Final Transcript

NNSA Surplus Plutonium Disposition EIS Scoping Virtual Public Meeting

Held on Monday, January 25, 2021

National Nuclear Security Administration

FINAL

NNSA SURPLUS PLUTONIUM

DISPOSITION EIS SCOPING

VIRTUAL PUBLIC MEETING

HELD ON

MONDAY, JANUARY 25, 2021

MR. GOODMAN: -- will be your moderator for this evening's meeting. I work at Pacific Northwest National Laboratory, which is under contract to the National Nuclear Security Administration to support this program.

We have a number of NNSA employees on the call that you'll be hearing from, including Jeff Galan, the NEPA document manager, which means he's the project manager for this EIS; and Virginia Kay, an office director in the Office of Material Management and Minimization and manager over the Surplus Plutonium Disposition Program.

It looks like right now we have 57 participants on the webinar outside of the -- the panelists. And we are very appreciative of the time that you've taken this evening to join us.

So first off, we certainly hope that everybody is saying -- staying safe and healthy

during the ongoing pandemic. Obviously, we are holding this meeting online, as in-person meetings are not feasible at this time. And so we appreciate your interest in the project and your efforts to join us for this virtual and phone scoping meeting. Please bear with us as we attempt to use this technology and run this virtual meeting as seamlessly as possible.

Since it's not as obvious as getting in line in an in-person scoping meeting, we will do our best throughout the meeting to make it as clear as possible how to provide a comment. Currently, all attendees except for the presenters are currently muted. Our WebEx producer, Catherine, will unmute both people on the webinar and those calling in over the phone when it is your turn to provide a comment.

If you are interested in making a comment and you are logged into the webinar, somewhere on the bottom right of your screen, you will see a hand icon. If you press that button to raise your hand, we will add you to the comment queue in the order in which you raised your hand.

If you have called in over the phone, as opposed to being logged into the webinar, please press Star 3 to be added to the telephone queue and

Star 3 to lower your hand again after you've had the opportunity to comment.

When we start the comment portion of the meeting, we'd like to start with Tribal, Federal, State, and local elected officials and representatives. If you're in that category, please raise your hand and note for our WebEx producer, Catherine, that you are an elected official by sending her a message in the chat box at the bottom right of your screen.

Please note that the -- the chat box is not for comments to be submitted. It's reserved for you to identify yourself as a government official or if you're having any technical issues with the WebEx. And we will get into how you can provide your comments in writing later in the presentation.

So first off, a little project background. NNSA is developing the Surplus Plutonium Disposition Program Environmental Impact Statement as required by the National Environmental Policy Act, or NEPA. The NEPA process is intended to ensure that public officials consider the environmental effects of proposed actions and alternatives in order to foster better decision-making and to provide opportunity for public involvement, including early

participation during the scoping process. Public scoping is an important aspect of the NEPA process, and we appreciate you being here.

Tonight, NNSA will be providing an overview of its mission as it relates to this EIS. In addition, there will be a brief description of the NEPA process and NNSA's environmental review process as well as a short explanation of the history of plutonium disposition and relevant past analyses.

Finally, NNSA will provide a description of the purpose and need for this action, an explanation of the Proposed Action, and a description of the alternatives that will be included in the EIS. However, the alternatives have not yet been finalized. Your input is important and valued as NNSA proceeds into developing the EIS and refining its analysis.

The input received during scoping will be summarized and incorporated into the EIS, and NNSA will consider all relevant input as the Draft EIS is developed. After the Draft EIS is published, additional meetings will be held to allow you to provide input on that document.

So tonight's meeting will proceed as

follows: After I'm done with the background and logistics, we'll proceed into a presentation, giving some context and background for the project, and we'll describe the NNSA mission, the description of the NEPA process, and the environmental review process, a description of the history of plutonium disposition and relevant past analyses, and a description of the purpose and need for action, preliminary alternatives and options, environmental issues of potential concern, and the process and timeline for the project. After the presentation, which we expect will take maybe an hour or so, we'll proceed into the open public comment period.

The meeting is scheduled tonight for four hours, or until 9:00 p.m. Eastern, 7:00 p.m. Mountain. We will keep the webinar and phone lines open until the four hours have elapsed. We will do our best to make sure that everybody has an opportunity to make a comment, if interested. All comments received orally here tonight will be transcribed by a court reporter and will be considered as part of the development of the Draft EIS.

Please note that if you do not provide a comment here orally in this meeting or, if time runs

short and we can't get to everybody, you have a number of other options to provide your scoping comment. First off, we're having an identical meeting tomorrow night starting at 7:00 p.m. Eastern, 5:00 p.m. Mountain. You may provide a verbal comment at that meeting. Or you can make -- provide your comment by phone, mail, or email. And we'll show those opportunities later in the presentation.

If you've already submitted a comment, you do not have to provide an oral comment tonight, but you're welcome to do so. All comments received, regardless of the mechanism or forum for doing so, will be considered equally.

So again, we recognize that some folks are logged onto the WebEx webinar tonight, and you can see the slides. Some people have just called in on the phone and cannot see the slides. For those that have internet access right now, if you search NNSA NEPA Reading Room on the internet, the very first link will take you to a webpage that has a link to the PowerPoint presentation that we'll be giving at this meeting, a fact sheet, and a question-and-answer document. And there's also a document regarding some ground rules and tips for this

webinar and how to provide a comment in this forum. And you can provide -- you can find at that website the phone number, address, and/or email address for you to provide your comment.

The link to that NNSA Reading Room was also in the newspaper and other announcements for this meeting. And again, we'll be providing that information in a slide later in the presentation. For now, please note that the scoping period ends on February 1st.

I will now turn to Catherine, our WebEx producer, who will provide additional information for how to get into the queue for those that would like to make an oral comment at tonight's meeting.

MS. HEGWOOD: Thank you, Dave.

Hello, everyone. My name is Catherine. I will be the WebEx producer for your -- for this event tonight. Down on the bottom-right side of your screen, you will see two -- it says Chat, and then there's a Participants bubble. If you click on the Participants bubble, that will open the Participants panel, and you will be able to see the panelists' names listed there.

If you scroll down on the bottom of that panel, there will be a little hand. If you click on

that, that will put you in the queue to be able to ask a question or to pose a comment.

If you have any technical issues using the WebEx, you can click on the Chat and type in your question or your issue. And I will help you walk through getting those resolved for you.

MR. GOODMAN: Great. Thanks, Catherine.

MS. HEGWOOD: Thank you.

MR. GOODMAN: So we also have a Spanish translator, Alvaro (phonetic), available for those that would like to make a comment in Spanish. And we've posted Spanish language copies of the PowerPoint presentation, fact sheet, and Q&A on the project website.

Alvaro, can you please introduce yourself, explain where those documents can be found and provide directions on how folks can get into the queue?

THE INTERPRETER: (Speaking in Spanish).

MR. GOODMAN: Thank you, Alvaro.

So with that, I will turn the presentation over to Jeff Galan, the NEPA document manager, and Virginia Kay, the manager of the SPDP project, who work in the NNSA Office of Material Management and Minimization and who will be walking us through the

PowerPoint presentation, providing information on the project and this EIS.

MR. GALAN: Good evening. My name is Jeff Galan, as I was just introduced. And I'm the NEPA document manager for the Surplus Plutonium Disposition Program EIS.

First, let me provide you with a brief explanation of what the National Nuclear Security Administration is and then what the Office of Material Management and Minimization does.

Just so you know, I am an NNSA employee and a member of the Office of Material Management and Minimization. As a NEPA document manager for this EIS, my primary role is as the project manager for this effort. I'm also the primary contact for any questions or comments you might have regarding this EIS. My contact information is at the end of this presentation and was included in the newspaper and other announcements that were made for this meeting.

All right. We need to be on the next slide, please, slide 4. One more.

MR. GOODMAN: Sorry, Jeff. I'm having some issues with the slides. It keeps --

MR. GALAN: It's all right.

MR. GOODMAN: -- moving, and I'm not touching it. So all right. You're trying to be on this slide, yes?

MR. GALAN: Previous one.

MR. GOODMAN: Ah.

MR. GALAN: Oh, no. You had it. Got to love technology.

All right. So first of all, you know, I wanted to -- you know, what is the National Nuclear Security Administration? We also refer to it as NNSA. NNSA is a semi-autonomous agency within the United States Department of Energy, or DOE. It maintains and enhances the safety, security, and effectiveness of the U.S. nuclear weapons stockpile. But one of our other primary responsibilities is preventing nuclear weapons proliferation and reducing the threat of nuclear and radiological terrorism around the world.

You may also wonder what the Office of Material Management and Minimization is. What -- we also refer to it as M-cubed. The Office of Material Management and Minimization is an NNSA office responsible for minimizing the use of and, where possible, eliminating weapons-usable uranium and plutonium around the world. This is the office that

has been charged with dispositioning 34 metric tons of plutonium that's been declared excess to national defense needs.

All right. Next slide.

All right. So why are we taking this action? What is our purpose and need? What does NNSA -- why does NNSA want to disposition 34 metric tons of surplus plutonium? Well, the action that we're discussing fits in with NNSA's mission to reduce the threat of nuclear weapons proliferation worldwide by dispositioning surplus plutonium in the United States in a safe and secure manner, ensuring that it can never again be readily used in nuclear weapons. To that end, NNSA will disposition 34 metric tons of surplus plutonium in a safe manner and in a reasonable time frame at a cost consistent with fiscal reality -- fiscal realities.

All right. So now let's talk a little bit about the National Environmental Policy Act, or NEPA, its purposes and processes. NEPA requires a process for any major Federal action that may significantly affect the quality of the human environment. The purpose of the -- the purpose of the NEPA process is to ensure that public officials consider the environmental effects of the proposed

actions and alternatives in order to foster better decision-making and to provide opportunity for public involvement, including early participation during the scoping process, like this, like tonight.

All right. Next slide.

All right. What is the planned timeline for this NEPA review? Now, first of all, I want to make it clear. These are estimates associated with -- with what we, you know -- kind of how -- how we're going to proceed. But it gives you a basic idea of our timeline. Now, the public scoping period for this EIS is 45 days. And it opened December 16th in 2020 when the Notice of Intent was published in the Federal Register and will continue through February 1st of 2021. Tonight's scoping meeting is part of this public process.

And you can see there -- there are preliminary estimates for other key dates in this NEPA effort. Once public scoping ends, NNSA will begin drafting the -- well, preparing the Draft EIS. Our goal is to have the Draft EIS finished and published by late December 2021. So there's some dates you see here. Again, those are just placeholders, but that's what our goal is.

The Draft EIS will include a summary of

all the scoping input received from the public as well as from Tribal, Federal, State, and local governments.

Well, once the Draft EIS is published, there's another 45-day public comment period. And in our current schedule, we'd like to issue a Final EIS by mid-November of 2022 with a Record of Decision published in mid-December 2022. But again, these dates are subject to change.

All right. Next slide.

All right. All right. Next, let's briefly discuss the background and history. I'm not going to discuss every item listed on this slide, but just highlight a few. A more detailed history of the various NEPA actions was provided in the Notice of Intent published for this EIS. There is a link on the NNSA NEPA website. In addition, the relevant history is included in each of the documents referenced on this timeline.

First, the process for disposing of surplus plutonium began about 25 years ago when DOE completed the Storage and Disposition of Weapons-Usable Fissile Materials Programmatic Environmental Impact Statement. And that was done in 1996. In this PEIS, DOE evaluated deep borehole,

immobilization, and reactor alternatives, each with sub-alternatives, for dispositioning surplus plutonium.

In 1997, there was a Record of Decision where NNSA documented its decisions to immobilize some or all surplus plutonium for disposal in a geologic repository, possibly fabricate some surplus plutonium in mixed oxide, MOX, fuel for irradiation in commercial reactors, and to consolidate storage of pit plutonium at Pantex, and to consolidate storage of non-pit plutonium at SRS.

In 1999, DOE completed the Surplus Plutonium Disposition Environmental Impact Statement, the SPD EIS. In the SPD EIS, DOE evaluated immobilization alternatives and MOX fuel fabrication alternatives, as well as siting alternatives for the Mixed-Oxide Fuel Fabrication Facility, a pit disassembly and conversion facility, and an immobilization facility. Since then, proposals on how to permanently disposition of surplus plutonium changed several times, and at -- and each step has been supported by an assessment of the impacts to the environment, as NEPA requires.

In 2015, NNSA completed the Surplus Plutonium Disposition Supplemental Environmental

Impact Statement, the SPD Supplemental EIS. In the SPD Supplemental EIS, NNSA evaluated the MOX Fuel Alternative; the WIPP Alternative, which is also referred to as plutonium downblending or dilute and dispose; and two variations on immobilization for disposition of 6 metric tons of non-pit plutonium and 7.1 metric tons of pit plutonium. This 13.1 metric tons of surplus plutonium, for which a disposition path had not previously been assigned, was in addition to the 34 metric tons NNSA decided to disposition using the MOX approach.

In 2016, NNSA issued a ROD, a Record of Decision, to dispose of the six metric tons of non-pit plutonium using the WIPP Alternative, dilute and dispose. Using that approach, NNSA is currently diluting the six metric tons of non-pit plutonium with an adulterant using modified or existing facilities, packaging that material as contact-handled TRU waste, and shipping it to WIPP for emplacement.

In addition, in 2020, NNSA prepared a Supplement Analysis, an SA, based on the analysis presented in the 2015 SPD SEIS to evaluate using the dilute and dispose approach for disposition of 7.1 metric tons of non-pit plutonium. And then NNSA

subsequently issued an Amended ROD, an AROD, to use dilute and dispose to disposition the 7.1 metric tons of the 34-metric-ton mission. This was done to support efforts to disposition material that was consolidated in South Carolina.

I know this was complicated. This is a complicated slide. So I encourage you to read a more detailed history of the various NEPA actions provided in the Notice of Intent that we published for this EIS. And like I mentioned, there's a link to the NOI on the NNSA NEPA website.

Now I'm going to turn over the presentation of the next few slides to Virginia Kay.

Virginia?

MS. KAY: My name is Virginia Kay. And I'm the director of the Office of Materials Disposition, the office that's responsible for the management and permanent disposition of inventories of weapons-usable nuclear materials that are in excess of national security requirement.

A large part of this portfolio in this office is the Surplus Plutonium Disposition Program. I very much appreciate your interest in our program and most certainly appreciate your attendance at tonight's scoping meeting as we begin the

preparation of a comprehensive Environmental Impact Statement for the Surplus Plutonium Disposition Program.

In terms of the Proposed Action, the Proposed Action in this Environmental Impact Statement is the reconsideration of the disposition pathway for 34 metric tons of plutonium that is in excess of defense needs of the United States. The 34 metric tons of material under consideration in this EIS is comprised of both pit and non-pit plutonium. Pit plutonium comes from the central core of a nuclear weapon, and it's in metal form, while non-pit plutonium may be in either a metal or oxide form. But it's still considered weapons-usable material.

Over the last two and a half decades, DOE has studied many alternatives and locations for the Surplus Plutonium Disposition Program. DOE had previously decided to disposition the 34 metric tons of plutonium by fabricating oxidized plutonium into Mixed Oxide, or MOX, fuel for irradiation and domestic commercial nuclear power reactors to produce electricity. However, the MOX fuel disposition path is no longer a viable alternative, as the MOX project was terminated in 2018 and the

former Mixed Oxide Fuel Fabrication Facility is currently being repurposed for another NNSA mission.

NNSA needs to complete the analysis in this EIS to determine a disposition process and strategy that can be safely executed in a reasonable time frame at a cost consistent with our current fiscal realities. To maximize efficiency, NNSA has proposed to implement proven technologies that are based on processes that require a minimal research and development and, therefore, minimizes deployment time.

NNSA's preferred alternative for disposition of the 34 metric tons of surplus plutonium, pit plutonium and non-pit plutonium, is the dilute and dispose approach, also known as plutonium downblending. Plutonium downblending is a proven technology previously being used and currently being used within the DOE complex.

In summary, the dilute and dispose approach requires disassembly of pits, conversion of pit and non-pit metals to an oxide form. The plutonium oxide is then blended with an adulterant mixture in a dry process. This produces a diluted product that is not readily usable for weapons and can be safely disposed of as transuranic waste at

the Waste Isolation Pilot Plant in New Mexico.

The dilute and dispose approach would require new, modified or existing capabilities within the DOE complex. And sites under consideration for this program are the Savannah River Site, Los Alamos National Laboratory, the Pantex Plant, and the Waste Isolation Pilot Plant.

As Jeff pointed out earlier, today, the dilute and dispose approach is currently being used to disposition six metric tons of non-pit plutonium that is not considered part of the 34 metric tons. Additionally, most recently, in August 2020, DOE decided to disposition an additional 7.1 metric tons of surplus non-pit plutonium using the dilute and dispose approach in order to support efforts to disposition material that was consolidated in South Carolina. That 7.1 metric tons of plutonium is part of the 34 metric tons that was originally designated for fabrication into MOX fuel.

Slide 11 presents a high-level system overview depicting the major steps in the surplus plutonium disposition process using the dilute and dispose approach. The intent of this diagram is to highlight the major steps in the process and -- and, in no way, shape, or form intended to address every

detailed step that -- that has to occur to ensure safe and successful execution of the dilute and dispose process.

Starting at the top-left corner and moving clockwise around the diagram, nuclear weapon pits are first disassembled using a lathe, which is shown in the first picture. The plutonium metal is then heated using a high-temperature furnace to form an oxide. Non-pit plutonium, if not already in an oxide form, is also converted into an oxide using a high-temperature furnace.

A disassembly lathe, furnaces, and associated equipment needed to convert plutonium metal to an oxide are located in a series of gloveboxes that separate workers from the hazardous material. The oxide is packaged into specialized containers, commonly called a DOE-3013 container, or an alternate configuration, such as a SAVY or can-bag-can, all of which are nested can configurations with multiple layers. These configurations are compliant with DOE standards for safe storage and transfer of plutonium.

Plutonium oxide-bearing containers and Blend Can Kits prefilled with an adulterant mixture are introduced into a glovebox used for dilution

processing. The second picture shows an existing glovebox at Savannah River Site, which is currently being used for plutonium downblending.

Continuing clockwise, the 3013 or alternate container is opened, and a specified amount of plutonium oxide is added to a blend can containing the adulterant mixture. The plutonium oxide and adulterant are blended using a mixture shown in the fourth photograph. The blend can is subsequently placed inside a robust outer container in order to reduce radiological exposure to workers. This downblending process results in a mixture that is not readily usable for weapons and can be safely disposed of as transuranic waste at WIPP. Once again, as a point of emphasis, the disassembly, oxidation, and downblending activities all occur within gloveboxes located within secure facilities.

After the downblend process is completed, the robust outer containers of diluted surplus plutonium are bagged out of the glovebox and packaged into Criticality Controlled Overpack containers, commonly called CCOs. These CCOs are metal drums that are approved for offsite shipment and disposal of downblended plutonium. The CCOs are characterized to ensure compliance with the WIPP

waste acceptance criteria; they're loaded into shipping containers, known as TRUPACT IIs; and then shipped to WIPP where the resulting transuranic waste is placed -- and placed over 2,000 feet underground.

Slide 12 shows the sites within the DOE complex where dilute and dispose activities would be performed. The majority of the 34 metric tons of surplus plutonium pit -- is in pit form, which is staged at the Pantex Plant in Amarillo, Texas. Surplus pits are packaged and shipped in approved shipping packages by secure transport to the Los Alamos National Laboratory in New Mexico, which main -- currently maintains the only capability within the complex to disassemble pits and convert pit metal to oxide.

The Savannah River Site in South Carolina has existing capability in the K -- the K Area Interim Surveillance glovebox within K Area at SRS to dilute plutonium oxide using the process as described on the previous diagram. And it's currently executing a capital project at Savannah River Site to install additional gloveboxes and support systems that would expand dilution capability and capacity at SRS.

Lastly, the Waste Isolation Pilot Plant in New Mexico is the final site and the pathway for underground disposal of diluted surplus plutonium as transuranic waste.

Okay. So moving on to slide 13, as we've previously stated, the dilute and dispose approach is the preferred alternative and is the only technological alternative currently proposed for the scope of the -- this EIS. The Department has extensively evaluated other technological alternatives in previous NEPA analyses and studies and does not believe that other technological approaches could be implemented in a cost-effective manner or within a reasonable timeline. However, NNSA will consider input from stakeholders on other possible alternatives as part of the scoping process.

The dilute and dispose approach would require new, modified, or existing capabilities at Pantex, Los Alamos, Savannah River, and WIPP. The options presented over the next several slides are variants, essentially, of the dilute and dispose approach, which range from a combination of facilities at several sites to multiple facilities at a single site. However, all the options as

presented result in a permanent disposition of the diluted surplus plutonium as transuranic waste at WIPP.

Slide 13 depicts those -- the preferred alternative as -- as has been proposed in the Notice of Intent. The preferred alternative -- under the preferred alternative, pits would be transferred from Pantex to Los Alamos for pit -- pit disassembly. Both pit and non-pit plutonium, if not already in an oxide form, would be oxidized at Los Alamos and packaged in a 3013 or alternate container for shipment to Savannah River Site. At Savannah River Site, the plutonium oxide would be diluted, packaged to CCOs, characterized to ensure compliance with waste acceptance criteria, and shipped to the repository for final disposition.

Next slide. Oh, already there.

Moving on to slide 14, which shows Option 1, as shown in this slide, Option 1 would provide capability for dilution of plutonium oxide and subsequent packaging, characterization, and shipment to WIPP from Los Alamos National Laboratory. In Option 1, LANL would have the full suite of processes required to disassemble pits, oxidize plutonium, dilute plutonium, and package the surplus

plutonium and ship the resulting transuranic waste to WIPP.

Also, under Option 1, Savannah River Site would maintain the capability for dilution, characterization, and packaging. So essentially, the backend processes supporting downblending -- the downblending portion of the dilute and dispose approach could be either performed at Los Alamos or Savannah River Site.

Moving on to slide 15, this shows Option 2. In Option 2, Los Alamos would process the nuclear weapons pits and send the pit plutonium oxide to Savannah River Site. However, a supplemental capability for oxidation of non-pit plutonium metal would be installed at Savannah River Site, allowing a portion of the oxidation processes to either be -- to either occur at Los Alamos or Savannah River Site. Both pit and non-pit oxide would then be diluted, characterized, packaged, and shipped to the repository from Savannah River Site.

Slide 16 shows Option 3. Option 3 entails new, existing, or modified facilities at Pantex, Los Alamos, and/or Savannah River Site. These facilities would provide the full suite of processes required to execute the dilute and dispose approach

from production of plutonium oxide through shipment of the diluted surplus plutonium to WIPP and would supplement or possibly replace existing or planned processes at Los Alamos or Savannah River Site.

Finally, this EIS will include a no -- an analysis of a no action alternative, which is shown in this slide. The no action alternative would consist of continued safe storage of surplus pit plutonium at Pantex and disposition of 7.1 metric tons of non-pit plutonium using the dilute and dispose approach, as previously described in the August 2020 Amended Record of Decision and as published in the Federal Register.

That's all I have in terms of describing the alternatives. Thank you very much for your time this evening. I look forward to your input and your comments.

And turning it back over to you, Jeff.

MR. GALAN: Great. Thank you, Virginia.

All right. We're on slide 18 now.

All right. When -- when a Federal agency undertakes an EIS, it must analyze a full range of environmental effects of the preferred alternative and of the reasonable alternatives identified in the Draft EIS. Here is a list of the environmental

topics that we plan on considering in the SPDP EIS. These include air quality, cultural resources, ecological resources, environmental justice, geology and soils, human health of workers and the public, the human health effects of accidents. And we'll also look at the effects of -- on the infrastructure, land and visual resources, noise, socioeconomics, transportation, waste management, and water resources.

Next slide.

All right. So finally, let's talk about the topics for consideration during this scoping process. NNSA is seeking comments from the public on the following aspects of the Surplus Plutonium Disposition Program EIS. We'd like to hear from you about the appropriate scope of the SPDP EIS. We'd like to hear from you about other reasonable alternatives that DOE should consider and environmental topics that DOE should evaluate in the EIS.

Well, that concludes our presentation on the SPDP EIS. Now it's time for the public comment portion of this meeting. How can you provide comments on this EIS? Well, today you can submit oral comments on the scope of the Surplus Plutonium

Disposition Program EIS, and they will be transcribed by a court reporter. You can also leave a message on voice mail at 803-952-7434. And you may mail your comment to me at Jeffrey Galan, NNSA Office of Material Management and Minimization, Savannah River Site, P.O. Box A, Building 730-2B, Room 328, Aiken, South Carolina, 29803. Or you may submit your comments by email to spdp-eis@nnsa.doe.gov.

If you've already provided a comment by phone, mail, or email, you do not have to provide it again tonight. However, you are welcome to do so. All comments will be treated equally, regardless of which method you choose to use.

Please remember that the comment period closes on February 1st, 2021. Please try to submit your comments before then. Any comments received after February 1st will be considered to the extent practical.

Thank you so much for your attention and your input. And now I'm going to turn it back over to Dave Goodman for the public comment portion of this scoping meeting.

Dave?

MR. GOODMAN: Great. Thank you, Jeff.

And thank you to both you and Virginia.

I recognize that was a lot of information in a short amount of time, but we hope that addresses some of your questions about the program and the scope of this Environmental Impact Statement. Again, if you'd like more information, we encourage you to read more on the project website.

So we are just about ready to begin the public comment period of the meeting. I think we were planning -- it went a little quicker than I think we were expecting, which is great. It provides more time for -- for comments. But why don't we go ahead now and take a 10-minute break, and then we will proceed with starting in the queue for comments.

Again, if you are on the webinar and you would like to provide a comment, please press the hand on the lower-right side of your screen to get into the queue. And we will unmute your line when it is your time to speak. Periodically, we will also check in to see if there are folks on the phone that would like to participate. If you're on the phone and you would like to raise your hand, please press Star 3, and you will get in the queue. And

then we'll unmute you when it's your turn. We'll start with some comments from the webinar, and then we'll shift over and see if there are comments on the phone.

So right now, I have it at 5:44 p.m. Eastern. Why don't we go ahead and take a 10-minute break, allow folks to get into the queue if they haven't already, and allow our folks to organize the queue. And at 5:55 p.m., we will come back and start with the public comment period. So thank you very much.

(WHEREUPON, a recess was taken.)

MR. GOODMAN: So once again, for the folks on the webinar, we are in the midst of a break here. Again, if you would like to -- if you're on the webinar and you would like to get in the queue to provide a comment, please raise your hand using the hand button on the lower-right side of the screen. If you're on the phone, please press Star 3 to raise your hand.

And I think we are realizing that a 10-minute break might be a little long for these purposes. So we're going to get going in just a minute or two, and hopefully folks have had the opportunity to get a snack, have time to go to the

bathroom, and we'll get going here again very shortly.

(WHEREUPON, a recess was taken.)

MR. GOODMAN: Okay. I think for the purposes of being respectful with everybody's time, we're going to go ahead and get started with the comment portion of the meeting. Again, we would like to start the public comment portion of the meeting with Tribal, Federal, State, and local elected officials. Hopefully, you have raised your hand and noted in the chat to our host, Catherine, that you are an elected official to get to the top of the queue. If you haven't done that, please do.

With that, we're going to start and -- and request that comments be no longer than three minutes. And I will track that on a timer that I am going to share right now, hopefully.

And can I get confirmation from Catherine or somebody else that you can see the three-minute timer on the screen?

MS. HEGWOOD: Yes, I can.

MR. GOODMAN: Great. Okay. So as your time begins to run short, I'll try to let you know. When your time expires, I will respectfully ask you to conclude.

We appreciate you being respectful of the project staff and your fellow members of the public. We certainly don't anticipate that this will be an issue. But in order to make sure everybody has the same amount of time to comment, we may need to mute your line after three minutes. If time permits, when everybody has had the opportunity to provide their comment, you may have the opportunity to provide a second comment.

So once again, if you're interested in making a comment and you haven't already got in the queue, please press the hand button on the right side of the screen. Or if you're on the phone, please press Star 3 to get into the queue.

Okay. So let's begin. First, we're going to receive comments from Tribal, Federal, State, and local officials.

Catherine, do we have any of those on the line and ready to make a comment?

MS. HEGWOOD: Yes, we do. We're going to start off with Joe Wilson.

Joe Wilson, you are unmuted.

CONGRESSMAN WILSON: Catherine, thank you.

And ladies and gentlemen, I want to thank Virginia, Jeff, and Dave.

Good evening, everyone. As the National Nuclear Security Administration acts on its promise to remove plutonium from the State of South Carolina, I support the effort related to the preparation of that Environmental Impact Statement to the Surplus Plutonium Disposition Program.

Moving this material out of South Carolina is a top priority for South Carolinians. The installation of three new gloveboxes, ventilation, fire protection, and other support equipment in the K area will expand the current capability of the site to dilute and dispose of plutonium, accelerating the removal.

The Savannah River Site continues to prove itself as a leader in safety and experience, especially when handling these types of materials. Note the liquid waste contractor, Savannah River Remediation, and the management operations contractor, Savannah River Nuclear Solutions, have been awarded safety achievement awards over the past year.

There is overwhelming community support for the site as it goes to a talented workforce with significant accomplishments. I know this firsthand as a former staff member myself at the site and the

only member of Congress to have ever worked at the site.

As we continue to seek innovative ways to dispose of the nuclear material safely and efficiently, I look forward to seeing the project come to fruition to lay the groundwork for the removal of plutonium from the State of South Carolina and our adjacent State of Georgia.

Thank you for your time and consideration. Best wishes for continued success. The congressional office in the 2nd District is grateful to serve. Thank you.

MR. GOODMAN: Congressman Wilson, thank you very much for your time and for joining us tonight. We appreciate your comment.

CONGRESSMAN WILSON: (Inaudible).

MR. GOODMAN: Catherine, do we have any other Tribal, Federal, State, or local elected officials?

MS. HEGWOOD: I do not see any at this time.

MR. GOODMAN: Okay. Then with that, can we just move on to members of the public?

MS. HEGWOOD: All right. Great. Our next speaker will be (inaudible).

MR. GOODMAN: Catherine, I think you went on mute right as you started saying the name.

MS. HEGWOOD: Sorry about that.

Susan Everitt, you are unmuted.

MS. EVERITT: Thank you so much.

My name is Susan Everitt. I'm with the American Red Cross. And as the executive director for the American Red Cross of East Central Georgia, please accept these personal comments in support of SRS and the NNSA's effort related to its preparation of an EIS for its Surplus Plutonium Disposition Program, which will involve the Savannah River Site and other DOE sites across the nation.

SRS has been a vital partner with our American Red Cross for many years, and the support they provide allows our Red Cross to help alleviate human suffering in the Central Savannah River area. Last year alone, the support from SRS helped our local Red Cross to be disaster specialists responding to over 250 disasters; to be champions of our military veterans and their families, providing over 5,000 services; to be life savers by providing 40 percent of our nation's safe blood products; and to be educators, teaching over 3,200 people to save lives through first aid and CPR.

Quite simply, without the continued support of SRS, our local Red Cross would not be able to alleviate the significant amount of suffering in our community. I know that SRS employees have helped make the world safer for 70 years, and I am proud to have SRS representation on our Red Cross of East Central Georgia Board of Directors. I personally support the NNSA's proposed downblending plan, and I have full and complete confidence in the SRS workforce to safely and securely complete this mission.

Thank you for your time.

MR. GOODMAN: Thank you very much, Ms. Everitt, for your time and for your comment tonight.

Catherine, can you go to the next commenter?

MS. HEGWOOD: Sure. Thank you.

Our next comment -- comment is from Don Hancock.

Don, you are unmuted.

MR. HANCOCK: Hello. I'm Don Hancock with Southwest Research and Information Center in Albuquerque, New Mexico.

There are many deficiencies that demonstrate that this entire Environmental Impact

Statement process is fundamentally flawed. In three minutes, I will be limited to briefly mentioning just three of those many deficiencies.

First, the 1996 PEIS shown on slide 8 did not include the dilute and dispose alternative because disposition was to meet the spent fuel standard, which dilute and dispose does not. The 1996 PEIS specifically excluded WIPP as an alternative. Thus, there is no PEIS to support the preferred alternative of dilute and dispose at WIPP.

The NNSA NEPA process should stop until an adequate new Final PEIS is issued. We've long advocated for that. In 2020, the National Academy of Sciences, in its review of the Department of Energy's plan for disposal of surplus plutonium in the Waste Isolation Pilot Plant also recommended a PEIS. So there's no adequate legal or technical support for proceeding with the DEIS that you are proposing.

Second, according to another part of DOE, the Office of Nuclear Energy, in its Draft Versatile Test Reactor Environmental Impact Statement, 34 metric tons of surplus plutonium would be used for fuel for that new reactor starting in 2026. Probably various parts of DOE don't talk to each

other, but I'm now informing NNSA of that other DEIS. Since that Versatile Test Reactor DEIS states that it is a reasonable alternative for disposition of 34 metric tons of surplus plutonium, NNSA either has to include it as a reasonable alternative or state why it is not a reasonable alternative.

To be clear, my organization opposes the new reactor, but we would be pleased if NNSA also objects to using surplus plutonium in that reactor.

Third, WIPP is not a reasonable alternative for disposition of the 34 metric tons. According to the WIPP Land Withdrawal Act, the New Mexico DOE Consultation Cooperation Agreement, WIPP doesn't have the capacity for the 34 metric tons. Under the State of New Mexico's permit for WIPP, WIPP will be closing long before the 34 metric tons could get to WIPP.

So NNSA has to be considering long-term storage; the no action alternative; and an alternative that hasn't been mentioned in the Notice of Intent, the development of a new repository other than WIPP. I feel we should commence that effort right away.

Thank you.

MR. GOODMAN: Thank you, Mr. Hancock.

Catherine, do we have our next commenter?

MS. HEGWOOD: Great. Thank you.

Our next one is from Suzanne Jackson.

Suzanne, you are unmuted.

MS. JACKSON: All right. Thank you.

I'm Suzanne Jackson. I'm the executive director with ACTS. We are a local nonprofit with a mission to serve individuals and families living in poverty, the working poor, senior adults on fixed income, and individuals who are facing financial uncertainties due to loss of employment. We have served extensively during COVID-19, providing services across Aiken County, including many underserved and rural communities, which has been quite an undertaking.

I thank you for the opportunity to provide comments in support of the Surplus Plutonium Disposition Program EIS. ACTS has operated for more than 34 years. And during this period, we have experienced firsthand the impact of SRS in our community. The support the site provides to ACTS from a volunteer standpoint, as well as financially, is to be commended. Without the support of SRS and its employees, ACTS will be limited in the number of clients we serve annually.

In 2020, we served more than 11,000 households, impacting more than 18,000 individuals, many of whom are children and senior adults. We rely on more than 300 volunteers to help deliver these services. And employees from SRS have been, and continue to be, active participants in our volunteer workforce. During COVID-19, our partnership with SRS has been even more essential in our ability to serve individuals and families to present unique issues related to the pandemic.

We are one of many nonprofits in the CSARA that are grateful for the breadth of support that are received from SRS. For 70 years, SRS has been a vital community partner, not only providing an economic impact by helping to sustain our economy with direct and indirect jobs, but also in their support of local businesses and nonprofits with missions to support vulnerable populations with limited resources, thus enhancing the quality of life in our community.

As a citizen of Aiken County for 32 years, I have witnessed the impact of SRS in our community and their exemplary safety record and breadth of nuclear management and operations experience that has led, and will continue to lead, the day-to-day

operations. I support the Surplus Plutonium Disposition Program EIS at SRS, knowing the site has experience in plutonium downblending, taking into account environmental impact and safety of our community while supporting our national defense missions.

I'm appreciative of the longstanding partnership ACTS has had with SRS and the opportunity to express support of this important mission.

Thank you.

MR. GOODMAN: Thank you for your comment, Ms. Jackson.

Catherine, next commenter?

MS. HEGWOOD: All right. Our next one is from George Anastas.

George, you are unmuted.

MR. ANASTAS: Well, thank you. Good afternoon, all.

I have -- I'm in Albuquerque, and I have three points I'd like to raise. Several of the speakers mentioned that this downblended plutonium can never be readily used in nuclear weapons. I think we need some discussion about what is meant by not readily used in nuclear weapons.

The second point is that both speakers talked about fiscal realities. I'm under the impression that the production of this plutonium, 34 metric tons or 60 metric tons, cost many billions of dollars over time. And my calculations show close to $100 billion it cost to produce that plutonium in the 2019 dollars. And now we want to take that plutonium and dilute it, add an adulterant to it, and spend another billion or more dollars and put it in the ground. It doesn't make fiscal sense. And I think there should be a discussion in the EIS, if there is another EIS on this, on the cost benefit of burying billions of dollars' worth of plutonium.

The last point I'll make is that the Waste Isolation Pilot Plant was not permitted, was not evaluated for the disposal, for the burial, of weapons-grade plutonium. And New Mexico, as some of you may know, is known as the Land of Enchantment. If you dump 34 metric tons of weapons PU into WIPP, the motto for New Mexico will be no longer the Land of Enchantment, but the land of the world's largest plutonium ore body.

I will be submitting written comments in a day or two. I will email it to the address that was provided. Thank you very, very much.

The last point I made is that there are a number of people in support of this program. Perhaps they would like to host a repository where NNSA can place this adulterated plutonium either in South Carolina or Georgia.

Thank you very much for the opportunity to present these comments.

MR. GOODMAN: Okay. Thank you, Mr. Anastas.

Catherine?

MS. HEGWOOD: (Inaudible) -- sure. Thank you.

Forest Mahan, you are unmuted.

MR. MAHAN: Oh, thank you. Yes. My name is Forest Mahan. I'm the president of Aiken Technical College, and I wanted to speak a few minutes in support of this effort of the Savannah River Site and the NNSA.

For the last 70 years, the SRS has had a major impact in our community. And for 50 years, Aiken Technical College has helped meet their workforce needs. Over the course of the years, the Savannah River Site has evolved to meet past missions, current missions, and will evolve to meet future missions regarding national defense and

environmental cleanup.

I just wanted to express my support for this Surplus Plutonium Disposition Program and to assure everyone at the NNSA that Aiken Technical College will work very hard to ensure that this talented workforce will be in place as we take on this very important mission.

Thank you.

MR. GOODMAN: Great. Thank you, Mr. Mahan.

MS. HEGWOOD: Great. Thank you.

And our next speaker is Cynthia Weehler.

Cynthia, you are unmuted.

MS. WEEHLER: Thank you. I'm Cynthia Weehler. I live in New Mexico, and I grew up near Carlsbad. I'm with the Southwest Alliance for our Future. Thank you for taking comments, my concerns.

NNSA originally decided to turn the surplus plutonium into MOX fuel. Several years later, and over $6 billion of public monies later, it decided the plan wasn't feasible and was too expensive. This kind of decision-making does not give the public confidence in the decisions NNSA is making now.

I live on the designated route for

radioactive transport, along with thousands of others in New Mexico and hundreds of thousands of others in other states. Each shipment will move past my neighborhood at least twice.

LANL has a poor record of transporting these shipments safely. At the least, the DEIS must indicate exactly which routes will be used and how often. We risk losing our property and our health in an accident, and we're being forced into accepting this risk. Imagine if it were your community, your home, your school with children, your business.

NNSA and DOE are also breaking every promise made to the State of New Mexico that they originally agreed to, to the -- originally required to get New Mexico to accept the WIPP facility. The State did not agree to take this waste in perpetuity. And now you're breaking the legal and social contract to operate this facility. It's illegal.

To get New Mexico on board with WIPP, the DOE promised to locate other repositories around the country. New Mexico was never meant to be the sole state holding the burden of the nation's nuclear weapons waste.

Every state has benefitted from the nuclear arsenal. New Mexico has done enough, other states need to step up, and NNSA needs to fulfill its legal promise to New Mexico to not make us the nuclear waste dump of the nuclear weapons complex and our nation. We do not support this mission creep.

Thank you.

MR. GOODMAN: Thank you, Ms. Weehler.

MS. HEGWOOD: Thank you, Cynthia.

And the next speaker we have is Roger Nelson.

Roger, you are unmuted.

MR. NELSON: Thank you for doing this. Almost 15 years ago, I came up with the idea that dilute and dispose for weapons-grade materials was a much cheaper way to get rid of all of this weapons material. Nuclear weapons are a terrible thing, and we need to consider how to get rid of them.

And Don Hancock and others have a -- have a chance to be heroes as well because we can get rid of entire nuclear arsenals that threaten the world in one fell swoop. That's what this weapons-grade surplus plutonium program is all about.

So I'm going to up the game one more time,

Dan Hancock and George Anastas. I'm going to tell you that NNSA should include another alternative, the alternative of shipping pits directly -- no downblending, no oxidation steps. Ship the pits themselves to WIPP and dispose of them directly. It -- it removes the argument of how many billions or thousands of shipments will be required to go through people's neighborhoods. It also makes the cost of the program essentially miniscule -- in the millions, not the billions.

If you're going to get rid of 34 tons of pits, you can do that in less than 150 shipments. So let's just be smart about this. An alternative that NNSA should include in this EIS should be direct disposal of pits without the D&D part.

Thank you for your time.

MR. GOODMAN: Thank you for your comment, Mr. Nelson.

MS. HEGWOOD: Thank you.

And our next speaker is Jim Marra.

Jim, you are unmuted.

DR. MARRA: Okay. Thank you.

Good evening, everybody. My name is Dr. James Marra, and I personally support all plutonium missions at Savannah River Site, including the

storage, management, and disposition. SRS has the culture, the facilities, and the experience to support all these missions.

I would like to say, though, that I personally have a long history with the disposition of plutonium, starting at the inception of this program in the mid-1990s with the identification, evaluation, and development of disposition technologies. I also continued these efforts well into the 2000s.

I am -- as was said earlier, I am aware and have read the recent study and report by the National Academy of Sciences. In fact, I was one of the presenters to the NAS panel during their initial fact-finding missions. The report, I think, is an excellent review and provides several recommendations that I think need to be considered. Specifically, recommendations regarding safeguards and security, transportation, and regulatory compliance are outlined in that report. I think these considerations that were identified by the NAS should be considered for any and all proposed options for the disposition of plutonium.

Thank you very much for your attention.

MR. GOODMAN: (Inaudible).

MS. HEGWOOD: Thank you.

Our next speaker is from -- Joni.

Joni, you are unmuted.

MS. ARENDS: Hi. Good afternoon. Joni Arends, Concerned Citizens for Nuclear Safety based in Santa Fe, New Mexico.

My comments today are about the process. The link provided in the newspaper ad is not working. I ended up having to go to the NEPA website. I wrote these comments in the chat, and I would ask that they be included in our -- in the public comments.

But I am very concerned because -- about the problem with the link. We wonder how many people were discouraged by the flawed -- flawed link, and that's number one.

Number two, what's the name of the LANL operation for oxidizing the surplus plutonium? Is it the ARIES program, or is it another specific program at LANL?

Also, I would like the Draft EIS to discuss the valence phases of the plutonium that will be considered for oxidation.

With regard to the comments, I've seen some references that the comments are due February

1st, 2021, at -- at 3:00 p.m., the deadline for those people in the Mountain Standard Time Zone. Could you clarify that? Sometimes when NNSA has comment periods, we have until right before midnight in the various time zones. So if you could clarify that, I would appreciate it.

And I also want to add that I've been involved in this project since the first scoping meetings back in the mid-1990s. This is an ongoing problem. And as a New Mexican, CCNS supports fully the comments by Don Hancock of Southwest Research and Information Center. Don has summarized those points beautifully.

And specifically about Cindy Weehler's comments about the social contract with DOE and the State of New Mexico through the C&C agreement and also through other agreements that WIPP would not be the only repository, WIPP is currently scheduled to close in 2024. And other repositories are needed. One of the alternatives should be other repositories for this waste.

Thank you.

MR. GOODMAN: Thank you, Ms. Arends. Can you clarify for us the newspaper ad that you saw, which newspaper that was and the link that didn't

work?

MS. ARENDS: It's the full-page ad that was in the Santa Fe New Mexican on a Sunday a couple of weeks ago announcing these meetings. And then, also, with regard to the notice that you sent out recently, that link isn't working because I cut and pasted that link for our action alerts. It's really disappointing. Yeah.

MR. GOODMAN: Okay. I'm sorry to hear those links don't work. Again, if you do go to the NNSA NEPA Reading Room, all of the links there should work. I apologize if that got transcribed in the newspaper incorrectly or -- or cut off, or something like that.

MS. HEGWOOD: All right. Thank you.

And our next speaker is Rick McLeod.

Rick, you are unmuted.

MR. MCLEOD: Good evening. Rick McLeod. I'm with the SRS Community Reuse Organization. And I've already submitted to you a letter with my comments in it. We are supportive of the mission and, also, the site performing that mission.

I would like to see the -- part of the scoping for the EIS to be expanded on the socioeconomic front, give us a little bit better

picture on what the workforce looks like, what are the impacts expected in the region.

And then the other thing a little concerning is the timeline that this will take for the dilute method. Right now, we're looking at until 2049, I believe is the time frame. Thirty-eight years is a long time to operate a mission. I'm sure there will be new technologies developed between now and then. But I believe the EIS should discuss that and also discuss any type of ideas that NNSA has for expediting removal of this material.

We are basically right now a de facto storage site for the plutonium. So we are a disposal site whether we like it or not. So we look forward to getting this material out of the State of South Carolina as quickly as possible.

Thank you.

MR. GOODMAN: (Inaudible).

MS. HEGWOOD: All right. Thank you, Rick.

And our next speaker is Robin.

Robin, you are unmuted.

MS. SEYDEL: Hi. Good -- good afternoon. Thanks so much for doing this.

I would like to also confirm that the links in the email that you sent out did not work as

well as the links in the newspaper. And it took me a full hour to find you and get online. So I have missed quite a few of the comments. But I would like to say -- and I hope you do better next time for that because I think there are many people who just gave up because I was about to give up myself in -- in trying to voice some of the concerns I have.

And it's clear to me that when -- as a long-term resident here in New Mexico, we were promised by the DOE and -- and the NNSA, also, that WIPP (inaudible) very limited mission. And I clearly remember them talking about gloves and booties back then. Surplus plutonium is a whole lot more than gloves and -- and booties.

And so the broken promises that the DOE has made -- it -- it would make in this process would be the amount and kinds of waste that are coming to WIPP and the promise that they would find other sites. The gentleman just before me said we want to get this waste out of our state. Well, we don't want it in our state either. We -- we were promised a very limited mission for WIPP, closing in 2024. This expands that mission in a way that we do not consent to here in New Mexico.

And I think it behooves you all to take another look and find other sites and figure out other ways to deal with this surplus plutonium than transporting it twice across the country, basically, across almost the whole continent, for this dilution process and then storage at WIPP, a site that was not supposed to have this kind of waste in the first place.

Other than that, I hope that you will also slow this process down considerably because I think that there are a lot of people in our state and along the transportation realm who might not have access to this kind of public scoping hearing, public process, and would need to come in person after the pandemic. So I want to say that this is not a fair and just way to hold these kinds of hearings because many people, certainly in our state and rural communities, do not have the kind of access they need to participate.

Thank you. Thank you very much.

MR. GOODMAN: Thank you for your comment, Ms. Seydel. And I apologize that you had issues joining the meeting. It seems like there's a couple issues with maybe some cutting and pasting from newspaper advertisements.

I -- I would like to -- I -- I would say the best source of information and links that 100 percent do work would be found on the NNSA NEPA Reading Room. And I'll also -- if you -- it sounded like you -- you joined the meeting late. It means you probably weren't able to hear the presentation that was given. If you're interested, this meeting will be held again tomorrow night at 7:00 Eastern, 5:00 p.m. Mountain. And you can find those details on the NNSA Reading Room website.

MS. HEGWOOD: Okay. Great. Thank you.

Our next speaker is a phone-in-only speaker.

I am going to unmute you. Can you please announce your name? You are unmuted.

MR. MCCOY: Hello?

MS. HEGWOOD: Yes. We can hear you.

MR. MCCOY: Yes. This is David McCoy. I'm Executive Director for Citizen Action New Mexico, located in Albuquerque. Our organization is opposed to this idea that you're going to bring plutonium waste in any additional form to the WIPP facility.

One of the problems that I think is not adequately discussed, in addition to the issues that

Don Hancock brought up, is that: What are you going to do with all the additional waste from processing the plutonium -- the leftover gloveboxes, the radioactive junk that goes along with these kind of programs? And what are the chemicals that you're going to use in the so-called dilution process? You're proposing six times the amount of high-level waste, well, that's already in WIPP, or proposed for WIPP. So this is a massive increase that you're proposing.

The other issue is that this is a scoping proceeding. Are you going to have a transcript out in time that people can review some of these comments and incorporate them into written comments that they might want to file? I think February 1st is far too short a period for the closing of the scoping period, given the issues that are involved.

And that would conclude my comments. Thank you.

MR. GOODMAN: Thank you, Mr. McCoy.

MS. HEGWOOD: All right. Thank you.

And our next speaker is Tom.

Tom, you are unmuted.

(No audible response.)

MS. HEGWOOD: Tom Clements, are you there?

MR. CLEMENTS: Yes. I'm online. Can you hear me?

MS. HEGWOOD: Yes, we can hear you.

MR. CLEMENTS: Okay. Thank you. Yes. Sorry.

I had not intended to make an oral comment here. I prepared about six pages of written comments, and I'll be sending them in, in the coming days.

But I wanted to reiterate a couple of things. I also had problems accessing this event tonight via the link that was sent out by email and also via the link that was printed in The State newspaper here in Columbia, South Carolina. I had checked on the link in the email earlier today and saw there was a problem and did figure out another way to get in. But it -- it's really not acceptable that information you put out to access a meeting like this when so much time and resources have gone into it that -- that the links are -- are not working correctly.

And as long as I'm saying something, I -- I did want to reiterate the need for a Programmatic EIS, which the National Academy of Sciences has supported for plutonium disposition. And they cite

up to an additional 48.2 metric tons of plutonium, though I know that this EIS would only cover 34.

But it really goes far beyond what the NAS has said concerning a Programmatic Environmental Impact Statement. The fuel fabrication for the virtual -- Versatile Test Reactor at Savannah River Site or Idaho National Lab could produce up to six metric tons of plutonium, TRU waste that would need to go somewhere. The pit production for -- for nuclear weapons at the proposed plutonium bomb plant at Savannah River Site would also have a large amount of transuranic waste.

So it -- it appears that not only is NNSA not talking to other parts of DOE, particularly the Office of Nuclear Energy, but NNSA is not even speaking to itself. WIPP may well be oversubscribed when you throw in the additional amounts of existing transuranic waste. It's clear that -- that the facility doesn't have the capacity, and it should not be assumed that the license is going to be extended or that the Land Withdrawal Act volume cap is going to be allowed to be increased.

So here in South Carolina, we're looking at about 27 metric tons coming in for -- for dilute and dispose, 30 metric tons fuel fabrication for the

Versatile Test Reactor is here, and 7 metric -- 7.5 metric tons of plutonium if the pit production issue would go forward. That's a huge amount of plutonium. So I'm quite concerned that we could see more plutonium stranded in the State of South Carolina just like we have now. And I will expand on these things in my written comments.

Thank you.

MR. GOODMAN: Thank you, Mr. Clements. And -- and, again, apologies that link was broken. And we are glad that you were able to find a way around that and join the meeting tonight. And again, we'll try and get that resolved, particularly as it relates to people being able to access tomorrow night's meeting.

MS. HEGWOOD: All right. And it looks like that is all of our hands raised at this time.

MR. GOODMAN: Okay. That sounds good.

So again, if you are interested in providing a comment, if you've heard anything and you'd like to -- to add to that, please raise your hand either by pressing the hand button on the right side of the screen or by pressing Star 3 on your phone.

You know, we've provided the opportunity

for everybody to be heard once at this point, but we certainly have the time if folks like to make a second comment. I think we would welcome that. So you may re-raise your hand if you are interested in doing that.

And if there was, you know, any reason why you were not able to or did not want to make a comment orally in tonight's meeting, you continue to have a number of options for doing so by phone, mail, or email, as noted in the meeting announcements if you are able to access those.

Again, as noted, the scoping comment period ends February 1st.

We are going to leave the webinar and the phone lines open until the end of the advertised time. So you're welcome to, but are not required to, stay. And we'll check in periodically to see if there's anybody that joined late that would like to make a comment.

So now, if you've already made a comment and would like to make another comment, please do so by raising your hand again. And I'll give that a minute or two.

Catherine, if anybody re-raised their hand or has raised their hand for the first time, please

let me know.

MS. HEGWOOD: Great. Thank you, Dave.

We do have a raised hand.

Don, I'm going to unmute you. You are unmuted.

MR. MONIAK: Thank you. My name is Don Moniak. I live in Aiken, South Carolina.

This is old plutonium. And hazards of old plutonium, such as elevated americium levels, dictate minimum processing. Removing plutonium from SRS is a top priority, we are told by Joe Wilson. I am not surprised, and I'm not shocked that he said that. But at the same time, he did not raise any objections to additional plutonium imports. And this is after years of describing existing storage as plutonium dumping. This is after DOE sent $625 million in what is essentially extortion funds to South Carolina simply for storing plutonium here, as they promised to do.

So limiting the amount of plutonium sent to Savannah River Site should be a top priority. And the optimal means to accomplish this is to leave the pits as they are -- not disassemble plutonium pits, not convert the plutonium in those to oxide. That would also prevent dozens of tons of plutonium

from having to be sent to WIPP.

At the same time, DOE should address an additional alternative, that of demilitarizing plutonium pits via pit stuffing. This is a proven technology that was raised back in the late '90s, and it should be addressed again.

Avoiding pit disassembly conversion at this time is through continued storage or pit stuffing will eliminate unnecessary worker exposures, unnecessary transportation, unnecessary cost, and unnecessary processing and unnecessary waste.

Pits are best left as they are. They are already storage containers. The plutonium within them is the most stable form of plutonium that the labs have developed. Many, if not most, of the pits have no utility in the existing arsenal, and several are not even designed to be disassembled, mostly Livermore pits, as we all know. Stuffing them would remove any utility.

However, leaving plutonium in pit form is not equivalent to leaving it alone. The term "safe pit storage at Pantex" remains a misnomer. Another option for pit storage beyond the current 50-year time frame for Pantex storage should be addressed.

As for the Savannah River Site plutonium, consideration should be given to temporary storage at the abandoned plutonium MOX fuel plant after the option of fabricating new pits there is also abandoned. Thank you.

MR. GOODMAN: Thank you for your comment, Mr. Moniak.

Catherine, do we have anybody else that has raised their hand or re-raised their hand?

MS. HEGWOOD: I do not show any other raised hands at this time.

MR. GOODMAN: Okay. I think with that, we will take a break. I will stop the countdown here.

Catherine, would you mind sharing the PowerPoint? Oh, it's -- I think -- I think it is being shared right now.

So we'll take a short break, and I will check in periodically if anybody has joined the webinar and would like to make a comment.

Again, for those that are on the webinar and have provided their comment and have heard the presentation, we very much appreciate your time and your consideration and your comments here tonight. You are -- again, are welcome to -- to stay on the webinar if you'd like. If -- but, you know, I can't

guarantee that anybody else will -- will join and want to make a comment. So defer to you on that. But again, thank you.

(WHEREUPON, the line remained open without public comment from audio time 1:32:12 to 3:55:25.)

MR. GOODMAN: Okay. Can you see my countdown clock? It's at 15 seconds. That was the last person.

MS. HEGWOOD: We sure can.

MR. GOODMAN: It feels like New Year's to me.

MS. HEGWOOD: All right.

MR. GOODMAN: All right. Well, again, everybody, thank you very much for your -- for your time and your patience. And everybody, we really appreciate you sticking with us on this. And I guess we will improve some things, and we'll do it again tomorrow night.

MS. HEGWOOD: All right. Ladies and gentlemen, thank you for attending today's webinar. This concludes today's event. You may now disconnect your lines and have a great rest of your night.

MR. GOODMAN: Thanks, Catherine.

(WHEREUPON, the meeting was concluded.)

CERTIFICATE

I, Karynn S. Willman, do hereby certify that the proceeding named herein was professionally transcribed on the date set forth in the certificate herein; that I transcribed all testimony adduced and other oral proceedings had in the foregoing matter; and that the foregoing transcript pages constitute a full, true, and correct record of such testimony adduced and oral proceeding had and of the whole thereof.

IN WITNESS HEREOF, I have hereunto set my hand this 4th day of February, 2021.

Karynn S. Willman

$

$100 43:6

$6 45:20

$625 62:16

1

1 25:19 25:19 25:23 26:3

1:32:12 65:5

10 31:21

100 56:2

10-minute 30:14 31:6

11 20:20

11,000 41:1

12 23:6

13 24:5 25:4

13.1 16:7

14 25:18

15 26:10 47:15 65:7

150 48:12

16 26:21

16th 13:13

18 27:20

18,000 41:2

1996 14:24 38:4 38:8

1997 15:4

1999 15:12

1st 8:10 13:15 29:16 29:18 51:1 57:15 61:13

2

2 26:11 26:11

2,000 23:4

2000s 49:10

2015 15:24 16:23

2016 16:12

2018 18:25

2019 43:7

2020 13:13 16:21 20:12 27:12 38:13 41:1

2021 2:6 13:15 13:22 29:16 51:1

2022 14:7 14:8

2024 51:19 54:24

2026 38:24

2049 53:6

25 2:6 14:21

250 36:20

27 59:24

29803 29:7

2nd 35:11

3

3 3:25 4:1 26:21 26:21 30:25 31:19 33:14 60:23

3,200 36:24

3:00 51:1

3:55:25 65:5

30 59:25

300 41:4

3013 22:4 25:11

32 41:21

328 29:7

34 12:1 12:7 12:14 16:10 18:7 18:9 18:19 19:13 20:11 20:18 23:8 38:22 39:4 39:11 39:14 39:16 40:19 43:3 43:19 48:11 59:2

34-metric-ton 17:3

4

4 10:22

40 36:23

45 13:12

45-day 14:5

48.2 59:1

5

5,000 36:22

5:00 7:5 56:9

5:44 31:5

5:55 31:9

50 44:20

50-year 63:24

57 2:20

6

6 16:6

60 43:4

7

7 60:1

7.1 16:7 16:24 17:2 20:13 20:17 27:9

7.5 60:1

7:00 6:15 7:4 56:8

70 37:5 41:13 44:19

730-2B 29:6

8

8 38:4

803-952-7434 29:3

9

9:00 6:15

90s 63:5

A

abandoned 64:3 64:5

ability 41:9
able 8:22 9:1 37:3 56:6 60:11 60:14 61:7 61:11
Academy 38:13 49:13 58:24
accelerating 34:13
accept 36:9 46:16
acceptable 58:17
acceptance 23:1 25:15
accepting 46:10
access 7:19 55:13 55:19 58:18 60:14 61:11
accessing 58:11
accident 46:9
accidents 28:5
accomplish 62:22
accomplishments 34:24
according 38:20 39:12
account 42:4
achievement 34:20
across 36:13 40:13 55:4 55:5
Act 4:20 12:19 39:12 59:21
action 5:12 5:13 6:8 12:6 12:8 12:21 18:4 18:5 27:6 27:7 39:19 52:7 56:19
actions 4:23 13:1 14:15 17:8
active 41:6
activities 22:16 23:7
acts 34:2 40:7 40:18 40:21 40:24 42:8
ad 50:8 51:24 52:2
add 3:21 43:8 51:7 60:21
added 3:25 22:6
addition 5:6 14:17 16:10 16:21 56:25
additional 5:23 8:12 20:13 23:23 56:22 57:2 59:1 59:17 62:14 63:3
Additionally 20:12
address 8:3 8:3 20:25 43:24 63:2
addressed 63:6 63:25
addresses 30:4
adequate 38:12 38:17
adequately 56:25
adjacent 35:8
Administration 2:12 10:9 11:10 34:2
adulterant 16:17 19:22 21:24 22:7 22:8 43:8
adulterated 44:4
adults 40:9 41:3
advertised 61:15
advertisements 55:25
advocated 38:13
affect 12:22
afternoon 42:19 50:4 53:22
agency 11:11 27:21
ago 14:21 47:15 52:4
agreed 46:15
agreement 39:13 51:16
agreements 51:17
Ah 11:5
ahead 30:14 31:6 32:6
aid 36:25
Aiken 29:7 40:13 41:21 44:15 44:21 45:4 62:7
air 28:2
Alamos 20:6 23:13 24:20 25:8 25:11 25:22 26:8 26:11 26:17 26:23 27:4
Albuquerque 37:23 42:20 56:20
alerts 52:7
alleviate 36:16 37:3
Alliance

45:16
allow 5:23
31:7 31:8
allowed 59:22
allowing
26:16
allows 36:16
alone 36:18
63:22
already
7:10 21:9
25:10
25:17
29:10 31:8
33:11
52:20 57:8
61:20 63:14
alternate
21:18 22:5
25:11
alternative
16:3 16:3
16:14
18:24
19:12 24:7
24:8 25:5
25:6 25:7
27:6 27:7
27:23 38:5
38:9 38:10
39:3 39:5
39:6 39:11
39:19
39:20 48:2
48:3 48:13
63:3
alternatives
4:23 5:14
5:15 6:9
13:1 15:1
15:15
15:16
15:17
18:17
24:11
24:16
27:15
27:24
28:18 51:20
Alvaro 9:10
9:15 9:20
am 10:11
32:16 37:6
49:11
49:11
50:13
56:14 62:12
Amarillo
23:10
Amended
17:1 27:12
American 36:7
36:8 36:15
americium
62:9
amount 22:6
30:3 33:5
37:3 54:18
57:7 59:12
60:3 62:20
amounts 59:17
analyses 5:10
6:7 24:11
analysis 5:18
16:22
16:22 19:3
27:6
analyze 27:22
Anastas 42:16
42:18 44:9
48:1
and/or 8:3
26:23
announce
56:15
announcements
8:6 10:19
61:11
announcing
52:4
annually
40:25
answer 7:24
anticipate
33:3
anybody 61:18
61:24 64:8
64:18 65:1
anything
60:20
apologies
60:10
apologize
52:12 55:22
appears 59:13
appreciate
3:3 5:3
17:23
17:24 33:1
35:15 51:6
64:22 65:16
appreciative
2:22 42:7
approach
16:11
16:15
16:24
19:15
19:20 20:2
20:9 20:15
20:23 24:6
24:18
24:23 26:8
26:25 27:11
approaches
24:13
appropriate
28:16
approved
22:23 23:11
area 23:18
23:19
34:11 36:17
Arends 50:4
50:5 51:23
52:2
argument 48:6
ARIES 50:19
AROD 17:1
arsenal
47:2 63:17
arsenals
47:22
aspect 5:2
aspects 28:14
assessment
15:22
assigned 16:9
associated
13:8 21:13
assumed 59:20

assure 45:4
attempt 3:6
attendance 17:24
attendees 3:13
attending 65:20
attention 29:20 49:24
audible 57:24
audio 65:5
August 20:12 27:12
available 9:10
Avoiding 63:7
awarded 34:20
awards 34:20
aware 49:11
away 39:23

B

backend 26:6
background 4:17 6:1 6:3 14:12
bag-can 21:19
bagged 22:20
based 16:22 19:9 50:5
basic 13:10
basically 53:12 55:4
bathroom 32:1
bear 3:6
beautifully 51:13
begin 13:20 17:25 30:9 33:15
begins 32:23
behooves 55:1
believe 24:12 53:6 53:9
benefit 43:12
benefitted 47:1
best 3:11 6:18 35:10 56:2 63:13
better 4:24 13:1 52:25 54:4
beyond 59:3 63:24
billion 43:6 43:9 45:20
billions 43:4 43:13 48:6 48:10
bit 12:18 52:25
blend 21:24 22:6 22:9
blended 19:22 22:8
blood 36:23
board 37:7 46:21
body 43:22
bomb 59:10
booties 54:14 54:15
borehole 14:25
bottom 3:19 4:9 8:24
bottom-right 8:18
box 4:9 4:11 29:6
breadth 41:12 41:23
break 30:14 31:7 31:14 31:22 64:13 64:17
breaking 46:13 46:18
brief 5:6 10:7
briefly 14:12 38:2
bring 56:21
broken 54:16 60:10
brought 57:1
bubble 8:20 8:21
Building 29:6
burden 46:24
burial 43:16
burying 43:13
business 46:12
businesses 41:17
button 3:20 31:18 33:12 60:22

C

C&C 51:16
calculations 43:5
cap 59:21
capabilities 20:3 24:19
capability 23:14 23:18 23:25 25:20 26:4 26:14 34:11
capacity 23:25 39:14 59:19
capital 23:22
Carlsbad 45:16
Carolina 17:5 20:17 23:17 29:7 34:4 34:7 35:8 44:5 53:16 58:14 59:23 60:6 62:7 62:18
Carolinians 34:8
category 4:6

Catherine 3:14 4:8 8:11 8:16 9:7 32:11 32:18 33:18 33:23 35:17 36:1 37:15 40:1 42:14 44:10 61:24 64:8 64:14 65:24

CCNS 51:10

CCOs 22:22 22:22 22:24 25:14

Center 37:22 51:12

central 18:11 36:8 36:17 37:7

certainly 2:24 17:24 33:3 55:17 61:2

champions 36:20

chance 47:21

change 14:9

changed 15:21

characterization 25:21 26:5

characterized 22:25 25:14 26:19

charged 12:1

chat 4:9 4:11 8:19 9:4 32:11 50:10

cheaper 47:17

check 30:22 61:17 64:18

checked 58:15

chemicals 57:5

children 41:3 46:11

choose 29:14

Cindy 51:14

cite 58:25

citizen 41:21 56:19

Citizens 50:5

clarify 51:3 51:5 51:24

cleanup 45:1

clear 3:11 13:8 39:7 54:9 59:18

clearly 54:13

Clements 57:25 58:1 58:4 60:9

click 8:20 8:25 9:4

clients 40:25

clock 65:7

clockwise 21:5 22:4

close 43:5 51:19

closes 29:16

closing 39:16 54:23 57:16

College 44:16 44:21 45:5

Columbia 58:14

combination 24:23

comes 18:11

coming 54:19 58:8 59:24

commence 39:22

commended 40:23

comment 3:12 3:16 3:17 3:21 4:2 4:3 6:13 6:19 6:25 7:3 7:6 7:7 7:10 7:11 8:1 8:4 8:14 9:2 9:11 14:5 28:22 29:4 29:10 29:15 29:22 30:10 30:18 31:10 31:17 32:7 32:8 33:5 33:8 33:9 33:11 33:19 35:15 37:14 37:18 37:18 42:12 48:17 51:4 55:21 58:6 60:20 61:3 61:8 61:12 61:19 61:20 61:21 64:6 64:19 64:21 65:2 65:5

commenter 37:16 40:1 42:14

comments 4:12 4:16 6:20 7:12 10:16 27:17 28:13 28:24 28:25 29:8 29:13 29:17 29:17 30:13 30:16 31:2 31:3 32:15 33:16 36:9 40:17 43:23 44:7 45:17 50:7 50:10 50:12 50:24 50:25 51:11

51:15 52:21 54:3 57:14 57:14 57:18 58:8 60:7 64:23

commercial 15:9 18:22

commonly 21:17 22:22

communities 40:14 55:18

community 34:22 37:4 40:21 41:14 41:20 41:22 42:5 44:20 46:11 52:19

complete 19:3 37:9 37:11

completed 14:22 15:12 15:24 22:18

complex 19:18 20:4 23:7 23:15 47:5

compliance 22:25 25:14 49:20

compliant 21:21

complicated 17:6 17:7

comprehensive 18:1

comprised 18:10

concern 6:10

concerned 50:5 50:13 60:4

concerning 53:4 59:4

concerns 45:17 54:7

conclude 32:25 57:18

concluded 65:25

concludes 28:21 65:21

confidence 37:10 45:23

configuration 21:18

configurations 21:19 21:20

confirm 53:24

confirmation 32:18

Congress 35:1

congressional 35:11

Congressman 33:23 35:13 35:16

consent 54:25

consider 4:22 5:21 12:25 24:15 28:18 47:19

considerably 55:10

consideration 18:9 20:5 28:12 35:9 64:2 64:23

considerations 49:21

considered 6:22 7:14 18:14 20:11 29:18 49:17 49:22 50:23

considering 28:1 39:18

consist 27:8

consistent 12:16 19:6

consolidate 15:9 15:10

consolidated 17:5 20:16

Consultation 39:13

contact 10:15 10:17 16:18

container 21:17 22:5 22:10 25:11

containers 21:17 21:23 22:19 22:22 23:2 63:14

containing 22:7

context 6:3

continent 55:5

continue 13:14 35:3 41:6 41:25 61:8

continued 27:8 35:10 37:1 49:9 63:8

continues 34:14

Continuing 22:4

contract 2:11 46:19 51:15

contractor 34:17 34:19

Controlled 22:21

conversion 15:18 19:20 63:7

convert 21:13 23:15 62:24

converted 21:10

Cooperation 39:13

copies 9:12

core 18:12

corner 21:4

correctly

58:21
cost 12:16 19:6 43:4 43:6 43:12 48:9 63:11
cost-effective 24:13
countdown 64:13 65:7
country 46:23 55:4
County 40:13 41:21
couple 52:3 55:23 58:10
course 44:22
court 6:21 29:2
cover 59:2
COVID-19 40:12 41:7
CPR 36:25
creep 47:7
criteria 23:1 25:15
Criticality 22:21
Cross 36:7 36:8 36:15 36:16 36:19 37:2 37:7
CSARA 41:11
cultural 28:2
culture 49:2
current 14:6 19:6 34:11 44:24 63:24
currently 3:12 3:13 16:15 19:2 19:18 20:9 22:2 23:14 23:22 24:8 51:18
cut 52:6 52:13
cutting 55:24
Cynthia 45:12 45:13 45:14 47:10

D

D&D 48:15
Dan 48:1
dates 13:18 13:23 14:9
Dave 8:15 29:22 29:24 33:25 62:2
David 56:18
day 43:24
days 13:12 58:9
day-to-day 41:25
de 53:12
deadline 51:1
deal 55:3
decades 18:16
December 13:13 13:22
decided 16:10 18:19 20:13 45:18 45:21
Decision 14:8 15:4 16:13 27:12
decision-making 4:24 13:2 45:22
decisions 15:5 45:23
declared 12:2
deep 14:25
defense 12:3 18:8 42:5 44:25
defer 65:2
deficiencies 37:24 38:3
DEIS 38:18 39:2 39:2 46:6
deliver 41:4
demilitarizing 63:3
demonstrate 37:25
Department 11:12 24:9 38:14
depicting 20:21
depicts 25:4
deployment 19:10
describe 6:4
described 23:21 27:11
describing 27:14 62:15
description 5:6 5:11 5:14 6:4 6:6 6:8
designated 20:18 45:25
designed 63:18
detailed 14:14 17:8 21:1
details 56:9
determine 19:4
developed 5:22 53:8 63:16
developing 4:18 5:17
development 6:22 19:10 39:21 49:8
diagram 20:23 21:5 23:21
dictate 62:10
dilute 16:4 16:14 16:24 17:2 19:15 19:19 20:2

20:9 20:14 20:22 21:2 23:7 23:20 24:6 24:18 24:22 25:25 26:7 26:25 27:10 34:12 38:5 38:7 38:10 43:8 47:16 53:5 59:24

diluted 19:23 22:19 24:3 25:2 25:13 26:19 27:2

diluting 16:16

dilution 21:25 23:24 25:20 26:4 55:5 57:6

direct 41:16 48:15

directions 9:17

directly 48:3 48:5

director 2:17 17:16 36:7 40:7 56:19

Directors 37:8

disappointing 52:8

disassemble 23:15 25:24 62:23

disassembled 21:6 63:18

disassembly 15:18 19:20 21:12 22:15 25:9 63:7

disaster 36:19

disasters 36:20

disconnect 65:22

discouraged 50:15

discuss 14:12 14:13 50:22 53:10 53:10

discussed 56:25

discussing 12:9

discussion 42:24 43:11

disposal 15:6 22:24 24:3 38:15 43:16 48:15 53:14

dispose 16:5 16:13 16:15 16:24 17:2 19:15 19:19 20:2 20:9 20:15 20:23 21:3 23:7 24:6 24:18 24:22 26:7 26:25 27:11 34:12 35:4 38:5 38:7 38:10 47:16 48:5 59:25

disposed 19:25 22:14

disposing 14:20

disposition 2:3 2:19 4:18 5:9 6:7 10:6 12:7 12:14 14:22 15:13 15:20 15:25 16:6 16:9 16:11 16:24 17:2 17:4 17:17 17:18 17:22 18:2 18:6 18:18 18:19 18:24 19:4 19:13 20:10 20:13 20:16 20:22 25:1 25:16 27:9 28:15 29:1 34:6 36:11 38:6 39:3 39:11 40:18 42:2 45:3 49:1 49:5 49:8 49:23 58:25

dispositioning 12:1 12:11 15:2

District 35:11

document 2:15 5:24 7:24 7:24 9:22 10:5 10:13

documented 15:5

documents 9:16 14:19

DOE 11:12 14:21 14:25 15:12 15:14 18:16 18:18 19:18 20:4 20:12 21:21 23:6 28:18 28:19 36:13 38:20 38:25 39:13 46:13 46:22 51:15 54:11 54:16 59:14 62:16 63:2

DOE-3013 21:17
dollars 43:5 43:7 43:9 43:13
domestic 18:22
Don 37:18 37:20 37:21 47:20 51:11 51:12 57:1 62:4 62:6
done 6:1 14:24 17:3 32:13 47:2
downblend 22:18
downblended 22:24 42:22
downblending 16:4 19:16 19:16 22:3 22:12 22:16 26:6 26:7 37:9 42:3 48:4
dozens 62:25
Dr 48:22 48:23
Draft 5:21 5:22 6:22 13:20 13:21 13:25 14:4 27:25 38:21 50:21
drafting 13:20
drums 22:23
dry 19:23
due 40:11 50:25
dump 43:19 47:5
dumping 62:16
during 3:1 5:1 5:19 13:4 28:12 40:12 40:19 41:7 49:14

E

earlier 20:8 49:11 58:15
early 4:25 13:3
East 36:8 37:7
Eastern 6:15 7:5 31:6 56:8
ecological 28:3
economic 41:15
economy 41:15
educators 36:24
effectiveness 11:14
effects 4:22 12:25 27:23 28:5 28:6
efficiency 19:7
efficiently 35:5
effort 10:15 13:19 34:4 36:10 39:22 44:17
efforts 3:4 17:4 20:15 49:9
eight 53:7
EIS 2:3 2:16 5:5 5:15 5:17 5:20 5:21 5:22 6:23 10:2 10:6 10:14 10:17 13:12 13:20 13:21 13:25 14:4 14:7 14:16 15:14 15:14 16:1 16:2 17:10 18:10 19:4 24:9 27:5 27:22 27:25 28:1 28:15 28:16 28:20 28:22 28:24 29:1 36:11 40:18 42:2 43:11 43:12 48:14 50:21 52:24 53:9 58:24 59:2
eis@nnsa.doe.gov 29:9
either 18:13 26:8 26:17 26:17 39:4 44:4 54:22 60:22
elapsed 6:17
elected 4:5 4:8 32:10 32:12 35:18
electricity 18:23
elevated 62:9
eliminate 63:9
eliminating 11:24
else 32:19 64:8 65:1
email 7:7 8:3 29:8 29:11 43:24 53:25 58:12 58:15 61:10
emphasis 22:15
emplacement

16:20
employee 10:11
employees 2:13 37:5 40:24 41:5
employment 40:11
Enchantment 43:18 43:21
encourage 17:7 30:7
Energy 11:12 38:21 59:15
Energy's 38:15
enhances 11:13
enhancing 41:19
ensure 4:21 12:24 21:1 22:25 25:14 45:5
ensuring 12:12
entails 26:21
entire 37:25 47:22
environment 12:23 15:23
environmental 4:19 4:20 4:22 5:7 6:5 6:9 12:19 12:25
14:23 15:13 15:25 18:1 18:5 27:23 27:25 28:3 28:19 30:5 34:5 37:25 38:22 42:4 45:1 59:4
equally 7:14 29:13
equipment 21:13 34:10
equivalent 63:22
especially 34:16
essential 41:8
essentially 24:22 26:5 48:9 62:17
estimates 13:8 13:18
evaluate 16:23 28:19
evaluated 14:25 15:15 16:2 24:10 43:16
evaluation 49:8
evening 2:23 10:3 27:16 34:1 48:23 52:18
evening's 2:9
event 8:18
58:11 65:21
Everitt 36:4 36:5 36:6 37:14
everybody 2:25 6:18 7:1 33:4 33:7 48:23 61:1 65:14 65:15
everybody's 32:5
everyone 8:16 34:1 45:4
evolve 44:24
evolved 44:23
exactly 46:7
excellent 49:16
except 3:13
excess 12:2 17:20 18:8
excluded 38:8
execute 26:25
executed 19:5
executing 23:22
execution 21:2
executive 36:7 40:6 56:19
exemplary 41:23
existing 16:17 20:3
22:1 23:18 24:19 26:22 27:3 59:17 62:15 63:17
expand 23:24 34:11 60:6
expanded 52:24
expands 54:24
expect 6:12
expected 53:2
expecting 30:12
expediting 53:11
expensive 45:22
experience 34:15 41:24 42:3 49:2
experienced 40:20
expires 32:24
explain 9:16
explanation 5:8 5:13 10:8
exposure 22:11
exposures 63:10
express 42:9 45:2
extended

59:21
extensively 24:10 40:12
extent 29:18
extortion 62:17

F

fabricate 15:7
fabricating 18:20 64:4
fabrication 15:16 15:17 19:1 20:19 59:5 59:25
facilities 16:18 22:17 24:24 24:24 26:22 26:24 49:2
facility 15:18 15:18 15:19 19:1 46:16 46:19 56:23 59:19
facing 40:10
fact 7:23 9:13 49:13
fact-finding 49:15
facto 53:12
fair 55:16
families 36:21 40:8 41:9
Fe 50:6 52:3
feasible 3:3 45:21
February 8:10 13:15 29:16 29:18 50:25 57:15 61:13
Federal 4:4 12:21 13:14 14:2 27:13 27:21 32:9 33:16 35:18
feel 39:22
feels 65:10
feet 23:4
fell 47:23
fellow 33:2
figure 55:2 58:16
file 57:15
final 2:1 14:6 24:2 25:16 38:12
finalized 5:16
finally 5:11 27:5 28:11
financial 40:10
financially 40:22
finished 13:21
fire 34:10
first 2:24 4:17 7:3 7:20 10:7 11:8 13:7 14:20 21:6 21:7 33:15 36:25 38:4 51:8 55:7 61:25
firsthand 34:24 40:20
fiscal 12:17 12:17 19:7 43:2 43:10
Fissile 14:23
fits 12:9
fixed 40:9
flawed 38:1 50:15 50:15
folks 7:15 9:17 30:22 31:7 31:8 31:13 31:24 61:2
forced 46:9
Forest 44:13 44:15
form 18:12 18:14 19:21 20:25 21:8 21:10 23:9 25:10 56:22 63:15 63:21
former 19:1 34:25
forum 7:13 8:1
forward 27:16 35:5 53:15 60:3
foster 4:23 13:1
fourth 22:9
frame 12:16 19:6 53:6 63:25
front 52:25
fruition 35:6
fuel 15:8 15:15 15:17 16:2 18:21 18:23 19:1 20:19 38:6 38:24 45:19 59:5 59:25 64:3
fulfill 47:3
full 25:23 26:24 27:22 37:9 54:2
full-page 52:2
fully 51:10
fundamentally 38:1

funds 62:17
furnace
21:8 21:11
furnaces
21:12
future
44:25 45:17

G

Galan 2:15
9:22 10:3
10:4 10:25
11:4 11:6
27:19 29:4
game 47:25
gentleman
54:20
gentlemen
33:24 65:20
geologic 15:7
geology 28:3
George
42:16
42:17 48:1
Georgia
35:8 36:8
37:7 44:5
getting 3:9
9:6 53:15
given 56:7
57:17 64:2
gives 13:10
giving 6:2
7:22
glad 60:11
glovebox
21:25 22:2
22:20 23:19
gloveboxes
21:15
22:17
23:23 34:9
57:3
gloves
54:13 54:15
goal 13:21
13:24
gone 58:19
Goodman 2:8
9:7 9:9 9:20
10:23 11:1
11:5 29:22
29:25
31:13 32:4
32:22
35:13
35:17
35:22 36:1
37:13
39:25
42:12 44:8
45:9 47:9
48:17
49:25
51:23 52:9
53:18
55:21
57:20 60:9
60:18 64:6
64:12 65:6
65:10
65:13 65:24
government
4:13
governments
14:3
grateful
35:11 41:12
great 9:7
27:19
29:25
30:12
32:22
35:24 40:2
45:9 45:11
56:11 62:2
65:22
grew 45:15
ground 7:25
43:10
groundwork
35:6
guarantee
65:1
guess 65:17

H

half 18:16
Hancock 37:19
37:21
37:21
39:25
47:20 48:1
51:11 57:1
hand 3:19
3:20 3:22
4:1 4:7 8:25
30:19
30:24
31:17
31:18
31:20
32:11
33:12 60:22
60:22 61:4
61:22
61:24
61:25 62:3
64:9 64:9
handled 16:19
handling
34:16
hands 60:17
64:11
hard 45:5
haven't
31:8 32:13
33:11
having 4:14
7:3 10:23
50:9 63:1
hazardous
21:15
hazards 62:8
health 28:4
28:5 46:8
healthy 2:25
hear 28:15
28:17 52:9
56:6 56:17
58:2 58:3
heard 60:20
61:1 64:21
hearing
2:14 55:13
hearings
55:17
heated 21:8
HEGWOOD
8:15 9:8
32:21

33:20 35:20 35:24 36:3 37:17 40:2 42:15 44:11 45:11 47:10 48:19 50:1 52:15 53:19 56:11 56:17 57:21 57:25 58:3 60:16 62:2 64:10 65:9 65:12 65:19

held 2:5 5:23 56:8

Hello 8:16 37:21 56:16

help 9:5 36:16 41:4

helped 36:18 37:5 44:21

helping 41:15

heroes 47:21

he's 2:15

Hi 50:4 53:22

high-level 20:20 57:7

highlight 14:14 20:24

high-temperature 21:8 21:11

history 5:9 6:6 14:12 14:14 14:18 17:8 49:5

hold 55:16

holding 3:2 46:24

home 46:11

hope 2:24 30:3 54:4 55:9

hopefully 31:24 32:10 32:17

host 32:11 44:3

hour 6:12 54:2

hours 6:15 6:17

households 41:2

huge 60:3

human 12:22 28:4 28:5 36:17

hundreds 46:2

I

icon 3:20

I'd 42:21

Idaho 59:7

idea 13:11 47:15 56:21

ideas 53:10

identical 7:3

identification 49:7

identified 27:24 49:21

identify 4:13

IIs 23:2

I'll 32:23 43:14 56:4 58:8 61:22

illegal 46:20

I'm 6:1 10:4 10:15 10:23 11:1 14:12 17:12 17:16 29:21 36:6 37:21 39:1 40:6 40:6 42:7 42:20 43:2 44:15 45:14 45:16 47:25 48:1 52:9 52:19 53:8 56:19 58:1 58:22 60:4 62:4 62:12

Imagine 46:10

immobilization 15:1 15:15 15:19 16:5

immobilize 15:5

impact 4:19 14:24 15:13 16:1 18:1 18:5 30:5 34:5 37:25 38:22 40:20 41:15 41:22 42:4 44:20 59:5

impacting 41:2

impacts 15:23 53:2

implement 19:8

implemented 24:13

important 5:2 5:16 42:9 45:7

imports 62:14

impression 43:3

improve 65:17

inaudible 35:16 35:25 44:11 49:25 53:18 54:12

inception 49:6

include 13:25 27:5 28:2 38:5 39:5 48:2 48:14

included 5:15 10:18

14:18 50:11
including 2:14 4:25 13:3 40:13 48:25
income 40:10
incorporate 57:14
incorporated 5:20
incorrectly 52:13
increase 57:9
increased 59:22
indicate 46:7
indirect 41:16
individuals 40:8 40:10 41:2 41:9
information 8:8 8:12 10:1 10:17 30:2 30:6 37:22 51:12 56:2 58:18
informing 39:1
infrastructure 28:7
initial 49:14
innovative 35:3
in-person 3:2 3:10
input 5:16 5:19 5:21 5:24 14:1 24:15 27:16 29:21
inside 22:10
install 23:23
installation 34:9
installed 26:15
intended 4:21 20:25 58:6
intent 13:13 14:16 17:9 20:23 25:6 39:21
interest 3:4 17:23
interested 3:17 6:19 33:10 56:7 60:19 61:4
Interim 23:19
internet 7:19 7:20
INTERPRETER 9:19
introduce 9:15
introduced 10:4 21:25
inventories 17:18
involve 36:12
involved 51:8 57:17
involvement 4:25 13:3
irradiation 15:8 18:21
isn't 52:6
Isolation 20:1 20:7 24:1 38:16 43:15
issue 9:5 14:6 33:4 57:11 60:2
issued 16:12 17:1 38:12
issues 4:14 6:10 9:3 10:24 41:10 55:22 55:24 56:25 57:17
item 14:13
I've 50:24 51:7 52:20

J

Jackson 40:3 40:5 40:6 42:13
James 48:24
JANUARY 2:6
Jeff 2:14 9:22 10:3 10:23 20:8 27:18 29:25 33:25
Jeffrey 29:4
Jim 48:20 48:21
jobs 41:16
Joe 33:21 33:22 62:11
join 2:23 3:5 60:12 65:1
joined 56:5 61:18 64:18
joining 35:14 55:23
Joni 50:2 50:3 50:4
junk 57:4
justice 28:3

K

Kay 2:16 9:23 17:13 17:15 17:15
key 13:18
kinds 54:18 55:16
Kits 21:24
known 19:15 23:2 43:18

L

Lab 59:7
Laboratory 2:10 20:6 23:13 25:22
labs 63:16
ladies 33:24 65:19

land 28:7 39:12 43:18 43:20 43:21 59:21
language 9:12
LANL 25:23 46:5 50:17 50:20
large 17:21 59:11
largest 43:21
last 18:16 36:18 43:14 44:1 44:19 65:8
Lastly 24:1
late 13:22 56:5 61:18 63:5
later 4:16 7:8 8:8 45:20 45:20
lathe 21:6 21:12
lay 35:6
layers 21:20
lead 41:25
leader 34:15
least 46:4 46:6
leave 29:2 61:14 62:22
leaving 63:21 63:22
led 41:25
leftover 57:3
legal 38:17 46:18 47:4
less 48:12
let's 12:18 14:11 28:11 33:15 48:13
letter 52:20
levels 62:9
license 59:20
life 36:22 41:20
limited 38:2 40:24 41:19 54:12 54:23
limiting 62:20
line 3:10 30:20 33:6 33:19 65:4
lines 6:16 61:15 65:22
link 7:21 7:21 8:5 14:17 17:10 50:8 50:14 50:16 51:25 52:6 52:7 58:12 58:13 58:15 60:10
links 52:10 52:11 53:25 54:1 56:2 58:20
liquid 34:17
list 27:25
listed 8:23 14:13
little 4:17 8:25 12:18 30:11 31:22 52:25 53:3
live 45:15 45:25 62:7
Livermore 63:19
lives 36:25
living 40:8
loaded 23:1
local 4:5 14:2 32:9 33:17 35:18 36:19 37:2 40:7 41:17
locate 46:22
located 21:14 22:17 56:20
locations 18:17
logged 3:18 3:24 7:16
logistics 6:2
long 31:22 38:12 39:16 49:5 53:7 58:22
longer 18:24 32:15 43:20
longstanding 42:7
long-term 39:18 54:10
Los 20:6 23:12 24:20 25:8 25:10 25:22 26:8 26:11 26:17 26:22 27:4
losing 46:8
loss 40:11
lot 30:2 54:14 55:11
love 11:7
lower 4:1
lower-right 30:19 31:18

M

Mahan 44:13 44:14 44:15 45:10
mail 7:7 29:3 29:4 29:11 61:10
main 23:13
maintain 26:4
maintains 11:13 23:14
major 12:21 20:21 20:24 44:20
majority 23:8
management

2:18 9:24
10:10
10:12
11:20
11:22
17:18 28:8
29:5 34:18
41:24 49:1

manager
2:15 2:16
2:18 9:22
9:23 10:5
10:13 10:14

manner
12:12
12:15 24:14

Marra 48:20
48:22 48:24

massive 57:9

material 2:17
9:24 10:10
10:12
11:20
11:21
16:18 17:4
18:9 18:15
20:16
21:16 29:5
34:7 35:4
47:18
53:11 53:15

materials
14:23
17:16
17:19
34:16 47:16

maximize 19:7

may 7:5 11:19
12:21
18:13 29:4
29:7 33:5
33:8 43:18
59:16 61:4
65:21

maybe 6:12
55:24

McCoy 56:16
56:18
56:18 57:20

McLeod
52:16
52:18 52:18

M-cubed 11:21

means 2:15
56:5 62:22

meant 42:24
46:23

mechanism
7:13

meet 38:6
44:21
44:23 44:24

meeting 2:4
2:9 3:2
3:5 3:7 3:10
3:11 4:4
5:25 6:14
6:25 7:4 7:6
7:23 8:7
8:14 10:20
13:16
17:25
28:23
29:23
30:10 32:7
32:9 55:23
56:5 56:7
58:18
60:12
60:15 61:8
61:10 65:25

meetings
3:2 5:23
51:9 52:4

member
10:12
34:25 35:1

members
33:2 35:23

mentioned
17:10
39:20 42:22

mentioning
38:2

message 4:9
29:3

metal 18:12
18:13 21:7
21:14
22:23
23:16 26:15

metals 19:21

method
29:14 53:5

metric 12:1
12:7 12:15
16:6 16:7
16:8 16:10
16:13
16:16
16:25 17:2
18:7 18:9
18:19
19:13
20:10
20:11 20:13
20:17
20:18 23:8
27:9 38:23
39:4 39:11
39:14
39:16 43:4
43:4 43:19
59:1 59:8
59:24
59:25 60:1
60:2

Mexican 51:10
52:3

Mexico 20:1
23:13 24:2
37:23
39:13
43:17
43:20
45:15 46:2
46:14
46:16
46:21
46:23 47:2
47:4 50:6
51:16
54:10
54:25 56:20

Mexico's
39:15

mid-1990s
49:7 51:9

mid-December
14:8

midnight 51:4

mid-November
14:7

midst 31:14
military 36:21
million 62:17
millions 48:10
mind 64:14
minimal 19:9
Minimization 2:18 9:25 10:10 10:13 11:20 11:22 29:5
minimizes 19:10
minimizing 11:23
minimum 62:10
miniscule 48:9
minute 31:22 31:24 61:23
minutes 32:16 33:6 38:2 44:17
misnomer 63:23
missed 54:3
mission 5:5 6:4 12:9 17:3 19:2 37:11 40:8 42:10 45:7 47:6 52:21 52:22 53:7 54:12 54:23 54:24
missions 41:18 42:6 44:24 44:24 44:25 48:25 49:3 49:15
mixed 15:8 18:21 19:1
Mixed-Oxide 15:17
mixture 19:23 21:24 22:7 22:8 22:12
moderator 2:8
modified 16:17 20:3 24:19 26:22
MONDAY 2:6
Moniak 62:6 62:7 64:7
monies 45:20
mostly 63:18
motto 43:20
Mountain 6:16 7:5 51:2 56:9
move 35:23 46:3
moving 11:1 21:4 24:5 25:18 26:10 34:7
MOX 15:8 15:15 16:2 16:11 18:21 18:23 18:25 20:19 45:19 64:3
multiple 21:20 24:24
mute 33:5 36:2
muted 3:14
myself 34:25 54:6

N

NAS 49:14 49:21 59:3
nation 36:13 47:6
national 2:10 2:11 4:20 10:8 11:9 12:2 12:19 17:20 20:6 23:13 25:22 34:1 38:13 42:5 44:25 49:13 58:24 59:7
nation's 36:23 46:24
neighborhood 46:4
neighborhoods 48:8
Nelson 47:12 47:14 48:18
NEPA 2:15 4:20 4:21 5:2 5:7 6:5 7:20 9:22 10:4 10:13 12:20 12:20 12:24 13:7 13:19 14:15 14:17 15:23 17:8 17:11 24:11 38:11 50:9 52:11 56:3
nested 21:19
newspaper 8:6 10:18 50:8 51:24 51:25 52:13 54:1 55:25 58:14
night 7:4 56:8 65:18 65:23
night's 60:15
NNSA 2:2 2:13 4:18 5:4 5:11 5:17 5:20 6:4 7:19 8:5 9:24 10:11 11:11 11:11 11:22 12:7 12:7 12:14 13:19

14:17 15:5 15:24 16:2 16:10 16:12 16:15 16:21 16:25 17:11 19:2 19:3 19:7 24:15 28:13 29:4 38:11 39:1 39:4 39:8 39:18 44:4 44:18 45:4 45:18 45:23 46:13 47:3 48:2 48:14 51:3 52:11 53:11 54:11 56:3 56:10 59:13 59:15

NNSA's 5:7 12:9 19:12 36:10 37:8

NOI 17:11

noise 28:7

non 16:13

non-pit 15:11 16:6 16:16 16:25 18:10 18:13 19:14 19:21 20:10 20:14 21:9 25:9 26:14 26:18 27:10

nonprofit 40:7

nonprofits 41:11 41:17

Northwest 2:10

note 4:7 4:11 6:24 8:9 34:17

noted 32:11 61:10 61:12

notice 13:13 14:16 17:9 25:5 39:20 52:5

nuclear 2:11 10:8 11:9 11:14 11:16 11:17 12:10 12:13 17:19 18:12 18:22 21:5 26:12 34:2 34:19 35:4 38:21 41:24 42:23 42:25 46:24 47:2 47:5 47:5 47:18 47:22 50:5 59:10 59:15

O

objections 62:14

objects 39:9

obvious 3:9

Obviously 3:1

occur 21:1 22:16 26:17

office 2:17 2:17 9:24 10:9 10:12 11:19 11:21 11:22 11:25 17:16 17:17 17:22 29:5 35:11 38:21 59:15

official 4:8 4:13 32:12

officials 4:5 4:22 12:24 32:10 33:17 35:19

offsite 22:23

Oh 11:6 25:17 44:14 64:15

Okay 24:5 32:4 32:22 33:15 35:22 44:8 48:22 52:9 56:11 58:4 60:18 64:12 65:6

old 62:8 62:8

ongoing 3:1 51:9

online 3:2 54:2 58:1

onto 7:16

open 6:13 6:17 8:21 61:15 65:4

opened 13:12 22:5

operate 46:19 53:7

operated 40:18

operation 50:18

operations 34:18 41:24 42:1

opportunities 7:8

opportunity 4:2 4:24 6:19 13:2 31:25 33:7 33:8 40:16 42:9 44:6 60:25

opposed 3:24 56:21

opposes 39:7

optimal 62:22

option 25:18 25:19 25:23 26:3 26:10 26:11

26:21
26:21
63:24 64:4

options 6:9
7:2 24:21
24:25
49:23 61:9

oral 7:11
8:14 28:25
58:6

orally 6:20
6:25 61:8

order 3:21
4:23 13:1
20:15
22:11 33:4

ore 43:22

organization
39:7 52:19
56:20

organize 31:8

originally
20:18
45:18
46:15 46:15

others 46:2
46:3 47:20

outer 22:10
22:19

outlined
49:20

outside 2:21

Overpack
22:21

oversubscribed 59:16

overview
5:5 20:21

overwhelming
34:22

oxidation
22:16
26:14
26:16 48:4
50:23

oxide 15:8
18:14
18:21 19:1
19:21
19:22 21:9
21:10
21:10
21:14
21:16 22:6
22:8 23:16
23:20
25:10
25:13
25:20
26:13
26:18 27:1
62:24

oxide-bearing
21:23

oxidize 25:24

oxidized
18:20 25:10

oxidizing
50:18

P

p.m 6:15 6:15
7:4 7:5 31:5
31:9 51:1
56:9

P.O 29:6

Pacific 2:9

package 25:25

packaged
21:16
22:21
23:11
25:11
25:14 26:19

packages
23:12

packaging
16:18
25:21 26:5

pages 58:7

pandemic
3:1 41:10
55:15

panel 8:22
8:25 49:14

panelists
2:22 8:23

Pantex
15:10 20:7
23:10
24:20 25:8
26:22 27:9
63:23 63:25

participants
2:21 8:20
8:21 8:22
41:6

participate
30:23 55:19

participation
5:1 13:3

particularly
59:14 60:13

partner 36:14
41:14

partnership
41:8 42:8

past 5:9
6:7 34:20
44:23 46:4

pasted 52:7

pasting 55:24

path 16:9
18:24

pathway
18:7 24:2

patience
65:15

PEIS 14:25
38:4 38:8
38:9 38:12
38:17

people 3:15
7:17 36:24
44:2 50:15
51:2 54:5
55:11
55:17
57:13 60:14

people's 48:8

percent 36:23
56:3

performed
23:8 26:8

performing
52:22

Perhaps 44:3

period 6:13
8:9 13:12
14:5 29:15
30:10

31:10
40:19
57:16
57:17 61:13

periodically
30:21
61:17 64:18

periods 51:4

permanent
17:18 25:1

permanently
15:20

permit 39:15

permits 33:6

permitted
43:15

perpetuity
46:18

person
55:14 65:8

personal 36:9

personally
37:8 48:24
49:5

phases 50:22

phone 3:5
3:16 3:23
6:16 7:7
7:18 8:3
29:11
30:22
30:24 31:4
31:19
33:13
60:24 61:9
61:15

phone-in-only
56:12

phonetic 9:10

photograph
22:9

picture
21:7 22:1
53:1

Pilot 20:1
20:7 24:1
38:16 43:15

pit 15:10
15:18 16:7
16:14
18:10
18:11
19:14
19:21 23:9
23:9 23:15
25:8 25:8
25:9 26:12
26:18 27:8
59:9 60:2
63:4 63:7
63:8 63:21
63:23 63:24

pits 19:20
21:5 23:11
23:15 25:7
25:24
26:12 48:3
48:4 48:12
48:15
62:23
62:24 63:4
63:13
63:16
63:19 64:4

placed
22:10 23:4
23:4

placeholders
13:24

plan 28:1
37:9 38:15
45:21

planned
13:6 27:3

planning
30:11

plant 20:1
20:7 20:7
23:10 24:1
38:16
43:15
59:10 64:3

please 3:6
3:24 4:6
4:11 6:24
8:9 9:15
10:22
29:15
29:16
30:18
30:24
31:17
31:19
32:13
33:12
33:14 36:9
56:14
60:21
61:21 61:25

pleased 39:8

plutonium 2:2
2:19 4:18
5:9 6:6 10:5
11:25 12:2
12:8 12:11
12:15
14:21 15:3
15:6 15:8
15:10
15:11
15:13
15:21
15:25 16:4
16:6 16:7
16:8 16:14
16:16
16:25
17:22 18:2
18:7 18:11
18:11
18:13
18:18
18:20
18:20
19:14
19:14
19:14
19:16
19:16
19:22
20:10
20:14
20:17
20:22 21:7
21:9 21:13
21:22
21:23 22:3
22:6 22:7
22:20
22:24 23:9
23:20 24:3
25:2 25:9
25:13
25:20
25:25
25:25 26:1
26:12
26:15 27:1
27:2 27:9

27:10
28:14
28:25 34:3
34:6 34:12
35:7 36:11
38:15
38:23 39:4
39:9 40:17
42:1 42:3
42:22 43:3
43:6 43:8
43:13
43:17
43:22 44:4
45:3 45:19
47:24
48:24 49:6
49:23
50:18
50:22
53:13
54:14 55:3
56:22 57:3
58:25 59:1
59:8 59:10
60:2 60:4
60:5 62:8
62:9 62:10
62:14
62:16
62:18
62:20
62:23
62:24
62:25 63:4
63:14
63:15
63:21 64:1
64:3

point 22:15
43:1 43:14
44:1 61:1

pointed 20:8

points
42:21 51:13

Policy 4:20
12:19

poor 40:9
46:5

populations
41:18

portfolio
17:21

portion 4:3
26:7 26:16
28:23
29:22 32:7
32:8

pose 9:2

possible
3:8 3:12
11:24
24:16 53:16

possibly 15:7
27:3

posted 9:12

potential
6:10

poverty 40:9

power 18:22

PowerPoint
7:22 9:13
10:1 64:15

practical
29:19

preferred
19:12 24:7
25:4 25:6
25:7 27:23
38:10

prefilled
21:24

preliminary
6:9 13:18

preparation
18:1 34:5
36:10

prepared
16:21 58:7

preparing
13:20

present 41:10
44:7

presentation
4:16 6:2
6:11 7:9
7:22 8:8
9:13 9:21
10:1 10:18
17:13
28:21 56:6
64:22

presented
16:23
24:21 25:1

presenters
3:13 49:14

presents
20:20

president
44:15

press 3:20
3:25 30:18
30:25
31:19
33:12 33:14

pressing
60:22 60:23

prevent 62:25

preventing
11:16

previous 11:4
23:21 24:11

previously
16:9 18:19
19:17 24:6
27:11

primary 10:14
10:15 11:15

printed 58:13

priority 34:8
62:11 62:21

probably
38:25 56:6

problem 50:14
51:10 58:16

problems
56:24 58:11

proceed
5:25 6:2
6:13 13:10
30:15

proceeding
38:18 57:12

proceeds 5:17

process
4:21 5:1 5:2
5:7 5:8
6:5 6:6 6:10
12:21
12:24 13:4
13:16
14:20 19:4
19:23

20:22
20:24 21:3
22:12
22:18
23:20
24:17
26:11
28:13 38:1
38:11 50:7
54:17 55:6
55:10
55:14 57:6

processes
12:20 19:9
25:24 26:6
26:16
26:24 27:4

processing
22:1 57:2
62:10 63:11

produce 18:23
43:6 59:7

producer 3:14
4:7 8:12
8:17

produces
19:23

product 19:24

production
27:1 43:3
59:9 60:2

products
36:23

program
2:12 2:19
4:19 10:6
17:22
17:23 18:3
18:18 20:5
28:15 29:1
30:4 34:6
36:12
40:18 42:2
44:2 45:3
47:24 48:9
49:7 50:19
50:20

Programmatic
14:23
58:23 59:4

programs 57:5

project
2:16 3:4
4:17 6:3
6:11 9:14
9:23 10:2
10:14
18:25
23:22 30:7
33:2 35:5
51:8

proliferation
11:16 12:10

promise
34:2 46:14
47:4 54:19

promised
46:22
54:11
54:23 62:19

promises
54:16

property 46:8

proposals
15:20

proposed 4:23
5:13 12:25
18:4 18:5
19:8 24:8
25:5 37:8
49:22 57:8
59:10

proposing
38:19 57:7
57:10

protection
34:10

proud 37:6

prove 34:14

proven 19:8
19:17 63:4

provide
3:12 3:16
4:15 4:24
5:11 5:24
6:24 7:2 7:5
7:7 7:11 8:1
8:2 8:4 8:12
9:17 10:7
13:2 25:19
26:24
28:23
29:11
30:18
31:17 33:7
33:9 36:16
40:16

provided
14:15 17:9
29:10
43:25 50:8
60:25 64:21

provides
30:13
40:21 49:16

providing 5:4
8:7 10:1
36:21
36:22
40:12
41:14 60:20

PU 43:19

public 2:4
4:21 4:25
5:1 6:13
12:24 13:3
13:11
13:16
13:19 14:1
14:5 28:4
28:13
28:22
29:22
30:10
31:10 32:8
33:2 35:23
45:20
45:23
50:12
55:13
55:14 65:5

published
5:22 13:14
13:22 14:4
14:8 14:16
17:9 27:13

purpose
5:12 6:8
12:6 12:23
12:23

purposes
12:20
31:23 32:5

Q

Q&A 9:13

quality 12:22

28:2 41:19
question 9:2 9:5
question-and 7:23
questions 10:16 30:4
queue 3:21 3:25 8:13 9:1 9:18 30:15 30:20 30:25 31:7 31:9 31:16 32:13 33:12 33:14
quicker 30:11
quickly 53:16
quite 37:1 40:15 54:3 60:4

R

radioactive 46:1 57:4
radiological 11:17 22:11
raise 3:20 4:7 30:24 31:17 31:19 42:21 60:21 62:13
raised 3:22 32:10 60:17 61:25 62:3 63:5 64:9
64:11
raising 61:22
range 24:23 27:22
reactor 15:1 38:22 38:24 39:2 39:8 39:9 59:6 60:1
reactors 15:9 18:22
readily 12:13 19:24 22:13 42:23 42:25
Reading 7:20 8:5 52:11 56:4 56:10
ready 30:9 33:19
realities 12:17 19:7 43:2
reality 12:17
realizing 31:21
really 52:7 58:17 59:3 65:15
realm 55:12
reason 61:6
reasonable 12:16 19:5 24:14 27:24 28:17 39:3 39:5 39:6
39:10
receive 33:16
received 5:19 6:20 7:12 14:1 29:17 41:13
recent 49:12
recently 20:12 52:6
recess 31:12 32:3
recognize 7:15 30:2
recommendations 49:17 49:18
recommended 38:16
reconsideration 18:6
record 14:7 15:4 16:12 27:12 41:23 46:5
Red 36:7 36:8 36:15 36:16 36:19 37:2 37:7
reduce 12:10 22:11
reducing 11:17
refer 11:10 11:21
referenced 14:19
references 50:25
referred 16:4
refining 5:18
regard 50:24 52:5
regarding 7:25 10:16 44:25 49:18
regardless 7:13 29:13
region 53:2
Register 13:14 27:13
regulatory 49:19
reiterate 58:10 58:23
related 34:4 36:10 41:10
relates 5:5 60:14
relevant 5:9 5:21 6:7 14:18
rely 41:4
remained 65:4
remains 63:23
Remediation 34:18
remember 29:15 54:13
removal 34:13 35:7 53:11
remove 34:3

63:20
removes 48:6
Removing 62:10
replace 27:3
report 49:12 49:15 49:20
reporter 6:21 29:2
repositories 46:22 51:19 51:20
repository 15:7 25:16 26:20 39:21 44:3 51:18
representation 37:6
representatives 4:6
repurposed 19:2
request 32:15
require 19:9 20:3 24:19
required 4:19 25:24 26:25 46:15 48:7 61:16
requirement 17:20
requires 12:20
15:23 19:20
re-raise 61:4
re-raised 61:24 64:9
research 19:9 37:22 51:11
reserved 4:12
resident 54:10
resolved 9:6 60:13
resources 28:2 28:3 28:7 28:9 41:19 58:19
respectful 32:5 33:1
respectfully 32:24
responding 36:20
response 57:24
responsibilities 11:15
responsible 11:23 17:17
rest 65:22
result 25:1
resulting 23:3 26:1
results 22:12
Reuse 52:19
review 5:7 6:5 13:7 38:14
49:16 57:13
Rick 52:16 52:17 52:18 53:19
rid 47:17 47:19 47:21 48:11
risk 46:8 46:10
River 20:6 22:2 23:17 23:23 24:20 25:12 25:13 26:3 26:9 26:13 26:15 26:18 26:20 26:23 27:4 29:6 34:14 34:17 34:19 36:12 36:17 44:18 44:23 48:25 59:6 59:11 62:21 64:1
Robin 53:20 53:21
robust 22:10 22:19
ROD 16:12 17:1
Roger 47:11 47:13
role 10:14
Room 7:20 8:5 29:7 52:11 56:4 56:10
route 45:25
routes 46:7
rules 7:25
run 3:7 32:23
runs 6:25
rural 40:14 55:18

S

SA 16:22
safe 2:25 12:12 12:15 21:2 21:21 27:8 36:23 63:22
safeguards 49:18
safely 19:5 19:25 22:13 35:4 37:10 46:6
safer 37:5
safety 11:13 34:15 34:20 41:23 42:4 50:5
Santa 50:6 52:3
Savannah 20:5 22:2 23:17 23:22 24:20 25:12

25:12 26:3 26:9 26:13 26:15 26:18 26:20 26:23 27:4 29:6 34:14 34:17 34:19 36:12 36:17 44:17 44:23 48:25 59:6 59:11 62:21 64:1

save 36:24

savers 36:22

SAVY 21:18

saw 51:24 58:16

schedule 14:6

scheduled 6:14 51:18

school 46:11

Sciences 38:14 49:13 58:24

scope 24:9 28:16 28:25 30:5

scoping 2:3 3:5 3:10 5:1 5:2 5:19 7:2 8:9 13:4 13:11 13:15 13:19 14:1 17:25 24:16 28:12 29:23 51:8 52:24 55:13 57:11 57:17 61:12

screen 3:19 4:10 8:19 30:19 31:18 32:20 33:13 60:23

scroll 8:24

seamlessly 3:8

search 7:19

second 22:1 33:9 38:20 43:1 61:3

seconds 65:7

secure 12:12 22:17 23:12

securely 37:11

security 2:11 10:8 11:10 11:13 17:20 34:2 49:19

seeing 35:5

seek 35:3

seeking 28:13

seems 55:23

seen 50:24

SEIS 16:23

semi-autonomous 11:11

send 26:12

sending 4:9 58:8

senior 40:9 41:3

sense 43:10

sent 52:5 53:25 58:12 62:16 62:20 63:1

separate 21:15

series 21:14

serve 35:12 40:8 40:25 41:9

served 40:12 41:1

services 36:22 40:13 41:5

several 15:21 24:21 24:24 42:21 45:19 49:16 63:17

Seydel 53:22 55:22

shape 20:25

share 32:17

shared 64:16

sharing 64:14

sheet 7:23 9:13

shift 31:3

ship 26:1 48:4

shipment 22:23 25:12 25:21 27:1 46:3

shipments 46:6 48:7 48:12

shipped 23:3 23:11 25:15 26:20

shipping 16:19 23:2 23:12 48:3

shocked 62:12

short 5:8 7:1 30:3 32:23 57:16 64:17

shortly 32:2

shown 21:6 22:9 25:19 27:6 38:4

shows 22:1 23:6 25:18 26:10 26:21

significant 34:24 37:3

significantly 12:22

simply 37:1 62:18

single 24:25

site 20:6 22:2 23:17 23:23 24:2 24:25 25:12 25:13 26:3 26:9 26:13 26:16 26:18 26:20 26:23 27:4 29:6 34:12 34:14 34:23 34:25 35:2 36:12 40:21 42:2 44:18 44:23 48:25 52:22 53:13 53:14 55:6 59:7 59:11 62:21 64:1

sites 20:4 23:6 24:24 36:13 54:20 55:2

siting 15:16

six 16:13 16:16 20:10 57:7 58:7 59:7

slide 8:8 10:22 10:22 11:3 12:4 13:5 14:10 14:13 17:7 20:20 23:6 24:5 25:4 25:17 25:18 25:19 26:10 26:21 27:7 27:20 28:10 38:4

slides 7:17 7:18 10:24 17:13 24:21

slow 55:10

smart 48:13

snack 31:25

so-called 57:6

social 46:19 51:15

socioeconomic 52:25

socioeconomics 28:8

soils 28:4

sole 46:23

Solutions 34:19

somebody 32:19

somewhere 3:18 59:9

sorry 10:23 36:3 52:9 58:5

sounded 56:4

sounds 60:18

source 56:2

South 17:5 20:16 23:17 29:7 34:3 34:7 34:8 35:7 44:5 53:16 58:14 59:23 60:5 62:7 62:18

Southwest 37:22 45:16 51:11

Spanish 9:9 9:11 9:12 9:19

SPD 15:14 15:14 16:1 16:2 16:23

spdp 9:23 28:1 28:16 28:22 29:8

speak 30:21 44:16

speaker 35:25 45:12 47:11 48:20 50:2 52:16 53:20 56:12 56:13 57:22

speakers 42:22 43:1

speaking 9:19 59:16

specialists 36:19

specialized 21:16

specific 50:19

specifically 38:8 49:18 51:14

specified 22:5

spend 43:9

spent 38:6

SRS 15:11 23:19 23:25 36:10 36:14 36:18 37:2 37:4 37:6 37:10 40:20 40:23 41:5 41:8 41:13 41:13 41:22 42:2 42:8 44:19 49:1 52:19 62:11

stable 63:15

staff 33:2 34:25

staged 23:10

stakeholders 24:15

standard 38:7 51:2

standards 21:21

standpoint 40:22

Star 3:25 4:1

30:25
31:19
33:14 60:23

start 4:3 4:4
31:2 31:10
32:8 32:14
33:21

started
32:6 36:2

starting
7:4 21:4
30:15
38:24 49:6

state 4:5
14:2 32:9
33:16 34:3
35:7 35:8
35:18 39:6
39:15
46:14
46:17
46:24 47:1
51:16
53:15
54:21
54:22
55:11
55:17
58:13 60:5

stated 24:6

Statement
4:19 14:24
15:14 16:1
18:2 18:6
30:6 34:5
38:1 38:22
59:5

states
11:12
12:12 18:8
39:2 46:3
47:3

stay 61:17
64:24

staying 2:25

step 15:22
21:1 47:3

steps 20:21
20:24 48:4

sticking
65:16

stockpile
11:14

stop 38:11
64:13

storage 14:22
15:9 15:11
21:21 27:8
39:19 49:1
53:13 55:6
62:15 63:8
63:14
63:23
63:24
63:25 64:2

storing 62:18

stranded 60:5

strategy 19:5

studied 18:17

studies 24:11

stuffing 63:4
63:9 63:19

sub-alternatives
15:2

subject 14:9

submit
28:24 29:8
29:16

submitted
4:12 7:10
52:20

submitting
43:23

subsequent
25:21

subsequently
17:1 22:10

success 35:10

successful
21:2

suffering
36:17 37:4

suite 25:23
26:24

summarized
5:20 51:12

summary 13:25
19:19

Sunday 52:3

supplement
16:22 27:3

supplemental
15:25 16:1
16:2 26:14

support
2:12 17:4
20:15
23:24 34:4
34:10
34:22 36:9
36:15
36:18 37:2
37:8 38:9
38:18
40:17
40:21
40:23
41:12
41:17
41:18 42:1
42:9 44:2
44:17 45:2
47:6 48:24
49:3

supported
15:22 58:25

supporting
26:6 42:5

supportive
52:21

supports
51:10

supposed 55:7

sure 6:18
33:4 37:17
44:11 53:8
65:9

surplus 2:2
2:19 4:18
10:5 12:8
12:11
12:15
14:21 15:2
15:6 15:7
15:12
15:21
15:24 16:8
17:22 18:2
18:18
19:13
20:14
20:21
22:19 23:9
23:11 24:3

25:2 25:25
27:2 27:8
28:14
28:25 34:6
36:11
38:15
38:23 39:4
39:9 40:17
42:1 45:3
45:19
47:24
50:18
54:14 55:3

surprised
62:12

Surveillance
23:19

Susan 36:4
36:6

sustain 41:15

Suzanne
40:3 40:4
40:6

swoop 47:23

system 20:20

systems 23:24

T

taking 12:5
42:3 45:17

talented
34:23 45:6

talk 12:18
28:11 38:25

talked 43:2

talking 54:13
59:14

teaching
36:24

technical
4:14 9:3
38:17
44:16
44:21 45:4

technological
24:8 24:10
24:12

technologies
19:8 49:9
53:8

technology
3:7 11:7
19:17 63:5

telephone
3:25

temporary
64:2

term 63:22

terminated
18:25

terms 18:4
27:14

terrible
47:18

terrorism
11:18

Test 38:22
39:2 59:6
60:1

Texas 23:10

thank 8:15
9:8 9:20
27:15
27:19
29:20
29:25 30:1
31:10
33:23
33:24 35:9
35:12
35:13 36:5
37:12
37:13
37:17
39:24
39:25 40:2
40:5 40:16
42:11
42:12
42:18
43:25 44:6
44:8 44:11
44:14 45:8
45:9 45:11
45:14
45:17 47:8
47:9 47:10
47:14
48:16
48:17
48:19
48:22
49:24 50:1
51:22
51:23
52:15
53:17
53:19
55:20
55:20
55:21
56:11
57:19
57:20
57:21 58:4
60:8 60:9
62:2 62:6
64:5 64:6
65:3 65:14
65:20

Thanks 9:7
53:23 65:24

themselves
48:5

therefore
19:10

there's
7:24 8:20
13:22 14:5
17:10
38:17
55:23 61:18

they're 23:1

Third 39:10

Thirty 53:6

thousands
46:1 46:2
48:7

threat
11:17 12:10

threaten
47:22

three-minute 32:19

throughout
3:11

throw 59:17

thus 38:9
41:19

timeline 6:11
13:6 13:11
14:19
24:14 53:4

timer 32:16
32:20

tips 7:25
today 20:8 28:24 50:7 58:15
today's 65:20 65:21
Tom 57:22 57:23 57:25
tomorrow 7:4 56:8 60:15 65:18
tonight 5:4 6:14 6:20 7:11 7:16 8:18 13:4 29:12 35:15 37:14 58:12 60:12 64:23
tonight's 5:25 8:14 13:15 17:25 61:8
tons 12:1 12:8 12:15 16:6 16:7 16:8 16:10 16:13 16:16 16:25 17:3 18:7 18:9 18:19 19:13 20:10 20:11 20:13 20:17 20:18 23:8 27:10 38:23 39:4 39:11 39:14 39:16 43:4 43:4 43:19 48:11 59:1 59:8 59:24 59:25 60:2 62:25
top 32:12 34:8 62:11 62:21
topics 28:1 28:12 28:19
top-left 21:4
touching 11:2
track 32:16
transcribed 6:21 29:2 52:12
transcript 57:12
transfer 21:22
transferred 25:7
translator 9:10
transport 23:12 46:1
transportation 28:8 49:19 55:12 63:10
transporting 46:5 55:4
transuranic 19:25 22:14 23:3 24:4 25:2 26:1 59:12 59:18
treated 29:13
Tribal 4:4 14:2 32:9 33:16 35:18
TRU 16:19 59:8
TRUPACT 23:2
try 29:16 32:23 60:13
trying 11:2 54:7
turn 3:16 8:11 9:21 17:12 29:21 31:1 45:18
turning 27:18
twice 46:4 55:4
type 9:4 53:10
types 34:16

U

U.S 11:14
uncertainties 40:11
underground 23:5 24:3
underserved 40:14
undertakes 27:22
undertaking 40:15
unique 41:10
United 11:12 12:12 18:8
unmute 3:14 30:20 31:1 56:14 62:4
unmuted 33:22 36:4 37:20 40:4 42:17 44:13 45:13 47:13 48:21 50:3 52:17 53:21 56:15 57:23 62:5
unnecessary 63:9 63:10 63:10 63:11 63:11
uranium 11:24
usable 14:23 18:15 19:24 22:13
utility 63:17 63:20

V

valence 50:22
valued 5:17
variants 24:22
variations 16:5

various 14:15 17:8 38:25 51:5
ventilation 34:9
verbal 7:6
Versatile 38:21 39:2 59:6 60:1
veterans 36:21
via 58:12 58:13 63:4
viable 18:24
Virginia 2:16 9:23 17:13 17:14 17:15 27:19 30:1 33:25
virtual 2:4 3:5 3:7 59:6
visual 28:7
vital 36:14 41:14
voice 29:3 54:7
volume 59:21
volunteer 40:22 41:7
volunteers 41:4
vulnerable 41:18

W

walk 9:5
walking 9:25
wasn't 45:21
waste 16:19 19:25 20:1 20:7 22:14 23:1 23:4 24:1 24:4 25:2 25:15 26:1 28:8 34:17 38:16 43:14 46:17 46:25 47:5 51:21 54:18 54:21 55:7 56:22 57:2 57:8 59:8 59:12 59:18 63:12
water 28:9
ways 35:3 55:3
weapon 18:12 21:5
weapons 11:14 11:16 12:10 12:14 14:22 18:14 19:24 22:13 26:12 42:23 42:25 43:19 46:25 47:5 47:17 47:18 59:10
weapons-grade 43:17 47:16 47:23
weapons-usable 11:24 17:19
WebEx 3:14 4:7 4:15 7:16 8:11 8:17 9:4
webinar 2:21 3:15 3:18 3:24 6:16 7:16 8:1 30:17 31:2 31:14 31:16 61:14 64:19 64:20 64:25 65:20
webpage 7:21
website 8:2 9:14 14:17 17:11 30:8 50:10 56:10
we'd 4:4 14:6 28:15 28:16
Weehler 45:12 45:14 45:15 47:9
Weehler's 51:14
weeks 52:4
welcome 7:12 29:12 61:3 61:16 64:24
we'll 6:2 6:4 6:12 7:8 7:22 8:7 28:5 31:1 31:1 31:3 32:1 60:13 61:17 64:17 65:17
we're 7:3 12:9 13:10 27:20 31:23 32:6 32:14 33:15 33:20 46:9 53:5 59:23
we've 9:12 24:5 38:12 60:25
WHEREUPON 31:12 32:3 65:4 65:25
whether 53:14
whole 54:14 55:5
whom 41:3
Wilson 33:21 33:22 33:23 35:13 35:16 62:11
WIPP 16:3 16:14 16:19 22:14 22:25 23:3 24:20 25:3

25:22 26:2
27:2 38:8
38:10
39:10
39:12
39:13
39:15
39:16
39:17
39:22
43:19
46:16
46:21 48:5
51:17
51:18
54:12
54:19
54:23 55:6
56:22 57:8
57:9 59:16
63:1

wishes 35:10

Withdrawal
39:12 59:21

witnessed
41:22

wonder
11:19 50:14

work 2:9 9:24
45:5 52:1
52:10
52:12
53:25 56:3

worked 35:1

worker 63:9

workers 21:15
22:11 28:4

workforce
34:23

37:10 41:7
44:22 45:6
53:1

working
40:9 50:9
52:6 58:21

world 11:18
11:25 37:5
47:22

world's 43:21

worldwide
12:11

worth 43:13

writing 4:16

written 43:23
57:14 58:7
60:7

wrote 50:10

Y

Year's 65:10

yet 5:16

you'll 2:14

yourself 4:13
9:15

you've 2:23
4:1 7:10
29:10
60:20 61:20

Z

Zone 51:2

zones 51:5