN HUBS

Senator COONS. And thank you for your strong focus on clean hydrogen. I was grateful for the chance to host the Secretary in Delaware, and a number of others, at the Air Liquide Innovation Campus. There are a number of world-class hydrogen technology, innovators in Newark, Delaware.

I am excited that Delaware is joining the Southeastern PA, and Southern New Jersey on the Mid-Atlantic Clean Hydrogen Hub. I think our region is a strongly competitive choice that is centrally located in one of the most densely populated and developed corridors in our country, that has world-class industry, a skilled union workforce, existing hydrogen transport, as well as general infrastructure, and an innovation ecosystem that is, I think, unparalleled.

How is the Department thinking about organized Labor's role in shaping the hydrogen economy, and in the priority process for the Hydrogen Hubs Program?

Mr. TURK. So it is a huge part of how we are thinking of hydrogen and the hydrogen hubs, in particular, but a lot of the other infrastructure funding, the historic funding that we have gotten. So on the hydrogen hubs, and others of our funding opportunities, we actually require something called a Community Benefits Plan.

Senator COONS. Right.

Mr. TURK. So, if you want to get money from the Federal Government, if you want to be entrusted with taxpayer dollars, we think that you should work in your community with labor, with other community leaders, and taking into account environmental justice concerns, and issues as well.

And make sure that there is a plan there, not only for your company to make money, that is great in this clean energy economy, but to do it the right way, to have those quality jobs, to work with unions, going forward. So that is a full 20 percent of the criteria for anyone to get funding through these grant opportunities.

Senator COONS. And there is, I think, an opportunity for us to keep moving forward in terms of our legislative work around hydrogen.

Senator Cornyn and I have four bills in this Congress to try and complement and fill gaps in our investments. The Hydrogen Infrastructure Initiative would support early adopters and help scale the deployment of hydrogen in maritime, in heavy industry, in heavy duty truck applications, as well as building out transport and stor-

age infrastructure. I am grateful for his partnership and his recognition. This is a real opportunity for regions all over the country.

INCREASING DOMESTIC DEMAND FOR HYDROGEN AND REGIONAL
PARTNERING ON CLEAN FUELS

How could additional demand side measures complement your existing work on hydrogen at the Department? And how can Congress support President Biden's efforts to coordinate with other regional partners like Canada, on clean fuels including hydrogen?

Mr. TURK. So, this is an absolutely critical moment for hydrogen, an Uber-critical moment. If we do things the right way with the funding and authority that you all have given us, but it is not enough. And thank you for all your continued work. There are some gaps in areas that we need to keep focus on.

I think you are absolutely right to focus on the demand side, and to make sure that we have got the demand part of it, as we are ramping up supplies, and we have got the tax credits and the hydrogen hubs providing that clean hydrogen supply. So we have had extensive conversations with the White House and interagency: What can we do as a Federal Government to provide some of that demand? And we are looking at the funding and authorities that we have of how we can use some of that to encourage that much more on the demand side piece.

And certainly, working with Canada, working with other international partners on this is a win-win for all of us, and we are really leaning in on that as well.

And thank you for all your efforts on the international side as well, not just on hydrogen, but across the board.

Senator COONS. Thank you. I look forward to continuing to work with you.

Thank you, Mr. Chairman.

Senator HEINRICH. Senator Hoeven.

Senator HOEVEN. Thank you, Mr. Chairman.

Thanks to both of our witnesses for being here today.

And Governor, if you deferred, thank you for that as well. I appreciate it.

Senator SHAHEEN. I will always defer to the Governor.

Senator HOEVEN. Fellow Governor, I appreciate you very much. Thank you. And I am not surprised. That working with you is always good.

REGIONAL CARBON SEQUESTRATION PARTNERSHIPS

Secretary Turk, you are very familiar with Energy & Environmental Research Center, you are also very familiar with the four regional partnerships, they pretty much cover the country. As a matter of fact, their Chairman is—his university is involved, one just like University of North Dakota is with EERC (Energy & Environmental Research Center). We put—myself and others, put legislation in the 2023 Appropriations Bill that provides, quote, "Not less than \$20 million for the Regional Carbon Sequestration Partnerships." This is not new. This has been going on for a long time, and we can't put CO2 down hole without these partnerships doing what they do, and what they have been doing for a long time.

Will you commit to ensuring the fiscal year 2023 funding supports the missions of the RCSP's (Regional Carbon Sequestration Partnerships)—and I have talked to Secretary Granholm about this as well, I am sure you are aware of that—will you commit to ensuring the fiscal year 2023 funding supports the mission of the RCSP's regional partnerships, as intended by Congress? And I know what the intent was, because I helped write the legislation. I am not guessing on this one.

Mr. TURK. Well, first of all Senator, thank you for your personal leadership, and North Dakota's leadership including on CCUS. As you know, I worked for a fellow—a previous Senator from North Dakota and I—

Senator HOEVEN. I think you and I see eye-to-eye on it, but my question is whether you can get it done?

Mr. TURK. So on this particular program, the Regional Carbon Sequestration Partnerships, I know there are some differences of opinion of folks on this side of the room, and we want to make sure that we are responsive, not only to you, but to other viewpoints on this, and going forward. We would like nothing more than clarity of what that guidance is for us going forward on this incredibly important piece.

I am familiar. And I know our Secretary had a chance to visit with the folks at the Plains CO2 Reduction Partnership. I know for many, many years the incredibly impressive work that has been done by UND (University of North Dakota), and others, throughout the State on these issues. And so, I think there is a lot there to build on.

Senator HOEVEN. Yes, you—

Mr. TURK. But we need clarity, we just want clarity from you all.

Senator HOEVEN. Yes. You recognize and agree that it is important work, correct?

Mr. TURK. It is incredibly important work.

Senator HOEVEN. Okay. Then will you work with, as far as we work now on the 2024 appropriation, to make sure that we get this done?

Mr. TURK. Happy to work with you on that.

Senator HOEVEN. Thank you, Secretary. And I do appreciate your efforts on this issue, very much. Thank you.

NNSA'S NUCLEAR MODERNIZATION PROGRAM AND INFRASTRUCTURE MODERNIZATION

Administrator Hruby, the W-84 warheads, and the plutonium pits—and I think again, our Chairman's—Los Alamos, and some of his labs, I think are working on these as well. But we need—there is a lot of synchronization here, as you know, with the modernization and the refurbishments that goes into the B-52, into the LRSO (Long-Range Stand-Off), the GBSD (Ground Based Strategic Deterrent), and all those things in terms of all the delivery systems to modernize our nuclear forces, have to coincide with the development that is being done on the W-84 warhead, the warheads that go on the LRSO, the replacement to the ALCM (air-launched cruise missile), and same with the pit production.

All this, and this not only affects, obviously, our bomber fleet, our ICBM (intercontinental ballistic missile) fleet, our submarines, our

whole nuclear arsenal. This is the upgrade to our nuclear arsenals. This is, you know, the insides. Are you going to keep all of those on schedule? And I want you to go through both the warheads, and the plutonium pits. You know, the—I think, particularly, you have got some supply chain issues. Is it on the W-4—wait, I lose track of which ones—of the W-84, right, but then you have also got the others that go for the—the Sentinel, and then the SLBM (Submarine-Launched Ballistic Missile).

So just kind of make—are we going to keep all this on schedule, very important? And of course, costs increase if we get off schedule too?

Ms. HRUBY. Right. Well, let me address your question in two parts. So, the first part is about the Weapon Modernization Program, and that program is on schedule and synced up with the Department of Defense, including the W80-4 for the LRSO. Just attended a briefing for the Department of Defense, we are entirely synced up there. That does not require new pits.

So that leads me to the second part of the answer, which is how we are doing on infrastructure modernization, and on that front we have experienced schedule delays and cost overruns that we are working hard to catch up. But it is a very, very difficult time—it is a very difficult thing to do, to establish new nuclear production capabilities that we just simply stopped in this country. As well as it is a particularly difficult time to do large construction.

But we are doing all sorts of things, working to increase the number of skilled crafts, working with unions, and trade shops, and technical schools, breaking the projects into smaller more manageable pieces, delaying some projects to get the ones done that are started. We have lots of—and having some success, and increasing the number of people on site, and increasing the pace of those activities, but that we have suffered some schedule and cost problems there.

Senator HOEVEN. We have worked very hard to fully fund the enterprise, and we need you to take all the steps to keep it on schedule.

Ms. HRUBY. Yes, sir.

Senator HOEVEN. Thank you, again, to both of you, appreciate it. Thank you, Madam Chairman.

Senator MURRAY [presiding]. Thank you. Senator Shaheen.

Senator SHAHEEN. Thank you both for being here, and for your testimony.

USING BIL AND IRA FUNDING TO PROVIDE TECHNICAL ASSISTANCE TO LOCAL COMMUNITIES

Secretary Turk, I am going to begin with you. In New Hampshire we have a very effective energy nonprofit that has Energy Circuit Riders, that have been individual, only a couple, but they have been going around helping communities look at how they can be more efficient with their energy use, as well as looking at alternative sources of energy.

We are putting a lot of money into States like New Hampshire, through the Inflation Reduction Act, and the Bipartisan Infrastructure package. So can you talk about how this budget is going to support technical assistance and outreach so that communities

know what is available? And how can we help them take advantage of what is in those pieces of legislation?

Mr. TURK. Well, thanks to you, Senator, and leadership from others, we do have these historic tools in our tool belt, on efficiency, and rebates, and all across the board; it is incredibly exciting to have that. But it does no good if communities—

Senator SHAHEEN. Right.

Mr. TURK [continuing]. If households, if families aren't aware of them, and we don't make it easy to take full advantage of this. So, I think you are absolutely right to focus on the technical assistance piece, and making sure that everything we are doing. From designing the funding opportunities in the first place, to designing the web interface for rebates and making sure that that is easily accessible. And a part of our new Under Secretary for Infrastructure is an incredibly important office. It has not gotten as much attention as I think deserves, it is called the State and Community Energy Program Office.

And the theory of the case there is to make sure that we have the human resources that can interface with communities, that can have those engagements, those discussions, in a very proactive, but also in a very respectful way, because each community is different in terms of what the opportunities and the challenges are on that front.

And what we want to do is help design particular programs, you can take advantage of this and this, maybe this isn't quite a good fit over here for you. And then make sure that all the deadlines they are aware of, make sure the application process is an easy application process, make sure consumers in those regions, in those communities have that opportunity.

That is going to take an awful lot of effort and leadership, not only from us, but funding including for the State and Community Energy Program Office in fiscal year 2024, and for years after that as well.

Senator SHAHEEN. Well, I hope you will think about Members of Congress as potential outreach opportunities to help our communities take advantage of what is available. We have been trying to do that, and the closer we can work with you all the better.

WORKING WITH OTHER FEDERAL AGENCIES ON BIL AND IRA FUNDED PROGRAMS

And that brings up another aspect of this, and that is: Can you talk about how you are working with other Federal agencies who are also engaged in promoting the programs in those two pieces of legislation: Treasury, EPA, other agencies that have overlapping jurisdictions? But in order for this to work, everybody has to work together.

Mr. TURK. Everybody has to work together, and having been in the Government, in the Executive Branch, it is challenging, but the prize is huge if we are able to actually get our acts together on this front.

So, a few concrete examples of this; one, is the Federal Government uses an awful lot of energy, and all of our facilities across the country. There is a program called FEMP (Federal Energy Management Program), and there is—some additional historic levels of

funding that you all have provided last Congress for a program called EFEKT (). This is hundreds of millions of dollars to try to help improve the efficiency of those Federal facilities across the country.

And so, we are trying to lean in on that, and make sure the Federal facilities, whether they are our facilities, or other facilities, can take advantage of that funding going forward. We have a couple hundred of our DOE staff working with IRS and Treasury, helping to design those tax incentives that are so important, to make sure that it takes into account the energy expertise that we have to get the biggest bang for taxpayer buck from those pieces as well.

You mentioned EPA, EPA is setting up a number of incredibly important programs, and we are trying to work hand-in-hand with them to make sure that they get the biggest bang for buck from their efforts going forward as well.

So this is something we are going to—to your point—on using you as outreach, leveragers, you know, your communities better than we do. And so, we will absolutely do that with you, and with other Senators, and look forward to that kind of engagement.

Senator SHAHEEN. Well, thank you. And I am glad you mentioned FEMP, because one of my other questions was going to be about what we are doing to help Federal entities with energy savings. We have the Cold Regions Research and Engineering Lab in Hanover, New Hampshire, which is a very important lab for the Federal Government. I know that they would like additional opportunities to save energy. And as well as the White Mountain National Forest where they have a very inefficient building that is too small, they welcome over 60,000 visitors a year, we need to help them build a new building that is compliant with our climate goals. So thank you very much. Thank you, both.

Secretary Hruby, I had a chance to see you at the Armed Services, so you answered my questions then. Thank you.

Senator MURRAY. Thank you. Senator Hagerty.

MANAGEMENT AND OPERATIONS CONTRACTS FOR Y-12 AND PANTEX

Senator HAGERTY. Thank you. Administrator Hruby, I would like to come back to you. It is good to see you again. I wanted to go over a couple of topics that we talked about last year when you were before the committee. The management and the operation contract for the Y-12 National Security Complex, and the delays, that I know frustrate you, and the cost overruns that are associated with the construction of the UPF, the Uranium Processing Facility there in Tennessee.

My first question on the management and the operations of Y-12 can you give me an update on the time line for the new competition that is underway there?

Ms. HRUBY. I can. We extended the contract at Y-12 through September 2025. There are some options to extend beyond that. But that is our target, 2025. As I think you know, we are doing the competition for Pantex first, and then we will follow it with the competition for Y-12.

Senator HAGERTY. Y-12.

Ms. HRUBY. The Pantex draft RFP is on the street, in fact comments are due back next week, so we are moving along with that

schedule. We are trying to get more input, do some new things in that contract which I think will help us with stability, for both of those sites, going forward.

Senator HAGERTY. On your decision to split Pantex and Y-12, can you give me a little more color in terms of the thought process there.

Ms. HRUBY. Yes.

Senator HAGERTY. How do you think that will work?

Ms. HRUBY. Absolutely. Yes. So the decision to split the contracts was because both of these sites—well, first, as you know, they used to be separate.

Senator HAGERTY. Mm-hmm.

Ms. HRUBY. We combined them back when it looked like our—we envisioned a complex that was smaller, more consolidated, and therefore combined these two contracts. What we have found is that the geopolitical environment is such that we are no longer consolidating. In fact, we are adding responsibilities at both of these sites that are pretty substantial. And they are quite different from one another in terms of the work that they do. So, we felt that concentrated leadership both from the Federal side and the contractor side, was really important at both sides; and that for all the growth, both in terms of construction projects and program growth, we really needed the sites to have dedicated leadership again.

COMPLETION OF Y-12'S URANIUM PROCESSING FACILITY

Senator HAGERTY. Let me move on to another topic we have discussed, that is on the UPF again. Congress has already appropriated over \$5.5 billion for the project, originally it was supposed to be delivered by 2025, and it was not to exceed \$6.5 billion. Can you give me an update on where we are with the schedule, and the funding for that?

Ms. HRUBY. Yes. Unfortunately, on UPF, it looks like we are 3 to 4 years behind. We are trying really hard to meet the 3, it sounds terrible, but to not be further than 3 years behind. There is some good science about this that we have been able to increase the workforce, we have completed pretty much all of our equipment buys now, on UPF, and we are in the phase of construction that is more predictable and reliable, assuming that we can get the workforce there, and that is looking good, but—

Senator HAGERTY. Well, with the time line expansion, I know that means an expansion of cost too, so I appreciate your continued diligence on this, to try to manage it.

PRODUCTION OF TRANSFORMERS AND ELECTRICAL STEEL COMPONENTS

I want to turn back to you, Deputy Secretary, for just a moment, on an issue that Secretary Granholm raised with the Senate Energy Committee last month. She said that an additional \$1- to \$2 billion investment injection is needed to boost domestic manufacturing rhythm structure, yet the President's budget only requests \$75 million for the Office of Manufacturing and Energy Supply Chains, that can be used to accelerate the production of domestic energy technologies, including, I am going to quote, "Critical power grid infrastructure, like transformers."

This is an area I have got a deep concern in. We have got a real choke point in transformer capacity in the United States. So, my question is, why does the budget only request \$75 million, if the Secretary is indicating we need a lot more funding for this?

Mr. TURK. Well, thank you, Senator for raising this issue. This is a real challenge right now on transformers, and I have had several conversations, I am sure you have with utility executives—

Senator HAGERTY. Yes.

Mr. TURK [continuing]. And others in this business about just how critical the challenge is right now. We have got something called our Electricity Sector Coordinating Council, made up of CEOs across the industry. We created a Tiger Team to explore this issue, and try to make sure that we have got good analysis, both on the challenge side, and then what we need to do, going forward.

I know there is some funding, as you have said, in the fiscal year 2024 budget request, I will say I don't think that is enough. I think we need more. And there have been very good conversations with Members of Congress, including for last year's Supplemental, last year's Omnibus that, unfortunately, did not come to fruition for a significant amount of additional funding.

So happy to have further conversations and appreciate your—

Senator HAGERTY. I would appreciate if you would follow up with my staff on this. It is a national security issue.

Mr. TURK. Absolutely.

Senator HAGERTY. And it is not just the transformers, it is the electrical steel components that go into it as well. But these are real choke points that—as you know.

Mr. TURK. I completely agree.

Senator HAGERTY. A critical national security issue. Thank you for updating us on that when you get your team together with ours. Thank you.

Mr. TURK. Right.

Senator MURRAY. Thank you. That will end our hearing today. And I want to thank the witnesses and my colleagues for participating in today's hearing. I look forward to working together on this year's appropriations bills, to make sure that we provide the Department of Energy and National Security Administration the resources that you need.

I will keep the hearing record open for 1 week. Committee members who would like to submit written questions for the record should do so by 5 p.m., Wednesday, May 17.

We appreciate both of you for being here, and for the Agencies responding to those questions in a reasonable amount of time.

CONCLUSION OF HEARINGS

With that, we stand adjourned.

[Whereupon, at 11:20 a.m., Wednesday, May 3, the hearings were concluded, and the subcommittee was recessed, to reconvene subject to the call of the Chair.]

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