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NUCLEAR REGULATORY COMMISSION

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PUBLIC ONLINE WEBINAR FOR THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED INTERIM STORAGE PARTNERS CONSOLIDATED INTERIM STORAGE FACILITY

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THURSDAY

OCTOBER 1, 2020

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The Meeting convened via Webex, at 6:00 p.m. EDT, Chip Cameron, Facilitator, presiding.

PRESENT:

FRANCIS "CHIP" CAMERON, Facilitator

MONIKA COFLIN, NMSS/REFS/ERMB

DIANA DIAZ-TORO, NMSS/REFS/ERMB

LANE HOWARD, NRC Contractor (SWRI)

KELLEE JAMERSON, NMSS/MSST/MSEB

MIRIAM JUCKETT, NRC Contractor (SWRI)

DAVID McINTYRE, OPA

JOHN MCKIRGAN, NMSS/DFM/STLB

MARLA MORALES, NRC Contractor (SWRI)

ANGEL MORENO, OCA

JOHN NGUYEN, NMSS/DFM/STLB

JIM PARK, NMSS/REFS/ERMB

JESSIE QUINTERO, NMSS/REFS/ERMB

JOHN TAPPERT, NMSS/REFS

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P-R-O-C-E-E-D-I-N-G-S

6:00 p.m.

MR. CAMERON: Hello, everyone. My name is Chip Cameron and it is my pleasure to serve as your facilitator for this virtual public meeting. And I want to welcome all of you to the Nuclear Regulatory Commission's virtual public meeting, and thank you all for joining us today.

The NRC is here today to listen to public comments, to your advice, your recommendations, your concerns on the Draft Environmental Impact Statement that the NRC has prepared as one part of its evaluation of a license application that the NRC has received from Interim Storage Partners to build and operate an interim storage facility in West Texas, in Andrews County, Texas.

And your comments out there in the public on the Draft EIS are vitally important because the Draft EIS is a fundamental part of the NRC evaluation of whether to grant the license application of Interim Storage Partners.

The other fundamental part of the NRC evaluation is a public health and safety evaluation, and that evaluation will be contained in something called a Safety Evaluation Report that will be issued

later.

There's a number of NRC staff with me in the room here in Rockville, Maryland, NRC Headquarters, that are responsible for preparing either the Environmental Impact Statement, the EIS, or the Safety Evaluation Report. And I wanted to give you a pictorial introduction of all the people here because that might give you a sense of what is going on in this room.

And we're at a horseshoe-shaped table, and I'm at the bottom of the horseshoe. And to my right is Jim Park. Jim Park is the Senior Project Manager for the preparation of the EIS. Now you're going to hear from him a little later. He's going to give you a summary of the Draft EIS.

To Jim's right is John Nguyen. John Nguyen is the Technical Project Manager for the preparation of the Safety Analysis.

Going up the side of the horseshoe, to John Nguyen's right is John Tappert. And John is our senior official here tonight, and he's the Director of the Division of Rulemaking, Environmental, and Financial Support. That's where the responsibility for the preparation of the Environmental Impact Statement lies. And Jim Park is in John's Division.

Now, at the top of the horseshoe, to the right of John Tappert is John McKirgan. John is the Branch Chief for the Environmental and Materials -- not for the environmental, but for the Materials Branch. And his Branch is responsible for the preparation of the Safety Evaluation Report. And John Nguyen, who I introduced earlier, works for John McKirgan.

Now, going across the empty space at the top of the horseshoe, over to the left we have Jessie Quintero. She's the Acting Branch Chief of the Environmental Review Materials Branch, where the Draft Environmental Impact Statement is being prepared. Jim Park, the Environmental Project Manager, is in Jessie's Branch.

Now, to Jessie's right, at the bottom of the horseshoe is Marla Morales. She's an environmental scientist, a consultant to the NRC from the Southwest Research Institute in San Antonio, Texas.

Now we also have some NRC staff and consultants on the phone.

Kellee Jamerson from the NRC is our technology expert, and she helps us with WebEx.

And we have Dave McIntyre on the phone, and he's from the Office of Public Affairs. And when Jim Park does his presentation, he's going to give you

Dave McIntyre's contact information for those of you in the media who need information.

Miriam Juckett is also on the phone. She's the Environmental Manager at the Southwest Research Institute. And also, Lane Howard, who's the principal investigator to help the NRC on this project, is on the phone. And they're both in San Antonio, Texas.

Angel Moreno from our Office of Congressional Affairs is on the phone.

And we also have Diana Diaz-Toro. Diana is an NRC manager. And Jim is going to go to her in a few minutes, and she's going to talk to anybody who might need assistance with Spanish translation tonight. So, she's going to say a few words shortly.

Now I'm sorry for the long introduction, but I wanted to emphasize how seriously the NRC takes your comments, that they have all these people in the room with me tonight and on the phone. They're here to listen to your comments. What do you agree with in the Draft EIS? What do you disagree with? What's missing in the Draft EIS?

Now they're not going to be responding to your comments or questions tonight, but they will listen carefully and they will carefully evaluate your

comments and questions in the preparation, when they prepare the Final Environmental Impact Statement.

We're taking a transcript of the meeting tonight, a verbatim transcript. And Allegra is our stenographer. And that transcript will be available for all of you on the NRC website in about 10 days or sooner.

The process tonight is I'm going to go to Jim Park for a summary of the Draft EIS in just a minute or so. And then, we're going to go out to you in the public for comment.

Tonight's phone operator is Dexter. And after Jim is done, he's going to instruct you on how to register to speak.

Now I anticipate that we're going to have a lot of people who want to speak tonight. So, I'm going to start out with a four-to-five-minute speaking guideline for you. I'll give you room on that, but also give you a warning of when your time is almost up, because we have to keep to that to ensure that we hear from everybody on the phone tonight.

And if you're in the same room, you won't be able to use the speaker phone to talk to us -- that won't work -- or putting your cell phone on the speaker. So, if you're in a gathering, the same room, if you

want to speak, you're going to have to call in separately to Dexter to speak. Everybody has to sign up separately. If you have access to WebEx, there is something called a chat box there to alert us to any technical difficulties you might be having hearing someone, or whatever.

And that's it for my opening, and I thank you again.

And I'm going to turn it to Jim Park, the Environmental Project Manager.

Jim?

MR. PARK: Thank you, Chip.

And welcome to all of you here taking part in this meeting.

As Chip said, my name is Jim Park, and I am the Project Manager for the NRC's environmental review of the application from Interim Storage Partners.

This meeting is to provide you, the public, an opportunity to provide comments on the NRC's Draft Environmental Impact Statement for the license application from Interim Storage Partners to construct and operate a consolidated interim storage facility for spent nuclear fuel in Andrews County, Texas.

On this opening slide, we have access

information for both the WebEx platform, where you can see the presentation, and also for the audio for this meeting.

The staff's presentation is available on the WebEx platform, but also through the meeting notice on NRC's public website and, also, on the NRC's special project page for its review of the license application from Interim Storage Partners. Audio for this meeting will be only through the telephone line.

Next slide, please. Can we go back one, please? Thank you.

The NRC has four meetings planned to receive comments on its Draft Environmental Impact Statement. The next meeting, or set of meetings, will be held, first, next Tuesday, on the 6th of October; on Thursday, the 8th of October, and finally, on Thursday, October 15. The notices for these meetings are all on the NRC's public web page. This slide provides the WebEx and audio access information for all four meetings.

Next slide, please.

As Chip said, members of the media should contact Dave McIntyre, who's with our NRC Public Affairs Office. And this contact information is provided here on this slide.

Next slide, please.

And now, I would like to go to Diane Diaz-Toro, who will provide some comments to those of you who will be listening in Spanish.

MS. DIAZ TORO: Thank you, Jim.

(Foreign language spoken.)

Jim, I'll turn it back to you.

MR. PARK: Thank you, Diana.

Next slide, please.

And with that, I'd like to turn it over to John Tappert.

MR. TAPPERT: Welcome and thank you for attending this evening's meeting.

As Jim said, my name is John Tappert, and I am the Director for the group that is responsible for the Draft Environmental Impact Statement that is the subject of tonight's meeting.

The Draft EIS is the result of the NRC staff's evaluation of environmental impacts for a license application from Interim Storage Partners to construct and operate a proposed consolidated interim storage facility.

The NRC has spent many months evaluating the impact to resource areas and has compiled the results of those analyses in the Draft EIS. Tonight,

we are asking for your comments on that report.

The comment period for the Draft EIS is scheduled to end on November 3rd. Tonight is not the only opportunity to comment on the Draft EIS. As Jim has noted, there are three additional upcoming meetings, and at the end of his presentation he'll also share other ways you could provide comments.

It's important to note that any comments received in this webinar forum are handled in the same manner as those comments received in an in-person meeting. Comments presented here tonight are recorded and transcribed. My staff will review and analyze them and, as needed, we'll update the Final EIS report. The transcript of tonight's meeting will be posted to the NRC's public website for the ISP review within about a week after this meeting.

So, again, thank you for your time this evening.

And we'll continue with the presentation of the NRC staff's Draft EIS results.

Jim?

MR. PARK: Next slide, please.

Thank you, John.

As you have heard, we are here to collect your comments on the NRC's Draft EIS. The majority

of this meeting will be dedicated to that activity.

Before we do that, this part of the presentation will begin with an overview of the NRC's review process for ISP's license application, including the differences between the environmental review and the safety review.

Next, I will summarize the application filed by ISP, and then, discuss some of the public comments that we received during the initial scoping process for the EIS.

I will, then, present the results of the NRC staff's environmental analysis.

Finally, I will present additional information and other ways to comment on the Draft EIS before I turn it back over to Chip to start the public comment portion of the meeting.

Next slide, please.

The purpose of this meeting is, again, to receive your comments on the Draft Environmental Impact Statement, or EIS, for ISP's license application for a consolidated interim storage facility for spent nuclear fuel.

The NRC is asking that your comments be pertinent to the current licensing action and the Draft EIS. We ask, if you can, to point to specific sections

of the report for your comments or at least identify the subject area that your comments will be referring to.

The Draft EIS can be downloaded from the NRC's public website. It is also accessible from the website for the Andrews County, Texas and Eunice, New Mexico, and Hobbs, New Mexico libraries. And the NRC has mailed hard copies of the Draft EIS to people who have requested it.

In addition to commenting in this meeting, you can provide comments on the Draft EIS by email, on a public website at regulations.gov, or by regular mail. Later in this presentation I will give the addresses to send comments in those ways. As John said, comments on the Draft EIS are accepted through November 3rd.

Any comments on the Draft EIS made in this meeting will be recorded and put into a meeting transcript that will be on the NRC's public website and in the public NRC docket for this licensing action. Transcripts will be publicly available within about a week of this meeting.

Next slide, please.

In the next few slides, I will discuss the NRC's process for reviewing the ISP license

application.

Next slide, please.

I would like to begin by clarifying the NRC's role. As an independent regulator, the NRC determines whether it is safe to build and operate a storage facility at the proposed site in Andrews County, Texas. In accordance with its mission to ensure adequate protection of public health and safety, the NRC evaluates an application for a facility and determines if a license can be issued. The NRC is not promoting ISP's proposal to construct and operate a consolidated interim storage facility, but, rather, reviewing that proposal against NRC's legislative mandate under the Atomic Energy Act and NRC's regulations concerning such a facility. That is the focus of NRC's safety review.

The NRC also is conducting an environmental review of the ISP proposal, in accordance with NRC's regulations that implement the National Environmental Policy Act of 1969. This meeting, during which we are asking your feedback on the Draft EIS, is part of the NRC's environmental review process. Results of the safety and environmental reviews inform the NRC's licensing decision.

Next slide, please.

This slide shows the basics of the NRC licensing decision process. It shows the NRC's concurrent safety and environmental reviews and the separate adjudicatory hearing process. The results of the safety review are documented in a Safety Evaluation Report, while the environmental review results are documented in a Final Environmental Impact Statement.

Now in the middle of the figure is an adjudication process that can be used for disputes. An Atomic Safety Licensing Board, or ASLB, consisting of legal and technical judges independent of the NRC staff, reviews hearing requests and presides over any hearing, in accordance with the NRC hearing regulations. This process is separate from the safety and environmental reviews.

Next slide, please.

This slide shows some of the requirements and review required by the NRC to assure that a design of the project can be constructed and operated while protecting human health.

The safety staff will evaluate the design of the consolidated interim storage facility to ensure that it will be stable by evaluating soil and geological characteristics for foundational stability.

The staff evaluates security practices to assure that the facility would not be accessed by those that would harm the facility,

The structural design is evaluated to verify its integrity.

Other areas such as thermal design and financial qualification must meet NRC standards before a facility can be licensed.

In addition, the staff will evaluate that the facility is capable of withstanding external hazards, which include temperature extremes, floods, tornados, and earthquakes.

You can say that the safety review in part evaluates how the environment will impact the design and whether that design is capable of safely storing spent fuel.

Next slide, please.

On the other hand, the parallel environmental review evaluates what the project potentially would do to the environment. The environmental review looks at the current environment as the baseline environment. And in the EIS, we call this the affected environment.

That means that each of the resources you see listed here on this slide will be evaluated for

the potential impacts against that baseline if the project is constructed and operated.

One area that is illustrative of the differences between the safety and environmental reviews is water resources. It's important to note that in this analysis there is no liquid inside the spent fuel canisters that could leak into the environment.

During a safety review, the NRC staff would evaluate a series of extreme events to verify that the project will remain safe during those episodes.

The maximum flood elevation would be evaluated and it would be determined if flood waters would rise to an elevation that would interfere with the safe function of the project.

Under the environmental analysis of water, and specifically, surface water, the staff would evaluate the effects of constructing and operating the proposed facility on local surface water bodies. Some of those impacts would be associated with additional runoff from impervious areas like the concrete pads and additional flow to nearby waterways. In other words, the environmental review evaluates the impact on the water resource from the project.

Next slide, please.

The following slides provide an overview of the ISP license application.

Next slide, please.

The proposed project site is located in West Texas in Andrews County, just east of the border with New Mexico. The project site, shown in the dark purple rectangle in the top center of the figure to the right on the slide, would be located within a much larger property owned by Waste Control Specialists, who is one of the partners in the ISP joint venture.

WCS operates a low-level waste storage and disposal facility, in the figures shown in the green, yellow, orange, red, blue-gray, and light purple. And the proposed facility would be located to the north of those current operations.

Along with the storage facility, an administrative building, a cask-handling building, an access road, and a rail sidetrack would be constructed. At the proposed full buildout of the facility, approximately 330 acres would be disturbed in constructing the facility.

Next slide, please.

This is a schematic drawing of ISP's proposed project. As shown, ISP intends that there be eight phases to the project, with phase 1, outlined

in red, the focus of ISP's license application to the NRC. Any expansion beyond an approved phase 1 would require ISP to submit an application specifically for that expansion. And the NRC would conduct separate safety and environmental reviews for that expansion application. ISP intends to expand the facility incrementally phase by phase over a period of 20 years.

The spent fuel would be shipped by rail to the proposed site, with a proposed sidetrack bringing the fuel into the facility. The existing rail line serves the WCS facility.

The fuel, first, would be offloaded from the train in the cask-handling building, and then, it would be transported to the concrete pad, where it would be stored, either vertically or horizontally.

At the NRC's discretion, in the environmental review we analyzed the potential environmental impact for phase 1 alone and, also, for all eight phases.

Next slide, please.

This slide shows on the left an artist's rendering of the storage of spent fuel shipped to the consolidated interim storage facility during phase 1. On the right, there is a representation of a vertical spent fuel storage cask and of a horizontal storage

module with the spent fuel storage cask being entered. ISP plans to use both vertical and horizontal storage at its proposed CISF, or consolidated interim storage facility. The storage canisters are designed and engineered to meet the NRC requirements for safety.

Next slide, please.

As I mentioned earlier, the proposed action is phase 1 for ISP's construction of the CISF and the authorization to store up to 5,000 metric tons of uranium, or MTUs, of spent nuclear fuel. It's important to understand that the NRC's current licensing decision is only about phase 1. The decision to evaluate in the Draft EIS the potential impact of all eight phases was made by NRC staff to provide additional perspective on the environmental impacts.

Finally, the staff evaluated the impacts of the proposed CISF project in three stages: construction, operation, and decommissioning. Most of the impacts from phase 1 come from construction, with only limited construction occurring during any later expansion phase, if approved.

Next slide, please.

In the following slides, I will briefly discuss the EIS scoping process and some of the scoping comments we have received.

Next slide, please.

For the EIS, the NRC staff conducted a scoping process that ran from November 16, 2016 to April 28, 2017, and again, from September 4, 2018 to November 19, 2018. The NRC staff hosted two webinars from the NRC's Headquarters in Rockville, Maryland, and two in-person meetings, one in Andrews, Texas, and the other in Hobbs, New Mexico.

The NRC received roughly 29,000 separate pieces of comment correspondence during the scoping period, from which the staff identified approximately 3200 unique comments. The NRC's analysis of these comments is found in a scoping summary report, with a link to that report shown in this slide.

Next slide, please.

This slide shows some of the topic areas where we received more comments during scoping. Some of those comments we identified from scoping were deemed being out of scope for the EIS. With the scope being ISP's proposal to construct and operate the CISF, or phase 1, topics such as the debate over the use of nuclear power were deemed outside that scope. Other issues, like stability of the storage pad or integrity of the storage casks, were not within the EIS scope, but would be handled as part of NRC's safety review

of the ISP's license application.

Next slide, please.

In the next few slides, I will present the results of our environmental review, as documented in the Draft EIS. I will begin by focusing on the areas for which we received many scoping comments, and after that, I will present the other areas.

Next slide, please.

In order to categorize the environmental impacts, the NRC uses these definitions for significance levels for impacts: small, moderate, large. The scale rises based on the destabilizing influence to the environmental resource. Definitions for these significance levels are found in the NRC's staff guidance for conducting environmental reviews.

Next slide, please.

For the transportation impact analysis, the staff evaluated traffic and road degradation from workers and construction vehicles during all stages and phases of the project. The staff found that there would be a minor increase in traffic around the proposed site. This would be due to construction and operation workers and to the construction materials brought to the site and the waste materials taken away.

The staff also evaluated the movement of

spent fuel to the CISF from phase 1 only and from all eight phases for 3400 casks using a bounding representative rail route. Radiological doses and health effects to the public and workers along the routes were conservatively estimated and found to be low relative to background radiation and expected baseline cancer risk. For comparison, the NRC annual public dose limit is 100 millirem.

Impacts from transportation accidents evaluated doses to first responders, workers, and members of the public. NRC's rules require spent fuel transportation canisters to withstand severe accident conditions. In an analysis from 2014, the NRC staff concluded that an accidental release of canister fuel during transportation did not occur under the most severe impacts studied, which encompassed all historic and realistic accident scenarios. So, an assumption of no release during accidents was used during the staff's Draft EIS analysis.

Next slide, please.

Two other areas of interest are groundwater and geology.

For groundwater, the NRC staff examined the data concerning the depth of groundwater beneath the proposed site for the CISF, as well as the potential

for the occurrence of the Ogallala Aquifer beneath the site. From our analysis, the shallowest confined groundwater is about 225 feet below the proposed site. And the nearest the Ogallala Aquifer comes to the site is about a mile away. In terms of potential impacts to the groundwater, the staff found that neither construction nor operation of the CISF would affect groundwater due to the depth of that water below the site.

Regarding geology, the staff determined that the potential for subsidence at the site was unlikely and that construction and operation of the CISF would not increase the potential for earthquakes, given the shallow excavation depth for the CISF pad and the passive nature of the project. The proposed CISF site is located in a regional area of low seismic risk.

Next slide, please.

Socioeconomic effects are primarily associated with workers and their families who might move into the area and tax revenues that the proposed project would generate, which would influence resources available for that community. Tax revenues and economic growth from the proposed project and from the additional workers in the area would create a

beneficial impact on the region, while there would be some increased use of public services, schools, and housing demand due to the increased population in the region.

Concerning environmental justice, the NRC staff analysis is based on guidance from the Council on Environmental Quality and the NRC's 2004 Environmental Justice policy statement. The analysis focused on the human health and environmental impact on low-income and minority populations that could result from the proposed action, phase 1, and from the full buildout of the CISF, using Census block groups and a 50-mile radius for the analysis.

There are 109 block groups with potentially affected low-income or minority populations that fall completely or partially within the 50-mile radius of the proposed CISF project area. The NRC staff found that there would be no disproportionately high and adverse impacts on any potentially affected environmental justice populations.

Next slide, please.

The site for the CISF has been proposed by Interim Storage Partners. As was shown in the earlier figure, the site is within the larger property

owned by Waste Control Specialists. WCS controls access to its property, and there would be similar restrictions on access to the CISF site.

Approximately 330 acres would be disturbed by full buildout of the proposed CISF. Activities outside the site would continue unaffected by the proposed facility.

When the CISF is decommissioned, the infrastructure, meaning the access road, the rail sidetrack, administrative buildings, may remain on the site or may be removed. That decision has not yet been made by ISP. ISP will need to submit to NRC a final decommissioning plan at that time for NRC review and approval.

Next slide, please.

This slide and the next tabulate the results of the environmental review. They provide the potential impacts from the proposed action, phase 1, and separately, the additional phases that may be requested in amendments to the license in the future, phases 2 to 8, referred to as "additional phases."

For each resource area, the timeframe associated with the impact analysis is the proposed 40-year licensing term. The area for each resource was also delineated to include reasonable

characteristics of that resource. In other words, for example, water resources were evaluated for an area to encompass the watershed; whereas, transportation was evaluated along the roadways around the site and the rail lines from across the country. As you can see on this slide and the next, the staff determined that impacts to nearly all resource areas are expected to be minor and not to be lasting or significantly destabilize the resource.

For ecology, though, vegetation on the site would be removed during construction, and because that vegetation is slow-growing, it would take some time to recover. So, while it is recovering, the impacts would be moderate, and small after the recovery and the regrowth of that vegetation.

Next slide, please.

On this page, you will see that potential socioeconomic impacts would be small to moderate, with moderate impacts due to population growth and increases to local finances. As discussed earlier, the staff found that there would be no disproportionately high and adverse impact to minority or low-income populations.

Next slide, please.

This slide provides links to the Draft EIS;

two brief overviews to the report in English and Spanish, and to the NRC staff's public web page for its review of the ISP license application.

Next slide, please.

The NRC is accepting comments on the Draft EIS here in this meeting; on the federal rulemaking website, regulations.gov; by regular mail to the NRC, and by email. Comments should be submitted by November 3rd.

Next slide, please.

That completes my presentation. I'll now turn it back over to Chip Cameron, our meeting facilitator.

MR. CAMERON: Okay. Thank you. Thank you very much, Jim. Good summary.

And, Dexter, we're ready to hear from the public. Can you put the first person on, please?

OPERATOR: I can.

If you'd like to make a comment, please press *1 and clearly state your name for comment introduction. To retract your comment, please press *2. Again, if you'd like to make a comment, please press *1 and clearly state your name for comment introduction.

One moment.

Our first comment comes from resident Kathy Wallace.

Kathy, your line is open.

MS. WALLACE: Hi. Yes, this is Kathy Wallace, and I'm in opposition to the proposal that facilitates the transport of the high-level nuclear waste across our country to be stored in West Texas and New Mexico.

The health and lives of people all across the United States are at risk of being exposed to the deadly waste in transit and after it reaches its location.

As a person that has experienced hundreds of earthquakes from the oil and gas operations in Texas, I strongly urge you to keep the waste where it resides and secure the integrity of the containers that hold it.

The U.S. Department of Interior, U.S. Geological Survey, issued a report that states there are at least 21 fault lines in the West Texas area. In the past month alone, the proposed site in West Texas has had 44 earthquakes. In March of 2020, there was a 5.0 magnitude earthquake in Mentone. That is only 80 miles away from Andrews County.

When these earthquakes occur, they are

much closer to the surface than deeper natural quakes. Therefore, ground movement and damage is much more intense. I have seen the damages created by the constant shaking from smaller earthquakes. In 2015, while hundreds of 2.0 magnitude quakes occurred in Irving, Texas, I watched my house walls. The bricks, the concrete, the pier and beam cracked and split. I watched water and gas lines break and sink holes appear in my neighborhood. Over time, damages from these West Texas earthquakes could be catastrophic to the containers holding this high-level radiation.

West Texas has also developed sink holes near the Ogallala Aquifer due to the recurring earthquakes in this area. Should the aquifer be compromised by the radiation leaks, the largest aquifer in North America that supplies water for America's crop irrigation would be gone forever.

In May of 2019, SMU Geophysicist Zhong Lu was interviewed by CBS to discuss the ongoing issue of sinking ground in West Texas. So far, two large sink holes have formed near Wink, Texas, but Lu notes that the problem is only expected to get worse over time due to the Permian Basin in Wink and other neighboring towns having a layer of salt below the ground. In many cases, oil and gas drilling has

allowed leaking water in to soften that salt layer and caused the surface to cave in.

Lu and fellow SMU Geophysicist Jin-Woo Kim have done a series of studies on the phenomenon of ground sinking at alarming rates in West Texas. Earlier studies have revealed significant ground movement that suggests two existing holes are expanding and new ones are forming. The researchers used satellite radar images that were made public to the European Space Agency and supplemented that with oil and gas activity from the Railroad Commission of Texas to connect the cause of these sink holes. Lu said the deterioration can cause serious problems for the people in Wink. "I think if I lived in that area," he said, "I would be very concerned."

Therefore, the ground in West Texas has already reached dangerous levels of deterioration which would not support any kind of radioactive waste being stored there. This should be considered in your current environmental and baseline assessments.

The effects of radiation poisoning are devastating to humans. Two years ago, my friend watched her husband die a slow, painful death from the effects of cancer caused by radiation leaks from the Coldwater Creek facility in St. Louis. As a child,

her husband unknowingly played in the contaminated creek with many other children near this nuclear waste dumpsite. Most all of them have ended up with latent cancers in adulthood and many have died from these cancers.

Exposure to this high-level radiation can show up years after exposure. If you care about the future generations, I am imploring you to reconsider implementing this plan. I oppose this project. I urge you to consider holding a live in-person hearing after the risk of COVID has diminished, possibly a year from now, and leaving the comment period open until then.

Thank you.

MR. CAMERON: Okay. Thank you.

OPERATOR: Our next comment comes from Kathy Croom.

MR. CAMERON: Thank you. I just want to say thank you, Dexter, to Kathy for all of that seismic information she offered.

Go ahead and put the next person on. Thank you.

OPERATOR: Our next question comes from Kathy -- excuse me -- Carolyn Croom.

Carolyn, your line is open.

MS. CROOM: Thank you.

I live in Austin, Texas, and I have relatives in San Antonio and in the hill country. I object to the transporting and storing of high-level nuclear reactor waste at Interim Storage Partners' Andrews County site because of the potential public health and safety, environmental, financial, and national security impacts.

An example of an environmental and public health impact resulting from a spill would be the contamination of the nearby Ogallala Aquifer, our nation's largest. Hardened onsite storage at or near a nuclear reactor is a much safer and more secure alternative to transporting 40,000 tons of high-level waste through most states over a 20-year time span.

Also, consolidated interim storage is illegal under the Nuclear Waste Policy Act. The Nuclear Regulatory Commission should summarily reject this license application just for this reason.

I also think that this hearing is inadequate because 40 percent of Texans do not have access to the internet and an in-person public meeting is inappropriate during this pandemic.

The NRC's motto is, "Protecting people and the environment." Live up to your motto. Do the right

thing and reject this application now.

Thank you for your consideration.

MR. CAMERON: Thank you. Thank you, Carolyn.

And who's next, Dexter?

OPERATOR: Our next question is Erin Hadden.

Erin, your line is open.

MS. HADDEN: Hello. Can you hear me?

MR. CAMERON: Yes, we can, Karen.

MS. HADDEN: This is Karen Hadden.

I appreciate the comments of the previous two speakers and, similarly, I'm speaking on behalf of SEED Coalition tonight.

I am opposed, and our organization is opposed, to the high-level radioactive waste going to Texas or New Mexico. We'll be put at incredible risk from the transportation that would occur. People across the whole country would be put at risk from the transportation.

I am very concerned that, even during routine shipment, there would be radiation emitted from the transport cask. And that's one thing if a train goes by at 60 miles an hour, and the NRC has said it would be less than a chest x-ray. However, if a train

stops near you or stays overnight, which is very, very likely, then people are potentially going to be exposed to vast quantities of radiation.

And we know the health impacts. We know that some doses of radiation can result in cancers, various kinds of cancer; that it can result in birth defects and genetic damage. And if you're exposed to spent nuclear fuel rods that are unshielded, it's going to kill you. It is lethal. And we know this.

The impacts in the DEIS have been so severely minimized that the report is really worthless. It needs to be done over, and we need real science. I had looked at it as over 400 pages of pseudoscience. To come out with these conclusions that the risks are small, that is like waving a magic wand over the whole issue. It's almost impossible to see how this contorted result was derived. It's like there's no analysis of the facts, and all of sudden, you leap to a conclusion that it's all okay, which is really a political conclusion that it's okay, because somebody wants to dump on Texas.

And that is not okay. It's not okay with the people who live here, and there are thousands of people in the region where this waste would go and millions of people along the route lines.

So, it's incredible that we are even having to do this fake public meeting which we can't see anyone's faces and which is incredibly difficult to access, even for people who use technology day-in and day-out.

It's an illegal process because we shouldn't be even looking at these applications at this time. It's illegal under the Nuclear Waste Policy Act to be constructing these facilities or to license them. So, we shouldn't be doing this. We shouldn't be here. That has been challenged legally, and we need a decision on it.

I'm very concerned about the limitation of what we supposedly are able to talk about here tonight, because, basically, we can't talk about safety. Well, this is all about safety.

And as a result of talking about safety, then comes the economic impact. Some studies have shown that an accident on a rail line could cost up to $270 billion. That is worth considering. And while federal tax money might cover some accidents and problems, you know, we need to look at other instances with radioactive contamination. And other states have gotten stuck with a huge part of the bill.

One, in particular, Peter Bradford, former

Chair of the Nuclear Regulatory Commission, said that New York got stuck with $2 billion for the reprocessing contamination. Now Texas can't afford that, and that's probably if we're lucky because the impacts in Texas, there are oil fields in the region. Who knows how many billions of dollars would be at stake here?

And we can't afford the health, the safety, or the economic impacts. And so, how can we come out with a small impact -- or, you know, positive impacts to the community? Well, that pales in comparison to the liabilities that we face.

And this report is disingenuous that way. It's not taking a realistic look that the real risks. One report found for the State of Nevada that there would be 1,370 latent cancer fatalities from an accident, and that was on the good end of things. If the people stayed in the region and didn't evacuate, it could be significantly more.

I have not been able to find one thing good out of this proposal. I've been looking. I've been trying. I've been trying to say, you know, what is good about this?

But nothing gets accomplished. It doesn't get the waste into a permanent repository. And this waste is supposed to remain isolated from

living things for a million years.

So, why is there not federal focus on that? That's where our tax dollars should be going, not for some band-aid approach that's going to leave this waste stranded in the desert above ground where it contaminates our air, our soil, our water. If this contaminates the Ogallala Aquifer, we're talking about contamination of the water that is used for millions of people, for wildlife, for agriculture. It is our largest aquifer --

MR. CAMERON: Excuse me, Karen. Could you just wrap up for us, please?

MS. HADDEN: I will wrap up. I'm strongly opposed to this application. I think that there needs to be real, public, in-person meetings and that this process should be halted right now.

MR. CAMERON: Okay. Thank you, and thank you for mentioning the safety concerns. And we do have two of the people responsible for looking at safety, as opposed to environmental. John Nguyen is here and John McKirgan.

And I bollocksed up the name of John McKirgan's Branch earlier on when I introduced him. And just for the record, John is the Chief of the Storage and Transportation Branch.

But the safety evaluators are here listening to the comments also.

But thank you, Karen.

And, Dexter, who do we have next?

OPERATOR: Our next comment comes from David McCoy, Citizen Action New Mexico.

David, your line is open.

MR. McCOY: Thank you.

My name is Dave McCoy. I'm with Citizen Action New Mexico.

One of the problems with the Draft Environmental Impact Statement is that it really doesn't address the purpose and need for this interim storage facility. It's stated the proposed facility is needed to provide away-from-reactor storage capacity that would allow spent nuclear fuel greater than Class C and small quantities of MOX fuel to be transferred from reactor sites and stored for the 40-year license term before permanent repository is available.

Well, first of all, there's no analysis of what "interim" means in this, but there's no analysis of why it is necessary to move the waste before establishment of a repository. The length of time and the suitability of existing reactor sites for continued

storage is not analyzed.

Then, it's stated, additional away-from-reactor storage capacity is needed to provide the option for away-from-reactor storage. Well, isn't that a little bit of a circular argument? Continued operations at reactor sites may be expanded by licensing extensions under the NRC. It's not explained why storage cannot be continued at these sites as it is or with some kind of modifications. And that, of course, is not analyzed in your cost analysis. What other uses are not explained as being in conflict with continued storage? The purpose and need violates NEPA by eliminating consideration of continued onsite storage at reactors with some kind of modifications, if necessary.

The statement of the agency's underlying purpose and need is critical to identifying a range of reasonable alternatives. But the NRC only identifies the alternative of doing nothing versus the CISF.

The site selection process is highly questionable. For one thing, these wastes will probably be left where they are after 120 years or even longer. So, the site selection criteria should include criteria as to whether the site is reasonable

for a repository because of future inability to remove the waste to another site, especially if no repository can be identified.

Now your assumption is that, well, we're going to have a repository. Well, you've been working on a repository or somewhere to put this stuff since the earliest period of the nuclear reactor operation and you still haven't come up with one. So, don't make that assumption.

Then, you identify seven states in the western and southwestern U.S. with basic characteristics. Again, you're not taking into account actual environmental criteria which are not laid out in your analysis in that section, and they're not set forth taking into consideration such factors as climate change and events that are going to occur over 120 years that you're not even aware of at this point in time. You guys are living in fantasyland.

Oh, one of the things I want to mention is that, in its April 18th, 2017 letter to the NRC, Waste Control Specialists indicated that it was recommended by the 2012 Blue Ribbon Commission on America's Future. This is a gross overstatement by WCS and far from the truth. There is no mention at all of WCS in the Blue Ribbon Commission Report. And

while they may have mentioned they had a site in Texas, there wasn't any specificity as to that site being suitable or desired for an interim storage facility.

The licensees have not analyzed the long-term damage to the fuel assemblies and the effect of moving them from reactor sites around the country, and then, removing the containers once again to a permanent repository. This is all a big, fat waste of money and time and threatens the environment and the public around this site and elsewhere in the nation.

You've failed to demonstrate that utilization of interim storage-associated systems and storage systems, as proposed pursuant to the requested permit, is adequate to accommodate storage of spent fuel elements safely, either for the length of time contemplated by its analysis or for what is reasonably likely to be a substantially longer period of time.

I identify with the prior statements by the persons who just spoke with respect to some of the environmental problems, the lack of compliance with the 1982 Nuclear Waste Policy Act. And there are a considerable number of NEPA violations which I will bring out subsequently in a later comment.

But this business of having virtual meetings, and then, comments being due in November is

a ridiculously short time stream for the public to try and comply with.

MR. CAMERON: Okay. Thank you. Thank you, Dave. Thank you very much. Thanks again for your comments.

And, Dexter, we're going to go on to the next person.

OPERATOR: Our next public comment is from Jay Thomas.

Jay, your line is open.

MR. THOMAS: Thank you, Dexter.

Hello. My name is Jay Thomas, and I am the Director of Transportation and Packaging for TN Americas and a concerned citizen. I appreciate the opportunity to participate in this public meeting to hear the concerns and opinions of the many stakeholders and to say that we support the NRC's Draft EIS regarding the transportation of used nuclear fuel.

TN Americas and other members of the Orano group internationally are knowledgeable of the safety aspects of transporting used nuclear fuel, based on our experience of performing over 5,000 used nuclear fuel shipments. Shipments of used nuclear fuel have been conducted safely and securely in the United States and around the world for nearly 60 years and shipments

continue to regularly move by road, rail, and sea today in the United States, France, and other countries.

So, I'd like to emphasize that the transport of used nuclear fuel is not new. In fact, it is considered routine by experienced shippers. The historical success of these shipments is attributed to: one, the strict defense-in-depth regulations that have been put in place by the NRC, the U.S. Department of Transportation, and international regulators, and, two, the highly experienced shippers and cask operators that follow these regulations.

The planning and coordination of a used nuclear fuel transport is not something that happens overnight and often takes six months to over a year to adequately pull all the pieces together to make a shipment happen. These pieces, which are all regulatory requirements, consist of a transport package and the elements that make up the physical protection system.

In order to transport used nuclear fuel, an NRC-certified Type B transport package, commonly referred to as the transport cask, must be used, and the material transported must be an approved or authorized content. These Type B casks are large, robust containers. They are heavily shielded to

protect the public and carriers from exposure to radiation doses above the DOT limits and are designed to absolutely prevent the release of nuclear material in the event of an accident.

Now, to obtain certification of the transport cask design, design documents are submitted to the NRC for formal review and approval. This design must demonstrate that the casks will provide shielding and containment of the nuclear material under normal use during normal accident conditions and during hypothetical accident conditions. Now hypothetical accident conditions represent extreme conditions that the cask could be subjected to, even though, in reality, they have a very low probability of occurring.

For a cask to be certified as a Type B, the cask design must be shown, either by analytical computation or through the use of scale models, to successfully satisfy the acceptance criteria of a series of tests. This series of tests simulates the conditions of the hypothetical accident. Thus, these casks have higher factors of safety built into the design.

Over the years, the parameters of the hypothetical accident conditions are updated to reflect any actual or newly-identified extreme event,

based on rail, barge, or truck accidents that occur while shipping non-radioactive material.

And the NRC, upon approving the design, will issue an NRC certificate for the cask, referred to as the Certificate of Compliance, or CoC. Casks must be operated and maintained in accordance with this CoC and transport only the contents authorized by the CoC.

The physical protection system consists of a number of elements, each of which plays a significant role in ensuring the safety and security of the transport. These elements are NRC-approved routes, preplanning with the state governments and tribal nation officials, armed escorts, movement control center, and tracking systems. And the key point here is that the planning of the states and tribal nations occurs well in advance of the shipment, and that the key stakeholders are aware of the details of the shipment.

History has shown that these regulations work. Companies such as TN Americas and others with proven experience understand these principles behind the regulations and the importance of strict compliance. Based on our experiences and the long history of safe and secure used nuclear fuel shipments

domestically and abroad, we support the conclusions of the NRC's Draft EIS.

Thank you for your attention.

MR. CAMERON: Thank you. Thank you, Jay, for those comments.

And, Dexter, can we go to the next person?

OPERATOR: Our next person is Audrey Sinett, resident.

Audrey, your line is open.

MS. SINETT: Thank you.

I live in Montpelier, Vermont, and I feel that, first of all, continued onsite storage until a permanent repository is established is key. We should not be shipping this high-level nuclear waste across country to communities of color that clearly do not want it and have not benefitted from the energy it produced. Furthermore, consolidated interim storage facilities are illegal under federal law until a final repository is operating.

You know, I've always heard, as the last speaker stated, how safe transportation is, but it only takes one accident that would cause incredible consequences to people and the environment for miles and miles and miles. And these people have not been allowed along the transportation route to speak about

this.

So, there's a lot I wanted to say, but it's already been said. I wanted to comment on the choice of the house graphic used in slide 12, extremely large homes which are probably not the type of homes in the areas proposed to unload this poisonous, toxic waste. The wealthy would never accept it, nor should anyone else.

And I think that the Draft Environmental Impact Statement is misleading, incomplete, and denies or ignores reality.

Thank you.

MR. CAMERON: Okay. Thank you very, very much for calling in from Vermont.

And, Dexter, can we have the next person?

OPERATOR: Our next comment is from Pat Beaulah, citizen.

Pat, your line is open.

MS. BEAULAH: Thank you, and thank you for the opportunity to say something.

I don't feel like these types of hearings have been satisfactory so far. One is not being able to see the people to whom we're making comments. So, we don't know whether they're actually listening. I hope they are. Hearings should be postponed until they

can be conducted in-person after the pandemic.

I am extremely concerned about the transportation issue related to high-level nuclear waste transport, in spite of what the gentleman said before. When I look at train derailments across the country, I see numerous trains that have gone off the tracks due to a number of different causes from straight-line winds to hurricanes, to whatever. What if these trains had been loaded with high-level nuclear waste? What if they had been derailed in the middle of downtown Dallas, Arlington, or Fort Worth? Or what if terrorists attacked these high-level nuclear waste trains near military bases in San Antonio?

I just don't think the massive amount of transportation of these dangerous materials is worth the risk, and I do not support bringing it to or through Texas.

Another issue is, should there be an accident at the Andrews site, who will be responsible? Will the citizens of Texas be responsible if the company goes bankrupt? I don't know. Do we really know beforehand who would wind up with having to pay? I just don't want my taxes to go to the massive cleanup.

Thank you.

MR. CAMERON: Okay. Thank you, Pat.

And I guess I would just offer that, as I look around at the NRC staff here, they are listening intently and seriously and they're taking notes on what you and the other people have said, for what that's worth.

But thank you very much for your comments.

Dexter, could we have the next speaker?

OPERATOR: Our next comment comes from Tom "Smitty" Smith, citizen.

Your line is open.

MR. SMITH: Good evening, everybody.

Chip, can you hear me okay?

MR. CAMERON: Yes. Hi, Smitty.

MR. SMITH: Hi, everybody.

My name is Tom Smith.

And there's one thing that the Governor of Texas, the Texas Attorney General, and the oil companies, and all the enviros in Texas agree on, along with 29,000 other citizens: we don't want this waste stored in Texas for infinity, and likely that's what's going to happen.

Now there are about 12 reasons that this is a really bad idea. And my dad used to say, "When you're fixin' to do something, you ought to look at what could go wrong, and if there's a one-in-two chance

of something going wrong, you should have a plan to fix it." Well, unfortunately, your plan, your analysis doesn't meet my dad's test, nor my test, nor any sober citizen's test of what a reasonable risk plan should look like.

No. 1, it's illegal. No. 2, it ignores the transportation risk, which is probably the really big risk for this site because it goes through almost every major city in the country and through Texas' most major cities. It goes down the rail lines parallel to I-10, I-20, I-30.

And it ignores the amount of radiation that is emitted continuously one chest x-ray at a time, affecting the communities along the route when that railcar is stopped, waiting for clearance to go down the line to otherwise contested, or not contested -- the backbone of the shipments coming across the country on the southern half of the country. And it's a killer to those people who live along those sites.

Now it goes, as I mentioned, through most major cities -- Dallas-Fort Worth, Houston, San Antonio, El Paso. And when you look at where it goes through, it's likely to be coming off of barges going through the Port of Houston and headed out toward El Paso. And what's in the Port of Houston? The

petrochemical complex that fuels about a third of the industries in the United States of America. One sabotage attack could take out the backbone of our economy and really cripple the United States. Is that smart? I don't think so.

It also goes past San Antonio and through El Paso, where we have massive military installations, and right through their downtowns, and DFW and Fort Worth, where it goes through their downtowns as well.

What's the cost of cleanup? Nobody really knows. We've never had anything this bad or big. You can look at Fukushima and how much is being spent, and those dollar meters continue to grow day after day. But the estimates that we have seen range from $270 and $650 million to clean up the transportation, the estimate.

Now those accidents that could occur often exceed the design standards that Jay Thomas was talking about earlier. Think about what would happen if a couple of train cars collided or trains hit head-on at 70 miles per hour. It never happens, you say? It certainly has happened in Texas up in the panhandle. And recently, two trains on the very track that's licensed to take this stuff out to the sister site at Holtec collided head-on, and one of them was carrying

fracking sand. When they came around a curve, one of them toppled in front of the other.

Now another big issue to look at is sabotage. What happens if some of the weapons that we left behind -- about 50 percent of all the weapons we used in Iraq was left behind, including armor-piercing weaponry and drones that weren't developed when these standards were first analyzed and weren't developed when these casks were tested -- were used against those casks that are so safe, they say? Well, you know, I suspect you could have a mighty big boom, and if you did, you could take out the Port of Houston.

Now I think it's also important to talk a little bit about what's happening to the groundwater and what could happen. And it's been mentioned it's under eight states. And the WCS site was first approved in a situation where all of the staff who worked at the state agency looking at this analyzed it and said, "We don't think this is a safe site because of the impact on groundwater."

The oil and gas industry is another reason. They're involved in it in opposition because they know what could likely happen, should there be an accident out there, and they're scared to death. They know

about the frequency of earthquakes that are occurring out there. And they know how much that would damage the enormous engine that is keeping the United States energy-independent these days.

Now there's no real plan for repackaging, should there be an accident out there or should a cask show up damaged. And if you look at a cask sitting around for 40 years or 120 years, there's a really high likelihood that cask is going to end up cracking, leaking, and need to be repackaged before it's moved off to the final repository. And for not having a system in place to do that, well, that's not only shortsighted, but it fails the basic test of having a plan to clean up the mess that you've made.

A couple of last points that I want to make. And the last one is there's not been any political will, just like there's not been any political will to build a repository over the last 40-odd years, to actually move this wherever it's supposed to go next. And we need to grow up and look at the political realities we're in. Nobody wants this stuff. Nobody wants to take the risk, and there will never be another final repository.

And last, you are moral, sentient human beings. And just because it's legal doesn't mean it's

the right thing to do. We're counting on you at the NRC to fulfill your mission and to protect the public from this genie that came out of the bottle called nuclear waste and keep it where it is until we have a final safe repository. That's your job, as people who protect the people of the United States. It's your responsibility.

And those of you who are in positions of power that are in a position who've analyzed this and say, "This is a bad idea," we're calling on you to do the same thing the people at the TNRCC did a generation ago and say, "This is a bad idea. We don't recommend it. This is not a site that's safe."

Thank you very much for your time.

MR. CAMERON: Okay. Thank you. Thank you, Smitty, for, as usual, all the specific issues you raised. Thank you very much.

And, Dexter, our next speaker?

OPERATOR: Thank you.

If you'd like to make a comment, please press *1 and clearly state your name for comment introduction. To retract your comment, please press *2. Again, if you'd like to make a comment, please press *1 and clearly state your name for comment introduction.

Our next comment comes from Edward Davis, U.S. Nuclear Industry Council.

Edward, your line is open.

MR. DAVIS: Yes. Good afternoon. Good evening. Can you hear me?

MR. CAMERON: Yes, we can, Ed.

MR. DAVIS: Thank you.

I'm Edward Davis. I'm a Senior Fellow with the U.S. Nuclear Industry Council. The Council is a trade association representing over 75 companies that have significant and substantial expertise and experience in all phases of the nuclear industry, including specifically nuclear fuel storage and transportation. We very much appreciate the opportunity to comment today on the Draft EIS for the Texas consolidated interim storage facility.

First, we believe that the NRC, under U.S. law, is the properly-charged federal agency to evaluate the environmental impacts of the proposed facility. We believe that the NRC has conducted a thorough, comprehensive, and complete review of the proposed impacts -- of the impacts of the proposed facilities.

We concur with the NRC's results in the Draft EIS, as outlined, that impacts of the proposed facility are small and that the facility will have

negligible impact on the surrounding environment.

We would also point out that the U.S. nuclear industry safety record is second to none when it comes to the transportation of spent fuel. Since the 1960s, the U.S. nuclear industry has shipped over 1300 shipments of commercial spent fuel in the United States. In addition, internationally, there has been 25,000 shipments -- air, land, and sea -- worldwide with a complete safety record. And moreover and in addition, there's been 12,000 shipments of transuranic waste to the WIPP facility in New Mexico. Clearly, there is a dramatic safety record, important safety record, of safe and secure transportation.

Finally, we support the proposed action and the NRC's issuance of the license for the proposed facility.

Thank you very much for your attention. Appreciate it.

MR. CAMERON: And thank you. Thank you, Ed, for your comments.

And, Dexter, could we have the next speaker?

OPERATOR: Our next comment comes from Doreen Geiger, March to the Polls.

Doreen, your line is open.

MS. GEIGER: Can you hear me?

MR. CAMERON: Yes, we can, Doreen.

MS. GEIGER: Okay. I am 100 percent opposed to the transportation of this nuclear waste in and through Texas. I live in Fort Worth, Texas. Behind my house is a set of railroad tracks. Twenty-six trains a day pass behind my house. A few years ago, there was a major derailment. If you've ever actually seen a derailment, it's very hard to feel that it would be safe to have any nuclear waste transported by rail.

The Dallas-Fort Worth Metroplex covers several counties and about 7.5 million people. I don't think it's wise to transport any type of nuclear waste through heavily populated areas. Please don't bring nuclear waste in and through Texas.

Thank you.

MR. CAMERON: Okay. Thank you, Doreen. Thank you very much.

And, Dexter, who do we have next?

OPERATOR: Our next comment comes from Mark Richter, NEI.

Mark, your line is open.

MR. RICHTER: Thank you very much. Can you hear me?

MR. CAMERON: Yes.

MR. RICHTER: Okay. Well, good evening, everyone. On behalf of NEI, I would just like to thank the NRC for providing the opportunity to offer comments on Interim Storage Partners' consolidated interim storage application, the Draft EIS associated with that.

The impact statement in our view documents the NRC's thorough, independent evaluation of the significance of the potential environmental impacts of the proposed action and the reasonable alternatives to the proposed action.

And during this process, the public has the opportunity to comment on both the scope of the review and on the draft report. And to that objective, NEI will offer our comments.

The possibility of licensing, constructing, and operating the consolidated interim storage facilities will be of tremendous benefit to the role that nuclear energy plays as the largest and most reliable source of carbon-free energy in our country. Consolidated interim storage will complement new business models around nuclear plant decommissioning and enable early removal of spent nuclear fuel from decommissioned sites, and

subsequently, enable an earlier return to the greenfield conditions and new uses for the decommissioned site.

In addition to enabling full decommissioning of permanently shut-down nuclear plants, there is significant economic benefit expected to accrue to the county and surrounding areas for the facility. The Draft EIS notes that the socioeconomic impacts from the facility are primarily associated, one, with workers who might move into the area and the tax revenues that the proposed project would generate, which would influence resources that are available to the community.

Tax revenues and economic growth from the proposed project and from additional workers in the area would create a beneficial impact on the region. Although there will be some increase in the use of public services like schools and housing, the demand for housing would certainly be a benefit to the economy and the population overall in the region deriving the benefits from new growth.

The Draft EIS also addresses transportation, and that's the real focus of my comments, related to CIS. That includes radiological and non-radiological health and safety impacts under

normal and accident conditions that could result from the proposed use of the national rail lines to transport shipments of spent nuclear fuel to and from the facility, The rail shipments of spent nuclear fuel could include relatively short segments of barge or heavy-haul truck transportation as needed to move the fuel from reactor site to the nearest rail line, where onsite rail access is otherwise limited.

The radiological impacts from transportation to both workers and the public were, quote, "estimated based on prior NRC transportation risk assessments" in their document, NUREG-2125, "Spent Fuel Transportation Risk Assessment," for your reference, and scaled using a representative transportation route that is longer than the distance from most reactor sites to the consolidated interim storage facility in order to conservatively overestimate any dose.

The radiological impact to the workers from incident-free transportation of spent nuclear fuel to and from the facility for all phases were found to be below NRC's Part 10 -- Code of Federal Regulations, Part 20, standard dose limit. All of the estimated public health effects from the proposed incident-free transportation for all phases are below

the thresholds for health effects, and therefore, are most likely to be zero.

To put it in a more plain spoken form, someone who stands maybe a hundred feet from the tracks and watches all 10,000 shipments over 20 years would receive a dose of about 6 millirem of direct radiation emitted from these heavily shielded transportation casks. And for comparison's sake, the NRC limits annual public doses to 310 millirem from natural sources of radiation and 310 millirem from manmade sources, such as medical, commercial, and industrial sources. So, even in the extreme, there's nearly a factor of 50 difference between allowable other sources and what one might experience in close proximity to all of those shipments.

And all of the spent nuclear fuel proposed to be transported to and from the facility would be shipped in canisters that are placed in NRC-certified casks. And again, referring to the NUREG-2025 analysis, NRC concluded that there is no accidental release of canistered fuel during transportation, even under the most severe impacts studied, which encompassed all of the historic or realistic accidents, including fire, impacted force to the casks, submersion, just to name a few of the rigorous tests

that they are subjected to.

The Draft EIS also specifically notes that adverse environmental and ecological impacts from construction and utilization of the needed transportation structure would be small.

The analysis and review of historical and realistic accidents considered in the Draft EIS is strongly supported by a long, safe, and uneventful industry history of the transport of spent nuclear fuel and related waste.

NEI recognizes that the success of the consolidated interim storage and its role in sustaining the benefits of carbon-free nuclear energy is inextricably linked to the ability to safely and efficiently transport spent nuclear fuel and the public confidence that it's earned throughout the history of this safe transportation. The history of the transportation of spent nuclear fuel tells a compelling, safe story. Since the early 1970s, there have been at least 20,000 safe shipments of more than 80,000 metric tons of used fuel worldwide, none of which has involved any harmful release of radioactive material or personal injury.

According to the NRC, more than 1300 spent fuel shipments have been completed safely in the United

States over the last 35 years. Most of the used fuel was shipped by rail. As a result of robust transportation, container design, and stringent safety measures, all of these used fuel shipments have been safely completed with no harmful release of radioactivity or environmental damage.

MR. CAMERON: And, Mark, I'm going to have to ask you to wrap up.

MR. RICHTER: In addition, the United States Navy has completed nearly 850 shipments of used fuel from naval propulsion --

MR. CAMERON: Thank you, Mark. Thank you very much for all that information, including the part about the potential benefits to communities where plants have been decommissioned. Thank you.

And do we have Lorraine on as the operator now?

OPERATOR: Not yet. She'll be here in just a moment.

So, our next comment comes from Jesse Deerinwater. Then, we have Kevin, and then, we have Stephan after that.

Jesse, your line is open.

MR. DEERINWATER: Can you hear me?

MR. CAMERON: Yes, we can.

MR. DEERINWATER: Greetings. My name is Jesse Deerinwater. I live in Redford, Michigan, and I'm a member of Citizens Resistance at Fermi 2, also known as CRAFT.

I just came on this call because, first, I would just like to say thank you to all the people that spoke before. There's so much that a person could build on, but there's so much I probably don't have time. But it takes a lot of bravery just to like step up and speak your truth, regardless. So, I just want to honor them for that.

But, anyway, I'd like to say that we need to halt this licensing now. I mean, it doesn't seem very just. You know, from what I've heard from the one guy there in Texas, it doesn't seem very prudent. It's definitely not sound and safe. The deadly waste should not be shipped across the country.

I live here in Redford, Michigan. We have the Fermi 2 Nuclear Reactor. I'm pretty sure some of the waste that's stored here will probably make its way there via rail, and I'm assuming that will probably come up through Detroit. We've had multiple train wrecks here. Conditions are not that great. And if not, it may go out through barge. And, you know, I'm pretty sure that nobody wants it to go through Lake

Erie. You know what I mean? That could be dangerous.

But, anyway, also, by taking the waste away from its localized storage, this fails to get the waste into a permanent repository, if one was ever to be created. And also, building on that, the waste needs to be isolated from the rest of civilization, you know, forever, like, yes, yes, just not put out in a field.

There's so many environmental injustices that everyone else has already caused, the health and safety risk from potential contamination. The one person brought up really interesting points about attacks with armor-piercing or RPG-style things. And that brings up one thing, like, say something's damaged and not even just from an attack, but, say, a railway accident, what happens to the canisters? I mean, what happens to the fuel on the spot? Does it go forward? Does it go back? How is that going to be handled?

Let's see here. Yes, and that brings up the financial risk. You know, you don't just have the cost of what goes into it, but who suffers afterwards? All the people that work localized in the places where an accident could happen are affected, impacted. The people that are there are impacted. Families are impacted. Human beings, nature.

Yes, yes, that's why I'm on here, is just

to give that much from my perspective and our perspective here in Michigan. I'm also a member of another group, the Michigan Environmental Justice Coalition, who also does not want nuclear waste moved through our city because of the dangers involved with transportation.

And also, yes, I think that's all I've got at this moment in time.

MR. CAMERON: Okay. Thanks. Thanks, Jesse, for taking the time to talk to the NRC. Thank you very much.

And do we have Kevin Kamps next?

OPERATOR: We have Kevin Kamps next. Then, Stephan; then, Linda.

Kevin, your line is open.

MR. KAMPS: Hello. Can you hear me?

MR. CAMERON: Yes, we can.

MR. KAMPS: Thank you.

This is Kevin Kamps with Beyond Nuclear and Don't Waste Michigan. And I would like to comment on the risks of so-called routine or incident-free shipments; nonetheless, being like mobile x-ray machines that can't be turned off, as well as the risks of externally contaminated shipments.

So even so-called routine or incident-free

shipments of irradiated nuclear fuel carry health risks to workers and innocent passers-by. This is because it would take so much radiation shielding to completely hold in the gamma and neutron radiation being emitted by the highly radioactive waste that the shipments would be too heavy to move economically.

So NRC has compromised and allows or permits a certain amount of hazardous gamma and neutron radiation to stream out of the shipping container. NRC's regulations allow for up to 10 millirem per hour of gamma and neutron radiation to be emitted at a distance of about 6 feet, 6.6 feet, 2 meters, away from a shipping cask's exterior surface. That's about one to two chest x-rays worth of gamma and neutron radiation per hour of exposure. Since the radiation dissipates with the square root of the distance, this means that NRC's regulations allow for up to 200 millirem per hour at the surface of the cask's exterior. That's 20 to 40 chest x-rays worth of gamma and neutron radiation per hour which NRC allows to stream out right at the cask's surface.

NRC has done a cost-benefit analysis, the cost being to human health, the benefit being to the nuclear power industry's bottom line or profit margin. And the NRC has deemed these exposure levels

acceptable or permissible.

But this should never be confused with safe or harmless. Exposures to 200 millirem per hour, or even 10 millirem per hour, still carry health risks. After all, any level of radiation, no matter how small, has long been confirmed to cause cancer and other maladies. For more information, see a NIRS press release dated June 30th, 2005 about the National Academy of Sciences' Biological Effects of Ionizing Radiation study.

The humans actually harmed by these exposures to hazardous radioactivity related to the nuclear industry's NRC-approved but unnecessary shipments, for example, might beg to differ about these conclusions. But, of course, any negative health impacts associated with irradiated nuclear fuel shipments will not be closely tracked or even tracked at all by the NRC or by any other government agency, for that matter.

NRC and industry almost always downplay the health risks and would almost certainly deny any connection between such exposures and negative health outcomes. Six feet away could affect a person standing beside a train track as the train goes by.

Some real-world examples of this situation

include the Takoma Metro Station near Takoma Park, Maryland, where our office happens to be located. The red line Metro Station platform is right beside the CSX railway which is targeted for trains to haul irradiated nuclear fuel from Calvert Cliffs, Maryland, and the North Anna, Virginia Nuclear Power Plants, such as those bound for Texas. Although further than 6 feet away, residences located immediately adjacent to these same CSX rail lines in Takoma-D.C. mean that those living there could well be exposed to gamma and neutron radiation, although at a lower dose rate. Again, the dose rate decreases inversely with the square root of the distance.

However, residents can be expected to be present in their homes a lot more often than commuters standing on a Metro platform, including during sleeping hours when trains carrying irradiated nuclear fuel could still go by. And, of course, residents along these tracks would also be commuters standing on the platform, leading to multiple exposures in their daily and nightly lives for years on end, such as during a WCS shipping campaign.

Trains pausing next to commuter platforms or residences will prolong these potentially hazardous exposures. Paused trains, even ones carrying

hazardous cargoes, are commonplace in the U.S. Pauses can sometimes last a long time. Lead cars stuck by paused trains at railroad crossings could mean the occupants of those cars are exposed to gamma and neutron radiation. Even a rolling train car would emit a certain dose as it passed by to a lead car and its occupants stopped nearest the tracks.

And I would like to address some real-world examples of this. Areva, now called Orano, a key partner in this ISP WCS proposal, at its home base in France experienced a plague or an epidemic of externally contaminated shipments. A full 25 percent to 33 percent of Areva's/Orano's irradiated nuclear fuel shipments in France during the 1990s bound for its La Hague reprocessing facility were externally contaminated for years on end above permissible dose levels. This amounted to many hundreds of individual shipments contaminated above permissible levels over the course of several long years.

On average, the shipments were giving off radiation dose rates 500 times the permissible level. And in one instance, a shipment was emitting radiation 3,300 times the acceptable level. So, comparing that to U.S. standards, 500 times permissible would be 500 to a thousand chest x-rays per hour; 3,300 times

permissible would be 3,300 chest x-rays per hour up to 6,600 chest x-rays per hour.

Such externally contaminated shipments have happened in the U.S. as well. Bob Halstead, up in Nevada State Agency for Nuclear Projects, documented this in a report prepared for his agency in 1996. It's titled, "Reported Incidents Involving Spent Nuclear Shipments - 1949 to 1996." And in that document, 49 surface contamination incidents are documented. And this report is available at the State of Nevada, Agency for Nuclear Projects, website.

And the last thing I'd like to mention regarding the environmental justice burden of such shipments, and one of the industry speakers, Jay Thomas from Orano, mentioned the tribal nations being involved. This is going to be a tremendous environmental justice burden on low-income, people of color communities, including indigenous communities. And as Mustafa Ali, the former head of EJ at EPA during the Obama Administration, has said, "This is yet another environmental justice burden of the nuclear industry on low-income, people of color communities."

Thank you.

MR. CAMERON: Okay. Thank you. Thank you very much, Kevin, including that local D.C.

example. Thank you.

And, Dexter or Lorraine, who do we have next? Lorraine, have you taken over from Dexter?

OPERATOR: No, not yet.

MR. CAMERON: Okay.

OPERATOR: Next up is Stephan Blackburn. Then, Linda Lewison; then, Michelle Lee.

Stephan, your line is open.

MR. BLACKBURN: This is Stephan Blackburn calling from Dallas, Texas. Can you all hear me?

MR. CAMERON: Yes, Stephan, we can hear you.

MR. BLACKBURN: I want to talk about the EIS, specifically Section 4 titled, "Environmental Impacts," and mostly, Section 4.3, "Transportation Impacts." First of all, I'd like to say that I think that Interim Storage Partners, LLC, ought to be able to do whatever they want, if they're willing to pay for the financial repercussions of anything that occurs.

And the problem with environmental impacts, Section 4 of the EIS, as it's currently drafted, is it does not consider impacts such as seismology and earthquakes, hurricanes and flooding, tornados, and terrorist attack on transportation of

this nuclear waste. And the problem that we run into is we know for a fact that accidents are going to occur. And it's one thing to say, well, you know, no accidents have occurred ever, but that's not the case. We know that accidents have occurred with respect to shipping nuclear waste. And the more nuclear waste that gets shipped, the more likely it is for an accident to occur.

And we need to be very serious about whether or not these casks can actually survive a Hurricane Andrew-like incident in a place like Houston on a railcar where that railcar might get swept into floodwaters and we might not know where it is for days or weeks.

And we need to be very serious about what happens if a railcar is transported through Dallas and we have another tornado rip through Dallas like we've had in the past several years and blows that railcar off the track, and that railcar might be miles and miles away from the track that it was on before it gets hit by that tornado.

I don't see in environmental impact what the environmental impact might be of these foreseeable circumstances. And we know they're foreseeable. There should be an environmental impact assessment of such foreseeable circumstances, and we don't really

get that. We get a little bit of lip service, "Oh, well, we analyzed this according this Nuclear Regulatory Commission guideline," blah, blah, blah. But that's not reality.

And we need to know what the financial liability might look like for anybody who takes on the responsibility of shipping this stuff. And where the EIS falls short is failing to address that.

And one other place I'd like to address that the EIS falls short is with respect to the decommissioning aspects that are found throughout the EIS report. The EIS report presupposes that when the licensing term ends in 40 years, there will be, you know, a new application made to either repackage everything and ship it off, or whatever.

And I don't think that the EIS impact statement should assume a nominal transfer of this liability stuff. I want to see what happens if, in year 28 or year 32, a major incident happens with respect to transportation, what those environmental costs are going to be. And then, what happens if Interim Storage Partners, LLC, is no longer soluble and no longer can afford the financial impact of such costs? And that's beyond the scope of this EIS. That's something that this EIS should, in fact,

consider because we don't know what the financial liability is for the people who want to transport this waste, might be, unless we know what the full environmental impact possibilities are.

Thank you.

MR. CAMERON: Thank you. Thank you, Stephan. Very, very specific. Thank you for that.

And are we going to hear from Linda now, Dexter?

OPERATOR: Next up is Linda Lewison. Then, we have Michelle Lee, and then, we have Jack Edlow.

Linda, your line is open.

MS. LEWISON: Hi. This is Linda Lewison. Can you hear me?

MR. CAMERON: Yes, Linda, we can.

MS. LEWISON: This is Linda Lewison. I'm with Nuclear Energy Information Service in Chicago and with the Sierra Club Nuclear Free Campaign. I have several points to make.

First of all, that this is illegal, as other people have said. CIS or consolidated interim storage facility are illegal under federal law. No interim or temporary storage site is allowed unless there is a final repository; plus, the site would become

de facto permanent, although it's not designed or licensed for permanent isolation of the waste.

Secondly, there is no dry transfer facility. There is no shielded facility to repackage damaged fuels or containers. Without a fuel pool, the only other option is a dry transfer facility. There's no plan to build a dry transfer facility or a fuel pool. How can the NRC believe that there never will be a need to recontainerize aging nuclear fuel that is in aging containers, especially when they are out in the open, exposed to severe heat, cold, hail, flooding, earthquakes?

Next, the Draft Environmental Impact Statement is misleading. It incorrectly assumes only 40 years of storage, even though the waste could be at the site far longer than that, potentially indefinitely. It incorrectly assumes that there will be a permanent repository elsewhere.

It also fails to address the environmental impacts of returning damaged containers of high-level radioactive waste if they arrive in unacceptable condition. The plan to return to sender with no analysis of the logically higher risk of transporting failed fuel and/or containers twice, it ignores the potentially higher risks from damaged fuel and high

burnup fuel, and it fails to acknowledge the impact on all transport roads to the site.

It is important. I call on the NRC to hold in-person meetings all along the potential routes and to extend the comment period until six months after the COVID crisis ends.

This deadly waste shouldn't be shipped across the country to be dumped in the Southwest for decades, perhaps forever.

MR. CAMERON: Okay. Thank you. Thank you, Linda.

And can we have Michelle now?

OPERATOR: Next up is Michelle Lee. Then, we have Jack Edlow; then, Patricia Walter.

Michelle, your line is open.

MS. LEE: Good evening. Can you hear me?

MR. CAMERON: Yes, we can.

MS. LEE: Okay. Thank you very much.

I'm going to try to focus my comments on points that have not been made, so as to avoid redundancy. However, I do wholly support the other comments in opposition and those who've expressed concern during this call and in the written comments that have been submitted, both regarding this and the New Mexico CIS app.

Okay. With respect to things that have not been said as far as the democratic process of these proceedings go, the industry has ample opportunity. The NRC staff meet with industry representatives very frequently on a formal and informal basis, including many meetings that are not open to the public. The industry has a lot of opportunity to ask you questions and have you respond to questions.

I want to voice my strenuous opposition, opposition on behalf of my organization, the Council on Intelligent Energy and Conservation Policy, to calls where you do not answer questions. And while I can appreciate perhaps this first call you want to simply take questions, I would really request that in future calls you set aside time to respond to specific questions that are raised. Okay? That's one thing.

Two, there's no excuse for not having a transcript of these meetings available at a much more rapid pace. You've set a very limited time span for responding, given the realities of the COVID crisis and given the realities of people struggling with internet and jobs and kids and schools, and the whole, you know, everything everybody knows about. And, of course, you're setting it for Election Day, which is interesting.

Given that, you should have the transcripts ready within a couple of days, so that the commenters who have written comments or want to participate in future calls can have the written transcripts to review. So, that's with respect to democracy.

With respect to the ecosystem and incremental justice and public health issues, using the logic of the NRC's analysis in these Draft EISs, you would have no environmental concerns with the World Trade Center being hit by two airplanes. You would have no environmental concerns with the advent of Katrina in New Orleans. There would be no ecosystem issues with respect to the Trans World disaster. Because these things aren't going to happen, right? The likelihood is so small.

You excise safety and security and the realities of infrastructure and the realities of the human factor, real-life human behavior, and flaws in the regulatory system, and all the things that go wrong in every single major disaster and accident that I have ever covered in the now near 40 years that I've been focusing on these things.

It's always a confluence of things. And to excise crucial material factors from evaluation and

say these are off limits and consideration is really abhorrent, if your actual goal is protection of the health and safety of the public and the environment.

Finally, with respect to the fossil fuel and chemical facility/infrastructure in the region of Texas, I just want to highlight the fact that one issue that you've not considered is major gas pipeline explosions or events such as an earthquake which could trigger multiple, simultaneous or nearly coincidental serious events all at the same time, which would also be at the same time when communications are likely down, where the ability to respond to fires is impaired, where first responders may be distracted, and so forth. And obviously, those things can all be exploited by a malevolent attack.

So, that's my comments here, and I do hope you will take questions in the future. Thank you.

MR. CAMERON: Thank you for those suggestions, Michelle. Thank you very much.

And let's go to Jack Edlow, Dexter.

OPERATOR: Next up is Jack Edlow. Then, we have Patricia Walter; then, Richard Halpin.

If you'd like to make a public comment, please press *1 and clearly state your name for comment introduction. To retract your public comment, please

press *2.

Chip, Lorraine has the next one.

Jack, your line is open.

MR. CAMERON: Okay. Thank you.

MR. EDLOW: Thank you very much. Good evening to all of you.

My name is Jack Edlow. I am the President and CEO of Edlow International Company, which has been in business for more than 60 years. We ship radioactive cargos of all types all around the world, including, of course, spent fuel. We made our first spent fuel shipment in the United States in 1963. It was managed by my father. It came from Sweden and entered the Port of Atlanta, Georgia. It went by rail to Idaho. So, I have particular expertise in this particular area of interest.

I have studied and reviewed the Draft EIS and I totally support the document as it is. And I would recommend that the NRC continue with this process towards licensing the ISP facility.

Now I think there are a lot of people who remain concerned about the transport of radioactive material, and that's understandable. Many people have legitimate concerns, and some people here are just normally against these kinds of things. But I would

like to make some comments for the NRC to consider.

There have been thousands of shipments of radioactive materials and, certainly, thousands of shipments of spent fuel in the United States. Other speakers have talked to this area of the thousands, 1300. That's commercial spent fuel. There are clearly Navy spent fuel shipments in the United States, shipments of Department of Energy fuel within the United States, and shipments from research reactors in the United States.

In addition to that, there are import shipments of used radioactive fuel, much of it high-enriched uranium, that have been returned to the United States under the Atoms for Peace Program. Within the last couple of years, Edlow International has managed shipments almost every week within the United States, mostly on import materials coming back under the Nonproliferation Program. In fact, one week in March of 2019, we managed four shipments within one week under NRC jurisdiction. So, these are routine and very normal shipments.

Around the world, there are massive amounts, tens of thousands of shipments in France, in Japan, in England, throughout Europe, Belgium, Germany, other countries as well. Russia, of course,

ships it. China ships it. India ships it. Many, many countries ship it. This is not something that is unknown.

I want people to understand that in the United States, both to the Holtec facility and to the ISP facility, routes have not been chosen down. And despite what Kevin Kamps may say, nothing is going through downtown Washington, D.C. along a route, certainly not from Calvin Cliffs or from Virginia reactors if it is headed south. It's not going to happen.

So, don't listen to people who are trying to decide where this material will travel. It's not been decided. It could go by road. It could go by rail. It could go by water. I doubt if it will go by air in the United States, despite the fact that we made air shipments out of Iraq for emergency purposes and from Ghana and Nigeria for other reasons, and also, out of Bogota, Colombia. So, it could go by air, although I doubt if it will go by air in the United States.

Nonetheless, in all these cases, it is a safe and secure way to ship. Security is a major part of our concern, as is safety.

Now somebody said accidents happen. And,

in fact, of course, accidents happen in all types of transportation. It would be silly for us to say that accidents don't happen. However, the package type is designed to maintain the material in case of an accident, even a severe accident. And so, some forms of radioactive material -- medical isotopes and low-level materials -- have shipped in less robust packaging. But the packaging involved, as described by Jay Thomas in his call, for this material is extremely robust and has been thoroughly tested, both by government and by the private sector within the United States and abroad. And the likelihood of release of material in the case of a very severe accident within the United States is very low.

So, people need to understand. And the NRC I hope will recognize that the routing is yet to be determined, and there are guidelines for routing, determined by the Department of Transportation and the NRC, and, in fact, to some degree, Homeland Security as well. So that we will avoid heavily populated areas and other areas of hazard.

Weather is taken into consideration. We would never send a shipment into a hurricane zone. It would be stopped and avoid these things.

And, of course, there are other

considerations that have to be taken into account during shipment activities. Shipments will happen safely and securely once they are planned, and the public will be aware, the public through the Governors' Offices, and the first responders will be advised of these routings, so that this can be maintained.

So, in summary, I would say that, for those of you who are truly concerned about this, I think you can find reasons to understand that the professionalism of the industry historically, domestically and abroad, will manage these shipments of hazardous materials safely and securely in the United States.

And again, I want to support the Draft EIS, and thank the NRC for holding this hearing, and despite the fact that you don't need to do this.

And, in fact, we could submit written comments, which I will do, of course, as well.

Thank you very much, and have a good evening.

MR. CAMERON: Okay. Thank you, Ed, for that information about routes not having been decided yet.

And, Lorraine, do we have Patricia Walter next?

OPERATOR: We do. Then we have Richard

Halpin and Diane D'Arrigo. If you would like to make a public comment, please press *1. Patricia, your line is open.

MS. WALTER: Hello?

MR. CAMERON: Hi, Patricia.

MS. WALTER: Can you hear me, yes?

MR. CAMERON: Yes, Patricia.

MS. WALTER: This is Patricia Walter. Can you hear me?

MR. CAMERON: Patricia, go ahead.

MS. WALTER: Maybe I'm on mute. Hello?

MR. CAMERON: Hello?

MS. WALTER: Hello, can you hear me?

MR. CAMERON: Yes. Patricia, we can hear you. Can you --

MS. WALTER: Oh good. I was --

MR. CAMERON: -- not hear us?

MS. WALTER: Thank you so much for replying. It's difficult to tell at this end.

First I want to say I'm a retired federal analyst for the Social Security Administration, and I am very surprised that we do not have a video teleconferencing because we certainly had that at my office when I left ten years ago, so I am surprised that we cannot see people.

Secondly, I wish to say that the country of Finland right now is developing a permanent spent fuel repository. And even for them, they're going to take at least four years, until 2024, while they -- before they will even consider a license.

Thirdly, I wish to mention that I'm surprised that the NRC analyst for this proposal has not considered talking with the railroad companies and the Railroad Retirement Board. For example, the Bureau of -- sorry, let me find my webpage, the Bureau of Transportation Statistics, specifically on their own charts list at least 1,200 derailments per calendar year.

Now, that doesn't mean they all have to be the big bad ones, but 1,200 derailments per year is something that it would be very serious considering that when I live -- because I live near Chicago and there is a lot of railroad crossings here, that chances of derailments are much more likely.

As I'm sure you know, that there was though that Lac-Mégantic accident in 2013 that killed 47 people simply because the engineer went on a break. These things are very likely to happen.

The railroad companies did not build their rail lines of -- as much as millions of miles of them,

to allow for sensitive materials to be transported. This is just a problem in the business of transporting materials, not people, for sensitive items such as nuclear waste casks.

So that is certainly one of the things that I wish the NRC would coordinate with. For example, there were the 14 major accidents, even for the oil lines, rather the oil cars.

And they included the problems that happened in Lake Forest, Illinois where they had problems with the railcars that happened there. They also had Lynchburg, Virginia that had problems. They had Casselton, North Dakota. They had Oregon that had problems with these derailments.

These are problems that have happened in highly populated areas. And the fact that they were oil trains is simply something else that must be considered.

Plainfield, Illinois in June 2017, it looks like it's a kid's train set where the railcars are scattered around the whole area there.

Lake Forest, Illinois had a train derailment that had nine -- 11 cars that, again, just went off the tracks.

So I understand that folks are concerned

about how they can be treated safely. The problem is is that we have to work with the system we have. And the system we have was not designed to carry sensitive material. Period.

I mean, I understand the people that have problems with them moving to West Texas, but why not have the whole thing set up first. And this is just not a viable option to use the train system in any way, shape, or form.

So thank you so much, and I appreciate listening to all the many comments that are in opposition to this proposal. And if train derailments isn't part of environmental impacts, I don't know what is. Thank you, goodbye.

MR. CAMERON: Okay, thank you, Patricia, for offering that to us. Thank you.

And, Lorraine, who do we have next? Is it Richard?

OPERATOR: We have Richard Halpin, Diane D'Arrigo, and Rose Gardner. Richard, your line is open.

If you need to make a public announcement, please press *1.

MR. HALPIN: Hello?

MR. CAMERON: Hi, Richard, we're here.

MR. HALPIN: Great. Thank you, Chip. Good evening, NRC community, fellow citizens, and public policy makers. My name is Richard Halpin. I am co-chair of the Green Sanctuary Ministry at the First Unitarian Universalist Church of Austin, Texas.

I speak to you today about the issue before you to approve a permit to allow the new addition of high-level nuclear waste to the current Waste Control Specialists interim storage site in Andrews County, Texas.

Thank you for having this hearing. Please, in the future have these face-to-face. That would be so much more effective.

Our Governor, Greg Abbott, and New Mexico Governor Michelle Lujan Grisham have published letters they have sent to the White House saying we do not consent to the storage of deadly high-level nuclear waste proposed to be deposited in our Texas and New Mexico.

Governor Abbott says in his letter, quote, a stable oil and gas industry is essential to the economy and crucial to the security of our great nation. Allowing the interim storage of spent nuclear fuel and high-level nuclear waste at sites near the largest producing oil field in the world will compromise the

safety of that region.

The Governor goes on to say, quote, the proposed sites in Texas and New Mexico do not provide the deep geological isolation required for permanent storage in order to minimize the risks of accidents, terrorism, or sabotage which, as you know, could disrupt the country's energy supply with catastrophic effects on the American economy.

The Governor could have also included the Ogallala Aquifer. Irregardless of what the staff has discovered, water can seep from this site into that essential waterway and poison the food production to millions of Americans in eight U.S. states. The very survival of these people and the global food production they create would be at serious risk.

I believe as many speakers will say tonight, this profoundly dangerous waste is better secured at the site it is produced. There it can be sealed in metal and concrete and not moved if, and only if -- and not moved if and only until a final permanent nuclear waste storage site is approved by you, the NRC.

The utility operators knew going into this nuclear energy business that this hazardous waste would be a byproduct they would be, and must be, responsible for. It's the cost of doing business. That cost

cannot be, and must not be, pushed off to the American people.

The utility operators made it and all profits associated with it. The utility owners must keep it safe and secure it at their production site.

One exception is for utilities located on or near water sites. That waste should be the transportation exception. It should be moved inland, far enough away from any possible flood location, only a few hundred miles maximum.

I urge you, NRC decision makers, to listen and respect the request of our state's people and our elected leaders saying no to this licensing application now. Tell Waste Control Specialists that New Mexico and Texas -- and Texas do not consent. Their application for a license therefore must be denied.

Thank you. Thank you for all your hard work and time-consuming critical effort, you at the NRC and all the staff, and all the people who have spoken up tonight for our nation and its people.

That's it, Chip. Thank you so much.

MR. CAMERON: Okay, thank you. Thank you, Richard, for that sentiments and also for your articulate comments. Thank you.

MR. HALPIN: Well, Chip, I just want to

make sure. They're not my comments, they're the Governor's comments.

MR. CAMERON: That's even better yet.

MR. HALPIN: Yeah.

(Laughter.)

MR. CAMERON: Thank the Governor. Thank you. All right, let's -- Lorraine, do we have Diane D'Arrigo next?

OPERATOR: Yes. Then we have Rose Gardner, Beki Halpin, and Meredith McGuire.

If you need to make a public announcement, please press *1. Diane, your line is open.

MS. D'ARRIGO: Hi, this is Diane D'Arrigo. I am the Radioactive Waste Project Director at Nuclear Information and Resource Service in the Washington, D.C. area.

Actually, right by the Tacoma Park Metro Station that Kevin described and which is on a transport route for Yucca Mountain. So it is a potential route for train transport of irradiated fuel, fuel rupture (phonetic) location.

First off, I am really quite appalled that whoever chose the November 3rd date for the deadline is so oblivious to the outrageous conflict with the election. We want people to give effort and give

thoughtful input that it is a time when much of the country is mobilizing on one side or the other to get their candidate elected. And we do want to encourage electoral activity.

So picking that date is just plainly outrageous. I don't know who choose it or why or what the thinking was. It had to have been intentional. And I oppose it.

I think that we should have an extension for beyond the COVID crisis, and we have asked for that. We've got over 80 organizations and we've got Congress members from both House and Senate that have asked for that from the Office of Management and Budget on all rulemakings, not just NRC.

I would also like to -- let's see, point out -- I mainly want to talk about water. But since several speakers before me told outright, inaccurate information about nuclear transport, I need to take a moment to correct that.

Whoever it was that said the canisters, the casks have been tested, they've been robustly tested, that is an absolute untruth. Not one of the canisters on the roads and rails today or barges. No transport casks in this country, to my knowledge, and I have been tracking this since 1980, has ever been

physically tested.

There were tests done back in the '60s, '70s at Sandia, and computer extrapolations are all that is done.

Another speaker in favor of transport, who would make money from doing so, said that the conditions, the criteria for the containers are robust to meet the real world conditions. And that is patently not true.

The fire temperature, the length of fire, the depth of submersion, the speed of a crash, the length of submersion are all much, much less than would be realistically -- would realistically happen on the roads, rails, and waterways today. So those criteria in the federal NRC regulations are not good enough. And to say the casks meet those standards is no consolation, is not -- does not assuage concern.

Third, talked about the number of shipments that have taken place. What we're talking about is the irradiated fuel in this country now and these proposed sites both in Texas and New Mexico, is moving commercial irradiated fuel from nuclear reactors, potentially high burn-up fuel. And we know that.

This irradiated fuel contains over 90

percent of the radioactivity in all of the nuclear power and weapons programs, mining, milling, the whole fuel chain -- fuel -- chain is in the irradiated fuel. We're talking about exponentially more radioactivity moving over decades, over 40 years, to get to these places that are supposedly interim only to turn around and ship again.

And how are they going to be containerized and shipped again when neither the sources where they are sitting now, other than fuel pools, or neither of these sites are even planning to have a shielded facility. The waste cannot be re-containerized without a -- transfer facility or a fuel pool, and that's not even in the cards.

Okay, so, what was claimed earlier about the transport being safe is simply -- some of it is simply not true. With regard to the Waste Control Specialists site itself, which is now the larger Interim Storage Partners with Orano, putting high-level waste.

The Waste Control Specialists site, and I've been tracking it since it was first proposed, the people in that community were told at first it's only going to be paint cans, nothing radioactive. Oh, well, no, now it's going to be radioactive. But it's only

going to be from Texas and Vermont, Texas, Vermont, and Maine maybe. Our compact will keep out all the rest of it. Well, it gets approved and it gets -- the compact commission now opens it up and it's taking so called low-level radioactive waste from 34 states.

And there were also comments, oh no, we'll never take high-level waste, it's just low-level waste. So now they've got a proposal for high-level waste. So I believe that the comments that are made cannot be trusted at this (audio interference) in particular.

And the water issue. When the State of Texas licensed the Waste Control Specialists site, it was done against the -- it was done for political expedience under Governor Bush, and the -- all of the scientists that reviewed the application recommended denying, rejection the application because it would not protect the water.

The evidence had not been provided by the applicant, Waste Control Specialists, and now it's WCS with Orano being ISP. But -- the information to protect the water, the groundwater, was not there.

Claims were made by the applicant, by -- Waste Control Specialists that the water would not -- that the aquifers would not recharge and that they could take measures to prevent recharging aquifers. And in

fact according to technical staff, there is no evidence to that effect.

There was nothing provided about how -- what activities would be taken to prevent water recharging into the pockets, into those areas. And in fact, now, when the waste is buried, it is my understanding that it is necessary to continually pump, that there actually is water there.

When I reviewed Section 3.5 and 4.5 of the Draft Environmental Impact Statement, I was really surprised. I thought, oh my gosh, I'm going to have to get a hydrologist to help me figure this out.

I went through it, and all it was was a description of the many aquifers in and around this region and no real analysis of the amount of radioactivity that could potentially get in if the containers and the waste start to leak in some way.

True, they're not liquid, but they are --

(Simultaneous speaking.)

MR. CAMERON: Diane, I'm going to have to ask you to wrap-up for us. But thank you. Thank you for all of that information.

MS. D'ARRIGO: Okay, if I could just conclude then.

That the evidence about the water that is

provided in the Draft Environmental Impact Statement does not make a case for protecting the water. And previously, when the other part of the facility was analyzed, all of the technical experts in the TCEQ recommended against that site, which was low-level waste, this is high-level waste, because the water resources would not be protected.

I also wanted to say one more really quick thing. Is that this information that I'm saying here about the concerns of the TCEQ technical experts was brought to this NRC during the scoping, very -- in specific detail.

And when I look at the EIS that came out, it's not even addressed in any way. There is no acknowledgment or dismissal or anything.

So we made these comments two years ago, and we're making them again, and I sure hope they're not going to be ignored again. Thank you.

MR. CAMERON: Okay, thank you. Thank you, Diane.

And, Lorraine, who is next, is it Rose Gardner?

OPERATOR: Yes. Then we have Beki Halpin, Meredith McGuire, and Cynthia Wheeler.

If you would like to make a public

announcement, please press *1.

Rose, your line is open.

MS. GARDNER: Okay, thank you very much. This is Rose Gardner. I live in Eunice, New Mexico, right along the state line of New Mexico and Texas.

Waste Control Specialists Interim Storage Partners is about four miles from my house. Every train shipment bringing in waste will go through my town.

The community is concerned here. People on the line telling me, I'm listening, that the industry experts tell me it's safe. And then I hear about all this radiation. I'm kind of inclined to believe truth over trying to sell this project.

The high-level waste is concerning to me because of where it comes from. It comes from everywhere.

But we didn't create it, and yet we're going to be stuck with this waste here in Eunice. And I'm saying Eunice because, like I said, I'm four miles from the site. The state line does not create a barrier.

My community, we work and live, play, all in this area. It's incredible to me to think that looking at the slides and stuff, there's no accidents.

There is scenarios where everything is going to be perfect. Well, sorry, but I don't believe that. Nothing is ever perfect.

So I'm totally against this project for the many reasons already given. It's dangerous. The radiation is dangerous.

I believe that we should have an extension of comment period. I don't believe we're going to be able to get everyone's comments in. It's very difficult to reach out to people that are concerned about this. Not everyone gets the newspaper or has a computer here.

I'm also very concerned in respect to how this radiation sitting onsite will affect the Permian Basin oil fields. We're right in the middle of it, folks. We are the biggest producers of oil in the United States.

I live here. I pay taxes here. And these Waste Control people want to bring in this waste to the Texas side, and Eunice will be the most impacted community, and we're in New Mexico.

What's in it for us? How are you going to guarantee my safety. I'm across the state line. You don't owe me anything; I owe you nothing. So I feel like this is a really bad mistake.

And the other point I wanted to make is back in March of 2019 the City of Eunice adopted a resolution that would make Eunice, New Mexico a sanctuary city for the unborn.

We believe in saving baby's lives. We believe in saving the health of pregnant mothers-to-be that carry our new future residents.

I believe the radioactivity in this area will grow to an astounding amount where it will be harmful to not just babies, to the whole community.

This whole project is illegal under the Nuclear Waste Policy Act. It's such a waste of resources when you could be looking for a safe place to put this stuff instead of right here next to my home.

I'm also asking that the NRC allow public hearings in person so that my community can reach out and give their questions, give their concerns in a positive way, that you would be receptive. This phone thing is not working too well, and I'm running on.

But I appreciate you all listening. And those people that have spoken in opposition to this project, I thank you so much, you're spot on. Thanks.

MR. CAMERON: Okay, thank you for commenting again, Rose. Thank you very much.

Now, Lorraine, who do we have next?

OPERATOR: We have Beki Halpin. Then we have Meredith McGuire, Cynthia Wheeler, then Susan Michetti.

If you would like to make a public announcement, please press *1.

Beki, your line is open.

MS. HALPIN: Hello, my name is Beki Halpin. The DEIS reports that most of the spent fuel will be carried on trains and that the risk of rail accident involving these trains is very small.

This is a rail industry that in 2013 left a 74-car freight train carrying crude oil unattended to become a runaway and travel downhill into a city in Quebec where it exploded, leveling the downtown, killing 47 people, and burning for 48 hours straight.

There were 11,434 railway accidents in the United States in 2019. The data used in the DEIS to predict that there would be little risk transporting this waste via rail is many years old. I think it's 20 years old, some of it. And does not reflect the reality of railroad safety today.

Why was that used? I don't even understand it.

Furthermore, there is no prediction of the enormous cost to the population exposed if there is

an accident or incident involving serious breach of the containment vessel and radioactive contamination of a whole city or a whole region. There is no plan for who will pay to remediate any calamity, costing millions, I think potentially billions of dollars.

Affected citizens will not be able to make any claim on their homeowner's insurance for such an accident. And who knows if their health insurance will cover them if they are made sick.

Furthermore, it's completely unclear what will happen to casks and canisters that are damaged in any form or fashion along the way, so they are now leaking more than the allowable amount of radiation, perhaps even lethal doses of radiation.

Where will these casks go? Leaking and limping their way back where they came from or on to Andrew's County where they will be totally unprepared to repackage the cask.

It is the assertion of this application that such an event probably won't happen. But that's not the way the world works. Bad things happen, and they happen to railroads, 11,434 times just last year.

This application assumes the rail industry will transport this dangerous material safely, an assumption that is not proved out by rail safety

statistics.

Oil train accidents have escalated in the United States and Canada over just the last decade until they require state and federal governments to step in and pass legislation to address the problem.

The reason oil train accidents have increased is because the use of trains to transport oils has increased.

There is every reason to think that the same thing will happen with the increased transport of high-level nuclear waste. The real accident risk and costs are not reflected in the DEIS but certainly should be.

The real risks are so great that there should be robust plans in place to deal with serious accidents or incidents, but there are none. We need to wait until there is a permanent site before we start moving this dangerous material across the country. We are unprepared.

Thank you.

MR. CAMERON: Okay, thank you. Thank you very much, Beki.

And, Lorraine, can we go to the next speaker? Meredith, I believe.

OPERATOR: Yes. Yes, then we have

Cynthia Wheeler, Susan Michetti, Sharon Richey, and Jan Boudart.

Meredith, your line is open.

DR. MCGUIRE: Hello, can you hear me?

MR. CAMERON: Yes, we can, Meredith.

DR. MCGUIRE: Great, thank you. Thank you for this opportunity to speak. I'm with the San Antonio area Sierra Club. I'm also a university professor who works very hard to develop my students' ability to use sound critical thinking in all of their analyses.

The Draft Environmental Impact Statement, DEIS, has so many egregious faults of critical thinking that it deserves an F minus.

I am strongly opposed to this entire process, which is a sham. Simply declaring as, quote, out of scope, unquote, everything that would show the seriousness of the dangers to human health and the environment is not a valid excuse.

The storage of all this deadly high-level radioactive waste is a serious problem that is too late to prevent. But what is the least dangerous way to solve that problem?

The answer is probably hardened on-site storage systems, HOSS. But this DEIS doesn't even

consider it. The DEIS site figures for, quote, permissible radiation doses -- I forgot the other quotation mark -- based on distance from the source and length of time exposed.

But those reference figures apply only to a grown man. Women, however, are more than twice as harmed as a man, and children even more so. An infant given an x-ray of the fetus has a 50 percent chance of developing cancer only through that tiny amount of radiation.

If this were a true EIS, it would acknowledge the fact that there is no way to protect people of all ages from dangerous levels of exposure when the high-level radioactive waste is in transit because there is no way to control how long the radioactive waste might stay on the rails very near where those people live, work, or go to school.

Even worse would happen if those were externally contaminated shipments, as discussed by a previous speaker.

One of the most serious problems of rail transport is -- this DEIS consider out of scope is the fact that the U.S. rails and trains are not reliable enough to support the risks this serious. So due to the climate change the rails are becoming even less

reliable.

During a lengthy and extreme heat wave, high heats can cause hundreds of sun kinks in the rails causing numerous derailments. Derailments in a city may result in numerous people being exposed to radiation over days or weeks while all the heavy casks and cars are righted.

The NRC appears not to be a trustworthy decision-making body. Hear us loud and clear. We do not consent to the transportation of high-level radioactive waste. We insist on a real public hearing in all of the potentially affected cities.

Don't consider permitting any interim storage space. Wait until you've got a reasonable, permanent storage space, and then make sure that you have a really good railroad transportation system. Thank you.

MR. CAMERON: Okay, thank you for those comments, Meredith.

And, Lorraine, is Cynthia on next?

OPERATOR: Yes. Then we have Susan Michetti, Sharon Richey, Jan Boudart, and Timothea Papas.

If you would like to make a public announcement -- comment, please press *1.

Cynthia, your line is open.

MS. WHEELER: Yes, can you hear me?

MR. CAMERON: Yes. Yes, we can, Cynthia.

MS. WHEELER: Thank you. Cynthia Wheeler, I live in New Mexico. I have been commenting on the problems with building Holtec, and now I'm commenting on the problems with building WCS and bringing in this waste.

I don't even know where to begin or where to end. Because I live in New Mexico I think it's still quite adequate and appropriate for me to speak because nuclear waste just has never quite followed state lines.

And so it doesn't matter what state it's in. It's dangerous to all of us to be burying this stuff when it's not necessary. This is just like a shell game.

You guys are doing this so that private companies can make money. That's it. And so that the Congress can feel comfortable that it's doing something about a problem that there really isn't a great solution for. And that's not our fault.

So somebody needs to suck it up and go back to the drawing board and start finding a reasonable response to this problem. And it is not this idiotic

letting private companies make money off of this.

I have to agree with previous speakers that the DEIS has holes so big you could drive a train filled with nuclear waste through them. This is not something that you can be just a little bit safe with. You've got to have everything down, everything locked down and covered. And that is not what the DEIS does. Thank you.

MR. CAMERON: Well, thank you. Thank you for those views, Cynthia.

And, Lorraine, are we going to Susan next?

OPERATOR: Yes. Then we have Sharon Richey, Jan Boudart, and Timothea Papas.

Susan, your line is open.

MS. MICHETTI: Hello, it's Susan.

MR. CAMERON: Hello, Susan.

MS. MICHETTI: Yes, this is Susan Michetti, can you hear me?

MR. CAMERON: Yes.

MS. MICHETTI: Okay. Thank you for that information.

I'm appalled that this DEIS is so sloppy that I can't call it science. Science is rigorous. Science does not shut down the scope.

Science looks at every confounding factor

and considers everything, every issue that might play a part. That's the way rigorous science has always been defined.

And the more people are cutting out the scope at the front end, that's a distortion away from rigorous science. It's a distortion away from honesty and trustworthiness and the ability to have solutions that do not have problems that are going to cause severe health effects and other problems to other people and disasters. And it is inexcusable.

And if this is what science has become in the United States, I don't think it's fine. And so I have serious issues that we do not do this, it's illegal. It's -- halt this licensing right now.

If we're going to continue, we have to have comment periods that go around to every single affected area and take in -- multiple years to develop all of the risks, all of the concerns, and address every single point without excluding pieces as out of scope.

That is just unacceptable for science to have out of scope when you have to explore all possible confounding issues in order to have rigorous science, in order to have a solution that is solid, that cannot be ripped apart somehow. So that's a major issue that we should not consent to this fake science that's not

valid.

And as far as permissible radiation doses, there are no permissible radiation doses, and the science has proven that for 80 years or more. Any dose, there is no threshold of any kind of radiation dose below which there is not human health effects and other health effects to any type of human being.

And those health effects seem to start at the cellular membrane level where that membrane gets damaged. And when that membrane gets damaged, it means that the waste inside the cell cannot pass out for detox and clarification and the new nutrition is not allowed to come in.

And that's -- there is distortion in that part of the scientific function of the membrane, which is critical to health. And if we don't have a solid, healthy membrane on every one of our cells in the human body and in other living organisms, we do not have health.

But that is the number one thing that they think is where they first see the damage occurring when there is any type of radiation doses. That's the lowest level. It gets worse after that. There is no threshold.

So there is no threshold below which that

effect does not occur. So the whole thing about permissible radiation doses is unacceptable, unscientific, fake science, and it's misinformation, and it has no business as permissible radiation doses when we already know there is a problem.

And the whole thing is we don't just judge things by men, the standard of men, we judge them by the most fragile standards which is those of pregnant women with -- carrying fetuses, infants, and children that have growing cells that can be damaged more likely by radiation doses then the older cells, of older people, more adult people.

So this is a real risk. And we need a robust plan, we need robust language, we need language that doesn't soften things, doesn't give us -- doesn't ignore and dismiss the real problem.

And we need to return to science in the United States. And if the scientific -- if something that requires this type of technical science as the NRC's radioactive waste does, we have no business even going there to begin with if we can't keep science as the top criteria that we use to develop DEISs and that we use to create scopes and create everything that goes on after that.

So I'm just appalled because we're

supposed to be a government of, by, and for the people. And the people assume that there is going to be science, that we're going to make our decisions by science. But that doesn't seem to be happening anymore.

I mean, and we know that this transportation risks to our train system have gotten out of control in the last 20 years. Seeing --

(Simultaneous speaking.)

MR. CAMERON: And, Susan, excuse me, I'm going to have to ask you to wrap-up now. I think you have really gotten your point across to the NRC staff, so thank you. Thank you for that.

MS. MICHETTI: Well, I would like to summarize just by saying I believe that this is an illegal -- illegal under the Nuclear Waste Policy Act and that we should stop processing this license application right now because we're supposed to be following the laws of this country. Thank you.

MR. CAMERON: Okay. Thank you.

Lorraine, who do we have next?

OPERATOR: We have Sharon Richey, Jan Boudart, Timothea Papas, and Joni Arends.

If you would like to make a public comment, please press *1. Sharon, your line is open.

MS. RICHEY: So this is Sharon Richey, concerned citizen from Fort Worth, Texas. Can you hear me?

MR. CAMERON: Yes, we can.

MS. RICHEY: Okay. I am in opposition to licensing this project in West Texas for the numerous hazardous risk issues already stated tonight by people like Diane, Smitty, Kevin, Beki, Meredith, and others.

Also, I join with others who find these online meeting hearings to be less than adequate for voicing dissent in such critical matters and request that in-person, post-COVID meetings be scheduled in several cities in the state.

As Texas Governor Abbott stated, I think it was today, this plan involves more than 80,000 metric tons of nuclear waste traversing about the country from more than 120 sites with no permanent strategy as how to address it.

It's my understanding that such placement is not following legal steps for storage of such material. Hardened storage casks involving onsite storage where waste -- where it is now or as close by as possible, given its -- where it is, like if it's on the coast, like in California, moving it as close as possible and making better, safer plans where it

is, where it's been used, until some more adequate plan can be arranged. Thank you very much.

MR. CAMERON: All right, thanks. Thanks, Sharon.

And, Lorraine, do we have, is it, Jan?

OPERATOR: Next up we have --

OPERATOR: Yes, Jan. Jan Boudart, Timothea Papas --

MR. CAMERON: Oh, it's Dexter.

OPERATOR: Next will be up, Jan Boudart, Timothea Papas, then Joni Arends.

Jan, your line is open.

MS. BOUDART: Thank you very much. I want to speak about the fact that this plan is for putting out in the desert.

And to a lot of people, a lot of people the desert is a place to abandon things. It's a place to forget that they're there, and it's a place where not so many people live, like a city or a northern area, especially a northeastern area.

Now, our Native American friends are very well aware of the problem of nuclear waste and that they're -- may be very distant relatives, but all indigenous people are being targeted as a sacrifice because it is their area that is being considered.

There was a very poignant video of a woman in -- now this is in Australia where they're planning on putting -- where they're wanting to put nuclear waste out in Pangea, and she mentioned that now if they put the nuclear waste out there she can't take her family out there for singing because -- and that is against their culture.

Now, I wanted to quote the Anishinaabeg-Iroquois Alliance on their joint declaration from May of 2017 on what should be done with nuclear waste. Their first point is that it should never be abandoned. Such dangerous material cannot be abandoned and forgotten.

The second point, it has to be monitored and retrievable in storage. They need to know how to fix leaks as soon as they happen and replace casks that are no longer good. It has to be monitored and retrievable.

Their third point is the best containment possible, the best packaging available. The right kind of packaging should be designed to make it easier to monitor, retrieve, and repackage.

Number four, it should be away from major water bodies. Water is life. Radioactive waste must not be stored beside major water bodies for the

long-term.

And the fifth is no imports or exports. Transport of nuclear waste should be strictly limited and decided on a case-by-case basis with full consultation of those affected.

This leads to the concept of on -- HOSS, hardened on-site storage, where the spent fuel casks are placed on a thick and heavy concrete pad, such that it will resist almost all earthquakes.

You will notice that in Fukushima the dry casks survived. It was the pools where the nuclear assemblies were in a pool that were the big problem -- one of -- not the big problem, one of the big problems at Fukushima.

So this concrete pad should have the dry casks on it, and it should be covered with a steel and concrete barrier and placed inside of a berm where it would be hidden and not easily detected by terrorists or anybody else who wanted to go in there.

And also, if it were in this cavity surrounded by a steel and concrete shield, people who wanted to monitor it could monitor it every 20 years. Go through, check it out. If it needed repackaging, being repackaged. We need to have confidence that our care of these things will evolve.

This should be done at every site where these casks are presently being stored, except for places like Palisades and San Onofre where they're just much too close to the beach and you need to move them to higher ground and to a safer place.

This is called hardened on-site storage. This has been carefully thought through by people who are totally capable of doing it. We need to stop making nuclear waste and take care of the nuclear waste that we have with hardened on-site storage.

And it's something that should be included in the consideration for storage of nuclear fuel. And it should be considered by the Nuclear Regulatory Commission, the Department of Energy, the Department of Defense, et cetera.

Thank you very much for listening to me, and it's very -- this has been a, actually, a wonderful three hours. It has been terrific listening to people. And thanks a lot.

MR. CAMERON: Well, thank you. Thank you, Jan, for those suggestions and also for that comment. It has been wonderful.

And who do we have next, Lorraine?

OPERATOR: Next up -- you got Dexter again. Next up we have Timothea Papas, Joni Arends,

Susybelle.

If you would like to make a public comment, please press *1 and clearly state your name for comment introduction. To retract your comment, please press *2.

Timothea, your line is open.

MS. PAPAS: Thank you. I assume you can hear me.

I wish I had something scientific to talk about, but I don't. I'm not a scientist. I'm more of a historian. And here we go.

As everybody knows, we are talking about lethal material that was created for the sole purpose of killing people. Our country was born out of the original sin of slavery.

Our second major sin was the dropping of two atomic bombs on Japan. And our third major sin is the expansion of nuclear power and nuclear weapons.

I don't believe the nuclear industry, those industries that feed off the nuclear industry, and our country as a whole are capable of establishing a final, permanent storage site, at least not in the foreseeable decade, not even in 40 years.

So for me this project looks like just another cow to be milked by the industry, by the

military, and by the politicians that feed off of it.

I believe the nuclear industry needs to bite the bullet, pay for permanent, secure storage right where those lethal materials are today and just shut down. The NRC will then have to shut down too.

Personally, I know two men who were nuclear scientists who quit their jobs and went on the become doctors. That says a lot to me.

And finally I want to say that the nuclear industry and those who have profited from it have enslaved the entire world with the threat of slow or immediate death, and it has to stop. Thank you.

MR. CAMERON: Well, thank you. Thank you, Timothea, for those comments. Thank you very much.

And, Dexter, can we hear Joni?

OPERATOR: Next up we have Joni Arends, then Susybelle. Joni, your line is open.

MS. ARENDS: Oh, thank you. Joni Arends. I am a resident of New Mexico.

For all of the reasons that have been spoken this evening in opposition to this project, and I do want to state that I do not consent to this NRC process during the public health emergency, during a global pandemic. I urge an open comment period until

six months after the pandemic has been resolved.

And I have great sadness this evening for future generations and the decisions and consideration that is being done during this unprecedented time. And I would like to take a minute so that we could think.

A minute of silence so that everybody can think about the future generations and what we're possibly putting out there for them for energy that's already been used by us. And putting that burden on them with very few tools to deal with it.

Under these proposals for both Holtec and WCS, there is no place to repackage. Both will result in surface and groundwater contamination, emissions into the air, contamination of the soil.

So I would like to take part of my time for a moment of silence. Think about those things. Thank you.

MR. CAMERON: Okay. Thank you for that. And --

MS. ARENDS: No, I want a whole minute. I want a whole minute.

MR. CAMERON: Yes, I got you, Joni. We're going to take a whole minute, right now, of silence. And then when that minute is up, we're going to go back to Dexter for the next person.

So we're starting our minute of silence right now. Thank you, Joni.

(Moment of silence.)

MR. CAMERON: Okay. It's always good to have a minute of silence for important things. So, Joni Arends, thank you for that.

And, Dexter, we're going to go to Susy next.

OPERATOR: Next up is Susybelle. Susy, your line is open.

MS. GOSSLEE: Thank you. I am with the League of Women Voters. It is a non-partisan and non-profit organization. We defend democracies, and we empower voters.

Voters and all the people are taking more risk if this storage site in WCS and in Holtec are approved. The public comment period does not meet the needs of the public and does not have the common good in mind.

It just so happened that the system even failed with my getting online. My whole name was not taken. My first name is Susybelle; my last name is Gosslee. So for me it did not work, and I can't help but think of how many other people have called in and it did not work.

If you don't follow the principles of democracy and the procedures for democracy then it undermines our government. You have to follow the law and the principles of a democracy in order to have these as legitimate hearings.

It undermines the voters in the U.S. and especially Texas because they don't have access to these calls. They don't have access to all the information.

To give you an idea, the low-income people and people of color do not have access to internet many times. Forty percent of the population of Texas does not have access to the internet.

You say that you want public comment, but as much -- and that we should not -- that we should just call in, but when -- access is not completely available for everyone, then everyone does not have an opportunity to speak.

There -- I'm calling for meetings that are public in-person meetings after the COVID-19 is over. The League has supported public comments and the democratic process since its inception in 1920.

The League opposes having high-level radioactive waste in Texas. The public health and safety risks are tremendous. It will affect -- if

there is any kind of an accident, it will affect our economy, agriculture, our whole -- whole civilization in Texas, and we have areas that are all connected.

It only takes one accident to affect a whole -- a large geographic region in Texas. Do not risk Texas, our people, or the state. The League does not want to have other states and other people dumped on either.

People across the country all need to be safe, and when this radioactive material is transported through all of these states from the 90 nuclear power plants that are to the east of the Mississippi River, you are affecting tremendous numbers of people where their income, their livelihoods, their families could all be affected, and they could lose them all.

I hope that you will take these comments seriously. There are many people that are afraid to call in to a public kind of meeting like this. There are people who don't have the technology, and they really -- there are many people that don't know anything about this.

So the NRC needs to do a better job of communicating with the public and giving access for public comments. I thank you all for your work. I hope that you will consider your mission. I hope that

you will consider the public good. I hope that you will seriously consider making our democracy work.

Thank you.

MR. CAMERON: Thank you very much, Susy. I am glad that you got through with those comments for the NRC. And, Dexter, do we have anybody else?

OPERATOR: We currently have no one else. If you would like to a public comment, please press *1 and clearly state your name for comment introduction.

To retract your public comment please press *2. One moment.

And our first -- our next public comment comes from -- and I apologize, Lonny Brook. Your line is open.

MS. BROOK: I think -- it's Molly Brook. I am here to request that the comment period be kept open until there is adequate opportunity for everyone, including the large number of people, including our most vulnerable, many with inadequate access to the internet to attend in-person public meetings in the large metropolitan areas along the transport routes until after COVID risks have ended.

This licensing is critical to our health and safety, and far too few people are aware of this

extremely dangerous proposal.

I live in Dallas County, which is one of several counties/cities and Chamber of Commerce in Texas representing 5.4 million Texans which have passed resolutions opposing nuclear waste transportation and dumping.

Dangerously risky and potentially deadly radioactive waste should not be shipped across the country to be dumped and stored in areas where it is unsafe. Thank you.

MR. CAMERON: Okay, thank you. Thank you, Molly. And we do have one speaker that we haven't heard from tonight, and I think that's -- is that Richard Singleton?

Let me see. Oh, Robert Singleton.

OPERATOR: And one moment.

MR. CAMERON: Put Robert on, please.

OPERATOR: Robert, your line is open.

MR. SINGLETON: Hi. My name is Robert Singleton. I am a member of a number of environmental groups, but I am speaking tonight as a terrified individual.

I wanted to follow up on some stuff that Diane D'Arrigo said about the history of low-level radioactive waste in Texas. We were scared into taking

low-level waste because we were told at the time that unless we entered a compact with Maine and Vermont we were going to have to take waste from every state in the union.

Well, WCS built a dump that was so large that there was no economic way to operate it without taking waste from every state in the union, and this is just an expansion, again another broken promise.

One constant though in the whole licensing process with WCS has been a very specific prohibition on storage of foreign-generated nuclear waste, and I want to know is there in any document concerning the consolidated interim storage plan, is there a specific prohibition on foreign nuclear waste.

I suspect that since Orano is involved, and they are a French corporation, formerly Areva, that that's probably the plan that we're going to take waste from around the world.

This worries me because the only way, unless they've got an underwater train hidden somewhere in France, to get the waste to the United States is going to be by boat, and we are not then going to have rolling Chernobyls, we're going to have floating Chernobyls. And that prospect truly terrifies me.

I really wish that this were a little more

technologically advanced hearing. I would think that Zoom is so much the standard now that it would truly be a good idea if you would at least set up a Zoom meeting.

I would like to see the faces of the people I am speaking to. It would at least ensure me that you're not all sitting around in your underwear sipping Chardonnay and ignoring the comments.

The transportation aspect is what worries me most about this, and specifically terrorism. I don't believe there has been any mention of terrorism or assessment of terrorism in the EIS, and this worries me because if there were, say, an attack with shoulder-mounted, shoulder-fired missiles that was adjacent to the Ogallala Aquifer, we have the very real possibility that this would, in effect, be a dirty bomb which could spread radiation across the Ogallala Reservoir which is the source for a lot of the food in the United States.

And this truly worries me. If we contaminate that aquifer, we have the real risk of famine in the not too distant future.

Finally, I just want to say a little bit. As a writer I am a little concerned about any corruption of language. And when I found this was an

interim storage proposal, the first thing I thought was a number of years ago when I was in college I woke up one morning to discover that there was a person sleeping on our couch that I was told was -- eventually was a new roommate.

He was still there when I left three years later. At least we didn't have to worry about thinking that he was still going to be there in a quarter million years.

It is a perversion of the term interim to say that it's only going to be for the 40 years of the license. It was supposed to be 40 years because we assumed by then -- well, actually, we were supposed to -- before we had interim storage, we were supposed to have a permanent repository for nuclear waste.

That hasn't happened. It doesn't look like it's likely to happen. And I think that we are going to have that Texas and New Mexico could wind up the dumping ground for some of the worst things on earth. I can't imagine how it could get any worse unless you are planning on storing live nuclear weapons at the site.

So I would just like to say that since consent is important to this, consider the fact that the Governor of Texas, Greg Abbott, and the Governor

of New Mexico, have both come out strongly opposed to this plan.

And I thought that consent was a major aspect that was going to be considered. And I would just say that -- hold off on this until you can do live meetings in person. There is no particular hurry. This is going to take a while to work out. So give us hearings when we can see you in person.

Thank you.

MR. CAMERON: Okay. Thank you very much, Robert. And, Dexter, do we have Lon Burnam on the phone?

OPERATOR: Lon Burnam is next, and then Elizabeth Padilla. Lon, Sierra Club, your line is open.

MR. BURNAM: Hey, good evening. Thank you for taking me at this very last hour. It's after 8 o'clock here and 9 o'clock there.

So if there is background noise, I apologize because over 20 of us decided that we would have our public meeting at the NRC Regional Office here in Arlington.

Of course, we couldn't get inside because it's completely locked up, but the fact that I have had to call in three different times to have this

opportunity to speak, should speak specifically to the issues and the problems with this technology.

It is inexcusable in the last six months of almost everybody living on Zoom nonstop that the NRC could not set up a meeting where we could appear in person.

I want to make a couple of quick points, and then I'll be back on the next call. Quick point one, this proceeding is not even legal. This application is not even legal.

Both the Governor of Texas and the Governor of New Mexico said we don't want it, we do not consent. There is no excuse, no reason for rushing into something that is not even legal during this pandemic period when you are making it difficult for everybody.

I mean it's dark and getting chilly even here in Texas, as I am sure you are enjoying the background noise. But the fact of the matter is we need live public meetings in Texas.

We need to see the invisible bureaucrats that are processing this application and determining the future of Texas. Our Governor doesn't want it. We don't want it.

This is October 1st. You are going to have three more of these during the course of Halloween

month, and I just want to point out that we are tired of the tricks of the NRC, this faux public citizen participation process, and the fact that they do not see.

So I brought one of my Halloween decorations for all of my colleagues that showed up at the NRC tonight. It is the classic see no evil, speak no evil, hear no evil in skeleton statue form.

So I am sick and tired of the NRC not seeing the evil that is going on or speaking to the issues of evil or hearing what is going on. As an active member with the Sierra Club, I have participated in their national working group on studying this issue for over two years.

Our document has just come out. They have thought through the process and just like so many other organizations, we are recommending HOSS. Don't transport all of this stuff through Texas pretending that it's only going to be here temporarily and then turn around and pretend that you are going to go someplace else.

We know the economic realities. Once the responsible parties who offload this responsibility to the taxpayers, we will be stuck with it in Texas for the rest of time.

I will be back with you at the next hearing. Thank you for hearing me out today.

MR. CAMERON: Okay. Thank you, Lon. I am glad you made it on tonight, and we'll look forward to hearing you again. And I think we have one more speaker.

OPERATOR: Next up is Elizabeth Padilla. Elizabeth, your line is open.

MS. PADILLA: Yes, hello. Can you hear me?

MR. CAMERON: Yes, Elizabeth, we can.

MS. PADILLA: Can you hear me?

MR. CAMERON: Yes, we can hear you, Elizabeth.

MS. PADILLA: Okay. Okay. Hello, my name is Elizabeth Padilla. I am a concerned citizen and a resident of Andrews, Texas.

And I am calling because I am strongly opposing this proposed project by WCS here in my county. And I am not -- I am speaking on behalf as well of my children.

I just now had a baby last Friday, my fourth child, and I am calling to speak on their behalf because they do not have a voice. They don't have a voice at the moment.

And I am calling because I have been a

concerned citizen of this proposed project since I found out in 2016 about the plans for storing high-level nuclear waste here in Andrews County.

I have been a resident of Andrews County for about 30 years already, so I have lived here all my life. And I do not want this, and I do not consent of this to be stored in my children's backyard.

The promise since the beginning was no low- or high-level radioactive waste in Andrews County. That was the promise, no low- nor high-level waste.

They broke their promise, they stabbed us in the back, and not only are they wanting to continue and to expand in bringing on the low-level waste, they want to bring in the high-level waste now.

So to me as an Andrews citizen this is a complete slap in the face and an insult, not just to me but to the people around here.

I have been protesting this for a while already speaking out to the people, and based on that I know that the people of Andrews, the majority, the grand majority who have nothing to do or who are not affiliated in any way do not want this in their backyard neither.

So I am strongly opposed to this, and I am not -- and I want to go ahead and state this as well,

since the beginning when WCS wanted to come to Andrews County and establish themselves, there were other experts and geologists who opposed the licensing of WCS since the beginning because there would be -- according to their reports there would be risk, there would always be risk of possible water contamination of the Ogallala Aquifer.

So they somehow managed, and they got the license in their hands. So once they got their license in their hands and they have their foot at the door, they are now applying for that high-level waste, which we do not want, and, again, it's a double stab in the back to me, to my children, and to the people of Andrews County.

I am not just asking you to not allow this proposed project in Andrews County. I am asking for a complete investigation on the possible environmental impact and on the initial licensing of WCS.

What is it that really happened? Why did they get the license in the first place if they weren't even supposed to? And this was according to experts, experts from the TCEQ who ended up resigning when they found out that the license was going to be granted anyways.

And I guess their convictions were so

strong in this, in opposing this, because they knew this was going to be a threat to our water source, to our environment, to our health, that they decided to resign.

So, again, I am asking for a complete and thorough investigation on what happened and why is it that they are not only wanting to complete their expansion, but they are now wanting to bring in and they have the nerve to apply for the high-level waste.

I forgot to mention that I am with Save Andrews County and with the Permian Basin Landowners and Royalty Owners Coalition. And I will continue the fight for my children, for my family, for my relatives, for the people of Andrews.

One thing that I would like to mention, again, we are the number one producing oil region in the United States. Let's keep that in mind. Let's not put that at risk. It's not worth it. The risks are not worth it.

Also, I heard earlier somebody mentioning that the taxes -- that there were a lot of -- that we had gotten a lot of benefits in taxes. No, we did not. As a matter of fact a lot of residents of Andrews were complaining because this year we had to pay $1000 more in property taxes.

And I haven't really seen any benefit at all money wise or financial wise as far as them being here in our community.

Also, I want to mention, remember this whole project is illegal under the Nuclear Waste Act, and we have now heard from our Texas Governor Abbott and the New Mexico Governor as well. They don't want it. Please take that in consideration.

I am asking also for live public meetings here in Texas. There is no time to rush this. We need more time. We need people to gather, and we need to see you personally and face-to-face. I want to know who you are.

Again, I would like for you to please, please, consider your public mission, your mission to the people, not to these private entities who just want to get rich and at the sole cost of our health, of our well-being, and of all of these risks that you know that there is risks, that there will always be risks and --

MR. CAMERON: Okay. Thank you. Thank you, Elizabeth. Much courage, thank you. And with that, Dexter, I think we're going to wrap up the meeting.

We have three more to go, and I would just

thank everybody, but I am going to turn it over to John Tappert, our senior official here, to wrap the meeting up for us. John.

MR. TAPPERT: Thanks, Chip. So basically I just want to thank everyone for participating in this meeting and sharing your comments and perspectives on the project.

The NRC will consider those seriously as we finalize the document. And as been mentioned before, there will be three more public meetings that we'll be soliciting comment in, and you can also send them in by email, hard letter mail, et cetera.

So, again, thank you for hanging in here. We ran a little bit longer, but we wanted to make sure that we got to all the speakers. Thanks again for your comments. Enjoy the rest of your evening and be safe. Thank you.

(Whereupon, the above-entitled matter went off the record at 9:22 p.m.)