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Alternative Disposal Request Guidance
Revision
Category 2 Public Meeting

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UNITED STATES NUCLEAR REGULATORY COMMISSION

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PART 61 REGULATORY ANALYSIS UPDATE AND ALTERNATIVE
DISPOSAL REQUEST GUIDANCE REVISION

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CATEGORY 2 PUBLIC MEETING

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THURSDAY,

OCTOBER 19, 2017

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The public meeting convened in the NRC Auditorium, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, at 2:01 p.m., Joan Olmstead and Sarah Lopas, facilitators, presiding.

PRESENT (NRC):

SARAH LOPAS, Facilitator

JOAN OLMSTEAD, Facilitator

BOBY ABU-EID, NRC

CYNTHIA BARR, NMSS*

GARY COMFORT, NMSS

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

2:01 p.m.

OPERATOR: Welcome and thank you for standing by. At this time, all participants are in a listen only mode until the question and answer portion of today's call. At that time, if you would like to ask a question, you may press *1. I would now like to turn the meeting over to Ms. Joan Olmstead. Ma'am, you may begin.

MS. OLMSTEAD: Good afternoon, everyone. I want to welcome everyone in the room here with us at NRC's Headquarters in Rockville, Maryland, and those joining us on the phone or via the webinar, and thank you for participating in this meeting to discuss our two topics for the afternoon.

NRC's Part 61 Low-Level Radioactive Waste Disposal regulatory analysis, regarding the licensing requirements for land disposal of low-level radioactive waste.

And the draft revision to the Guidance Document for alternate disposal requests entitled, Guidance for the Reviews of Proposed Disposal Procedures and Transfers of Radioactive Material

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under 10 CFR 20.2002 and 10 CFR 40.13(a).

My name is Joan Olmstead and I work in the NRC's Office of General Counsel and I'll be facilitating this meeting with Sarah Lopas, from the Office of Nuclear Materials and Safety and Safeguards, Federal, State, and Tribal Liaison Branch.

Our role is to help ensure that today's meeting is informative and productive. This is a Category 2 meeting. The public is invited to participate in the meeting by discussing regulatory issues with the Nuclear Regulatory Commission at designated points identified on the agenda.

We will provide information, respond to questions, in order to help to obtain feedback on the regulatory analysis for the supplemental proposed Part 61 rule and the draft revised alternate disposal request guidance document.

While we will provide an opportunity for the public to ask for information from the staff and provide an opportunity for discussion, the feedback the NRC receives today is not considered formal public comments.

Participants should submit formal

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written comments regarding these two documents to the federal rulemaking website. Go to <http://www.regulations.gov> and search for the docket ID NRC-2017-0198 and address questions about NRC dockets to Carol Gallagher. Her telephone number is 301-415-3463 and her email address is carol.gallagher@nrc.gov.

More information can be obtained by reviewing the *Federal Register* Notices published on October 17 and today, which can be accessed on our webpage for NRC *Federal Register* Notices issue in 2017. The address is <https://www.nrc.gov/reading-rm/doc-collections/fedreg/notices/2017.html>.

Public comments will be due within the time frames indicated on those Notices and we will provide more information on this during the two presentations. The agenda for today's meeting includes two separate presentations.

The first presentation will be on the Part 61 regulatory analysis, and after a short break, a presentation on the revision to the alternate disposal request guidance document, also known as the 20.2002 procedure.

After each presentation, there will be a

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discussion period where participants, in the auditorium or on the phone, can make a statement or ask questions of the NRC staff.

Because of the number of people attending, we won't ask you to -- we will ask that your statements be limited to two minutes, so everyone will have an opportunity to participate. If we have time and everyone's had a chance to speak, we'll go around again for additional questions and statements.

Are there any questions about the agenda? Okay. I'd like to go over some logistics before we start the presentations.

MS. LOPAS: Hey, Joan, just one -- I got one feedback that you're breaking up, so try to speak as clearly as you can into the microphone. Sorry.

MS. OLMSTEAD: Okay, thanks. Hopefully, everyone has signed in and received copies of the agenda, presentation slides, and a meeting feedback form. If you haven't signed in, the sheets are near each entrance.

For those of you on the phone who haven't signed in, please make sure to contact

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Gregory Suber to ensure that we have your contact information. And you can get Gregory's contact information on the meeting announcement.

We have a few hard copies of the supplemental proposed Part 61 rule regulatory analysis and the alternative disposal request guidance document available for people in the room.

But we've asked folks to bring copies of the materials, or you can access them on your laptop. And if you'd like to view the slides while using the teleconference, please refer to the public meeting notice.

All people participating by phone, you've already been told to push *1 in order to notify the Operator that you wish to speak, and you'll be put in the queue with the other people online.

You can also submit a question or make a statement using the webinar software. We will be monitoring the webinar and will read your questions or statements out loud as they come in.

This meeting is being recorded. So, to ensure we get a good recording of our discussions and that everyone participating on the phone can

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hear the speakers, please speak one at a time, use either the microphone at the podium or in the aisle or the handheld microphone that I'll have available during the Q&A period.

Please also do not have loud side conversations during the meeting. To minimize distractions during the meeting, we ask that you turn off or mute anything that rings, buzzes, beeps, or has an alarm. That way folks on the phone, as we said before, you'll be on a listen only mode unless the Operator unmutes you and your line so you can speak.

The restrooms are out this door, across the stairway. And if we have to evacuate, please follow directions from the security officers.

Finally, we're always looking for ways to improve our meetings and your feedback is important to us. At the end of the meeting, please complete the feedback forms and return them to us. You can find copies near the entrance. You can fill them out here and leave them today or you can send them to us later, the postage is free.

We also have online meeting feedback forms available. And after today, you can go to

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NRC's public meeting schedule webpage, click on Show Recently Held Meetings, and find the listing for this meeting. And there will be a link that says, Meeting Feedback Form, and just click on that link and it will take you to the online form that's very easy to fill out.

Do we have any questions about the logistics? Okay. Let's see. Usually, at this point, we normally try to have everyone introduce themselves, but with so many attendees, we won't follow that practice.

Instead, I'll only ask folks to identify themselves if they speak. And this will allow more time for useful discussion. All right.

To get started, let me first introduce the folks here at the table and then, Andrea Kock, who is the Deputy Division Director of the Division of Decommissioning, Uranium Recovery, and Waste Programs, in the Office of Nuclear Material Safety and Safeguards, will give opening remarks.

So, at the table here, we have Greg Trussell, Project Manager in the Rulemaking and Project Management Branch. Gary Comfort, who is a Senior Project Manager in the Rulemaking and Project

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Management Branch. And Gregory Suber, the Branch Chief in the Division of Decommissioning, Uranium Recovery, and Waste Programs, Low-Level Waste Branch.

Okay. And that's it for me and now, I'll turn this over to Andrea for opening remarks.

MS. KOCK: Thanks, Joan. Just wanted to take a few minutes to say, thank you for taking time out of your afternoon to provide feedback to us.

It is important to us that we receive your input on a lot of our regulatory activities, including the two that we're talking about this afternoon. And I just want to encourage candid feedback and open discussion this afternoon.

Joan already covered that we're going to touch on two topics. One is our regulatory analysis for Part 61 Low-Level Waste Disposal rule. And the second topic will be getting your feedback on our guidance for alternate disposal methods under 20.2002.

You probably read in the *Federal Register* Notice that on the Part 61 reg analysis, we're looking for information on cost to shape our regulatory analysis. We will have further

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opportunities for public input on the actual re-proposed supplemental rule that we'll be working on.

So, today's discussion is really focused on the cost associated with the rule. We're looking for your feedback in a period of about 30 days. And we will consider all comments. Although, as Joan said, the comments that you make today won't be formal comments, we are listening to your comments and recording the conversation so we can take that into account.

On the 20.2002 guidance, those of you who've been in the low-level waste area for a while know that that's been a long time coming, so this is an important milestone for us. It's one of the high priority activities in our low-level waste strategic assessment.

And it's important to us because it really provides clarity and transparency in the way that we review 20.2002 proposals and it really institutionalizes the practice that we've been using for a long time under 20.2002. So, we hope it brings clarity and we're looking for your feedback on where additional clarity might be needed.

I did also want to point out that, we

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just put out the guidance on our website this week, so we realize there hasn't been that much time for you to reflect on it.

So, we are going to have another public meeting, about halfway through the comment period, which will be 60 days. So, we're going to look in about 30 days, have another meeting to get your additional feedback, so don't think this is the only opportunity that you will have.

That's all I wanted to say for opening remarks, so I will turn it over to Gary Comfort, who is our first speaker.

MR. COMFORT: Okay. Good afternoon, everybody. As Andrea said, I'd like to thank all of you for attending this session regarding our draft regulatory analysis for the 10 CFR Part 61 rulemaking on low-level radioactive waste disposal.

As stated before, my name is Gary Comfort. I'm the Senior Project Manager responsible for developing this rulemaking. In addition to a brief background and discussion on the recent Commission Staff Requirements Memorandum that we received on September 8, Greg Trussell, to my right, will also be talking a little bit about our

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regulatory analysis.

Greg is our regulatory analysis expert and is responsible for drafting the current draft regulatory analysis and making the changes that will come out of this meeting in support of the supplemental rule that we'll be doing. We're seeking, of course, additional input to help a better, more robust regulatory analysis. Next slide, please.

Okay. The primary reason for this session is that the Commission did direct the staff in its September 9 Staff Requirements Memorandum to develop a supplemental proposed rule for comment.

One of the factors the Commission wanted us to do as part of that supplemental rule was to revise the rulemaking to be informed by broader and more fully integrated, but reasonably foreseeable costs and benefits to the U.S. waste disposal system, resulting from the proposed rule changes, including pass-through costs to waste generators and processors.

So, we're hoping to get additional information from our stakeholders to be able to support that.

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As part of that request, we're holding this meeting and we've also issued a *Federal Register* Notice that was published on October 17 that requests the stakeholder information that may be used to -- or requests certain comments and questions that we'd like to hear specifically about, to inform our regulatory analysis.

We're of course welcome to any type of comment that you have on the regulatory analysis, too. Although we are asking for the specific questions, we're just trying to make the regulatory analysis more realistic and robust out of this information.

The public comment period for this request is relatively short, being only about 30 days, it ends on November 16. However, there will be additional opportunity when the supplemental rule is published to provide additional comments on the regulatory analysis. We're hoping to publish the regulatory analysis, as well as the supplemental rule for public comment, sometime next spring.

That's on our current schedule. In addition, at this time, we're only seeking, as part of this meeting and as part of the *Federal Register*

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Notice, we're only seeking comments on the regulatory analysis and any type of associated cost information you can provide.

Anything specific to the rule, the draft final rule that was sent to the Commission, as well as any of the Commission directed changes, those will be -- we'll look for comment on that, hopefully during the supplemental -- when the supplemental rule is published.

But for right now, we really would appreciate if you would focus your comments to just help us get the information for the regulatory analysis.

During this meeting, we're hoping to be able to also answer any questions that may help you form your comments for the regulatory analysis. If you have questions about what we're asking or what information we're seeking, as well as any specific provisions or direction that would help you draft those questions, we'll try to answer them as well as we can. Next comment, please. I mean, slide.

On this slide, I provide a status of the rule and some of the pertinent documents that were associated with this rulemaking. The proposed rule

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was published in the *Federal Register* on March 26, 2015. So, quite a while ago.

We had an extended comment period that ran through September 2015. And based on the comments we received, we developed a draft final rule package, which we provided the Commission on September 15, 2016.

If you haven't already reviewed the draft rule package, you can get the package from the NRC website, under SECY 16-0106 or through our Agency Document Access and Management System, which is otherwise known as ADAMS, at the -- using the numbers stated on the slide.

The package itself that you'll find includes the SECY paper, the draft statements of consideration, which is basically the FRN, *Federal Register* Notice, as well as a copy of the draft regulatory analysis.

These were all sent to the Commission for review and affirmation. Instead, the Commission sent us a Staff Requirements Memorandum on September 8, 2017, which is also available on our website, which directed the staff to make some changes to the rule and publish a supplemental rule for comment.

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The reason the Commission made the decision to reissue the rule, rather than go to a final rule, was that they felt the changes are somewhat substantial, both between what the staff between the proposed rule and the draft final rule, as well as the changes that they're doing. So, they want to make sure that everybody has another chance to comment before the rule becomes final. Next slide, please.

Now, in the Staff Requirements Memorandum, the Commission directed us to make really five separate, or gave us direction for five separate, things, which I'm going to go over four of them.

The first one, we've already talked about, is the informing, and why we're here, is the informing the regulatory analysis. On this slide, on the left side, I basically have what we provided the Commission in their draft final rule package. On the right side is the direction for the -- that the Commission provided the staff to make changes to that draft rulemaking package.

The first two items, I've kind of bolded, because those are the issues that we think

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will affect the regulatory analysis the most, so we'd like some additional comment and any feedback on the changes that that would do, that aren't currently in the regulatory analysis.

For the first item on the first row, in our draft final rule package, the staff had intended the rule to be applicable to all existing operating waste disposal facilities, as well as any that are developed into the future.

In addition, as part of the comment process, we received a lot of comments on 10 CFR 61.1(a) asking the applicability of that. That was basically a provision that said that a case-by-case review could be used to not adopt some of the provisions.

And so, people were asking, well, is this basically a grandfather clause, and it has allowed the regulators and state regulators to not have to implement those requirements.

In our draft final rule package is one of the comments we basically identified, no, the intent of that provisions originally was when the rule was originally promulgated in 1982, to allow sites that were going into a totally new framework,

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to have some flexibility, but that it shouldn't be there.

So, as part of this draft final rule package and as a result of the comments to make more clarity, we were recommending deleting that provision from the regulations.

Instead, what the Commission has directed us to do is to reinstate the use of a case-by-case basis for applying new requirements to only those sites that plan to accept large quantities of depleted uranium for disposal. So, we do plan on reimplementing some sort of method that mimics what was in 61.1(a) for these new rule provisions, as the Commission directed.

The other significant change that we think will affect the regulatory analysis is, the Commission directed us to change the compliance period.

If you remember back in the proposed rule, we -- the NRC had proposed basically three-tier system, which included a 1,000-year compliance period, a protective assurance period from 1,000 to 10,000 years, and then, followed by a performance assessment period after that.

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Based on comments that we got, that seemed to be a relatively complex dealing that we were including in our proposed rule, as well as other concerns about some of the dose goals and things that were associated.

The staff, in the draft final rule package, had revised the language to try to simplify it a little bit more and we went to a compliance period, as well as performance period assessment, but we split the compliance period -- the compliance period was going to be determined dependent upon the amount of long-lived radionuclides that were going to be disposed of at the site.

So, if you had very little or not a significant quantity of long-lived radionuclides at the site, you'd be subject to a 1,000-year compliance period. If that were not the case and you had a significant amount of long-lived radionuclides, you'd be doing a 10,000-year compliance period.

The Commission, in their Staff Requirements Memorandum, directed the staff instead to just simplify this whole process by just implementing a 1,000-year compliance period. And

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then, for any sites that do have significant quantities of long-lived isotopes, they would continue to be subject to the performance period review.

The last two items, or the latter two directions from the Commission, we don't think are going to affect the regulatory analysis, but I've included them for completeness. They're basically asking us to define the term safety-case or use the term safety-case in defense and depth a little bit differently than what we had proposed in the rule.

You're certainly welcome to provide comment to the effect that you think it may influence the regulatory analysis cost, but right now, we're not thinking that it's going to provide a significant impact to that regulatory analysis.

Now, I guess I'd like to turn over the presentation to Greg, where he'll get into more detail about the regulatory analysis. So, I thank you.

MR. TRUSSELL: Thanks, Gary. So, what I'd like to do is, take a few minutes and discuss what a regulatory analysis is and its role in our rulemaking process.

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And then, I'm going to take some time and talk about the RA we did at the proposed rule stage and the changes we made to the draft final rule, based on your feedback, from stakeholder feedback. And at the end, we'll review the questions that the staff has created, to allow us to update the regulatory analysis directed by the Commission.

So, an RA. As I look around the room, I think most of the folks here are pretty familiar with a cost-benefit analysis. Our guidance defines an RA as a formal, highly structured, reasoned analysis containing estimates on benefits and cost that are quantified to the fullest extent possible.

An RA will look at the proposed action, compare the alternatives, and organize in a structured manner. The RA is one of our analytical tools, provided to the Commission. It recommends a preferred alternative from the alternatives that were offered and it gives a decision rationale and talks about the alternative that was selected.

Because of the RA's importance and its role in a rulemaking process, it must meet minimum quality standards and the analysis must be based on

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the best obtainable scientific, technical, and economic information available. Next slide, please. Okay. All right.

So, the change we made to the RA from the proposed rule to the draft final rule. As Gary mentioned, the proposed rule was published back in 2015. The NRC received hundreds of comments and several of those comments were on the RA.

The staff reviewed the comments and we made several changes to the RA. First, the RA is now based on site-specific assumptions for the four licensees that are impacted. Next, we changed the analysis time frame from ten years to a site-specific estimated closure date.

This allows the RA to capture all the estimated costs to the licensee throughout their estimated operational period. In addition, the assumptions to the cost and technical analysis were increased to reflect comments that we received directly from the stakeholders and also from the Agreement State regulators.

As a reg analysis is based in part on estimates of values, it's useful to conduct a sensitivity analysis on the variables as part of the

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uncertainty analysis. So, an uncertainty analysis was done on this draft final RA.

The staff identified some of those variables that were uncertain. In this case, those variables were the implementation cost to the industry and to the Agreement States. Next slide, please.

So, here's some sample costs in the draft final RA. These are the type of calculations of cost that we did. For these calculations, the staff used assumptions specific to a given site. This spreadsheet shows point estimates for a given provision for that particular site.

As you can see in this example, the cost reflects the estimated year in which the cost would occur. Each impacted entity for the rule would have its estimated costs rolled up into a summary sheet. Next slide, please.

So, here's a summary table for the estimated cost on the draft final RA. The draft final RA now reflects an overall estimated, undiscounted industry cost of \$9.8 million, compared to \$4.2 million that was in the proposed RA.

The cost to the Agreement States went

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from \$2.1 million in the proposed RA to \$7 million in the draft final rule RA. So, that's a quick review of what a regulatory analysis is and some of the changes that we made.

So, now we're at the point of making some additional changes to the RA, based on the Commission's direction. To address this direction given by the Commission, the staff has come up with some questions in updating the RA.

These questions were published in the *Federal Register* on October 17. I would like to go over these questions, provide any clarification to the questions if needed. Next slide, please.

So, these three questions here are somewhat similar. The first question was seeking feedback on if we are considering appropriate alternatives to the regulatory action in the RA. The second and third questions are asking if there are any additional factors or information that should be included in the RA. Next slide.

Question 4, did we capture all the costs in the RA? Are there any unintended cost consequences for moving from the discussed 1,000-year and 10,000-year compliance period to just a

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single 1,000-year compliance period?

And Question 5, are there any costs that should be assigned to those sites not planning to accept large quantities of depleted uranium for disposal in the future? Next slide.

Question 6, is the NRC's assumption that only two existing sites plan to accept large quantities of depleted uranium in the future reasonable? Question 7, what are the potential transfer costs or pass-through costs to the waste generators and processors?

So, that's a quick review of the questions the staff has created to allow us to update the RA. At this point, I think we can open up -- oh, I'm sorry, Question 6? Oh, okay, Question 6? That's all of them, that's awesome. That's all the questions.

So, we can open it up to the floor for any questions at this time. Don't be shy.

MS. LOPAS: All right. Yes. If you have questions, go ahead and use the mics along here or Joan can run a mic to you. For folks on the phone, remember to press *1, if you want to ask a question. And, Brandon, just let us know if somebody pops on.

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But we'll go ahead and start in the room. If you could introduce yourself first and then --

MS. D'ARRIGO: I'm Diane D'Arrigo with Nuclear Information and Resource Service. The costs -- are you including the costs of the potential consequences of the costs after closure of the facility?

I mean, it looks to me like you're only looking at the costs of actually implementing the regulations and not the environmental and health costs of the consequences.

MR. SUBER: Yes, thank you for the question. And that is correct, in the regulatory analysis, it is the cost of implementing the regulation.

The cost that you're talking about would be considered in the decommissioning portion of the site or the after-closure portion of the site, with the financial assurance requirements that the site licensee would have to maintain.

MS. D'ARRIGO: So, but you're changing 10 CFR 61 to allow for longer lasting materials to be there and so, you're saying then, the

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decommissioning and the financial assurances for each facility would now change somehow, because of that? I'm trying to figure out how it plays through.

MR. COMFORT: Okay. First of all, I wanted to clarify that the rule changes that we are proposing or drafting don't make any change to what materials can go into the site specifically. It changes how we analyze them to make sure that what's going in there remains safe, for more site-specific analysis.

So, we're not -- it already allows, under the current regulations, some certain long-lived radionuclides to be put into it. What we're trying to make sure is that, because the regulation does do that, that there is some safety provision to make sure it's appropriate for those things to be in there.

But the regulatory analysis itself, or this regulatory analysis is trying to look at the costs that differ from what the current rule structure is versus what we're trying to implement.

So, the costs of the longer -- or the maintenance of the material, the changes of the

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disposal site after closure would have already been addressed in the original Part 61. And so, we're not changing what's happening there at all.

MS. D'ARRIGO: So, you're saying, because Class C waste has -- well, because all the -- well, A and C have some long-lasting radionuclides, now by allowing larger amounts of long-lasting radionuclides, somehow that doesn't require changes in costs or in -- I mean, I'm trying -- my understanding is that there's some amount of long-lasting material, but that there's been an analysis in the past, through the 10 CFR 61 analysis, that that would decay to an acceptable level within the 100, 300, or 500 years.

So now, if you're putting in something that has a peak dose that's way far out beyond that, it's not the same as what you've already got.

MR. SUBER: Diane, so, let me make sure I have your comment straight. You want to understand, as we revise this regulatory analysis, how -- what is the impact of putting longer lived material into the near-surface? How is that going to be assessed, both in the regulatory analysis and in the closure analysis for the site?

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MS. D'ARRIGO: Okay. I mean, what I want to know is, how the consequences of putting long-lasting material in there are going to be paid for in the long run?

If you've got a site, West Valley or a new site or one in Utah or Texas or whatever one, and then, 500-1,000 years down the road, the institutional control period has passed and we're relying on the analyses that are being done today, and if there are consequences, then this is an externality, it's an external cost that the public and the state and the community has to pay, and I'm trying to ask in advance how that's going to be compensated or averted.

MR. COMFORT: And where I'm trying to say on the response is, the current regulation allows these materials that you're talking about to already be put into these same sites.

MS. D'ARRIGO: When you say that, could you be specific?

MR. COMFORT: Like depleted uranium.

MS. D'ARRIGO: Yes.

MR. COMFORT: Okay. That, under the current regulation, is allowed to be disposed of, it

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has been disposed of in the existing low-level waste disposal sites. What we're trying to do is --

MS. D'ARRIGO: Since when?

MR. COMFORT: Since the beginning of the

--

MS. D'ARRIGO: Since 1982?

MR. COMFORT: -- rule was put in place.

Yes.

MS. D'ARRIGO: And is there an amount?

Is there a limit, based on -- I'm sorry, I've been to a lot of these --

MR. COMFORT: Yes, no, that's one of the

--

MS. D'ARRIGO: -- workshops over the decades --

MR. COMFORT: -- that's one of the --

MS. D'ARRIGO: -- I'm not trying to --

MR. COMFORT: -- issues. In 2000, that's what started this whole rulemaking is --

MS. D'ARRIGO: Right.

MR. COMFORT: -- in 2005, as part of one of the hearings on one of the private enrichment facilities, the Commission came up to, what is the impact of the DU into the sites and is it allowed

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under the current regulations?

Because in the current regulation, it's silent on depleted uranium, it's automatically classified as Class A waste, but there's no limit --

MS. D'ARRIGO: Which we've challenged.

MR. COMFORT: -- and there's no limit on. So, the Commission basically, as part of their finding was that, yes, it is considered under the regulation as a Class A waste, but they directed the staff to go back and evaluate it. And as part of that -- or to do additional evaluation on the disposal of that material and come back with recommendations.

The Commission then decided, after getting that evaluation from the staff, to go forward with its rulemaking, which is supposed to try to do a more specific that, even though it's allowed, we want to make sure that the amounts that are put in there will be safe, will continue to be safe in the future, based on the provisions and the policies of what the Commission --

MS. D'ARRIGO: And which of these documents apparently talks about paying for managing it longer into the future?

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MR. SUBER: Okay. Greg --

MS. D'ARRIGO: That will be my last question.

MR. SUBER: Okay. So, Greg, can you explain the scope again, reiterate the scope of what -- of the regulatory analysis? Because I think we're trying to get into an error where we're confusing the closure analysis for a site with the regulatory analysis that's conducted for the purpose of the rulemaking. So, if you could just --

MS. D'ARRIGO: When do we get to participate in the closure analysis? When is the public opportunity for comment on that then, if that's where it's -- my question --

MR. SUBER: Okay. So, the -- there will be a 90-day comment period for comment on the entire rule. Right now, the purpose of this particular segment is restricted to the regulatory analysis that is being conducted per the direction of the Commission.

But what the Commission also told the staff to do is, when we publish the supplemental rule, and I don't know whether it's the supplemental proposed final, supplemental final, supplemental

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final proposed, then we'll have a 90-day comment period. Okay. And it'll probably be more appropriate for that particular discussion.

MS. D'ARRIGO: That's inadequate, but I hear you.

MR. SUBER: Thank you.

MS. LOPAS: Brandon, do we have anybody on the line?

OPERATOR: Yes, ma'am. We have a question from Marvin Lewis. Your line is open.

MS. LOPAS: All right. Hi, Marvin.

MR. LEWIS: Hi. Well, first of all, Diane D'Arrigo did take part of my question, which I appreciate greatly, and left me with the core to my question, which is much more appropriate. Namely, exactly what you put up.

The NRC has been cutting and pasting the comment periods and other parts of the public participation, to the point where it's unintelligible. What you're doing is finding a way around the problems, instead of meeting the problem.

For instance, if you put down oodles of depleted uranium, which was done in a colony called Puerto Rico on a beach, there's no way that you're

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going to bring that beach up to what it was before, because even if you took out every ounce of depleted uranium, the public, the tourist public, that would be spending money down there know it's depleted uranium on that beach and will not go there. You've ruined the value of that beach, whether you've done anything else to it.

And that money does not appear in your analysis no way, no how. And I would like to know how you have the right to cut apart the public participation in such a way that you get any third-rate answer that you're looking for, to protect whatever you're trying to protect.

And what I'm trying to say you're protecting is a \$1 trillion upgrade to the whole nuclear arsenal in order to make nuclear electricity continue, instead of falling on its face as it was and is doing. Thank you.

MS. LOPAS: Thanks, Marv.

MR. SUBER: All right. Well, thank you for your comment, and we will note that. But I think the NRC goes through great extent to make it easy for people to comment on our rulemaking and our guidance document.

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In fact, the meeting today is an in-person meeting here at Headquarters. We have a facilitated bridge-line for people to participate on the phone. And we have a webinar. We issued an FRN notice to announce the meeting, in addition to the fact that, for the past two and a half weeks, we've had notices -- we have had a meeting notice on the NRC website.

If you have suggestions on other ways that we could engage the public and make sure that people know about our meetings, then we'll be glad to hear for that. But we take public outreach very seriously. Thank you.

MR. LEWIS: I've been making comments for 40 years, since the 1970s. And I have found them to be similarly dismissed at all times. Thank you.

MS. LOPAS: Okay. Brandon, do we have anybody else on the line?

OPERATOR: I'm currently showing no further questions on the phone line.

MS. LOPAS: All right. We have somebody here in the room.

MR. COWNE: Good afternoon. My name is Steve Cowne and I'm the Chief Nuclear Officer and

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Compliance Manager for LES. And I don't have any questions, but I'd like to make a few statements for you, and I promise that my statements will be shorter than what the first speaker, the amount of time that we took up.

So, I'd like to thank you for this public hearing and for an opportunity to talk. You've done this a couple times and it looks like you're going to be doing it again. So, you've given us plenty of time to provide information and ask questions and we've still got opportunities to do that, so I appreciate that and so does LES.

However, LES is very concerned about this proposed rule. We believe that the original regulatory analysis was inadequate, because it was based on the costs of the four disposers and not the generators or the processors. The original economic analysis also did not take into account the economic impact of national security.

I remind you that the Atomic Safety and Licensing Board stated during the LES proceedings that the uranium enrichment industry and this facility is a strategically important domestic industry of vital national interest that is

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essential to national and energy security.

And not assessing the costs to decommissioning and disposal for that industry is an economic impact on national security. Now, the LES facility estimates that, by the end of the current license, it will have generated somewhere between 100,000 to 130,000 metric tons of tails.

And based on what we estimate to be a 15 to 20 percent cost increase, if that was to occur, that would be almost \$90 million increase in the disposal costs for tails. I do not see those numbers reflected in the current regulatory analysis.

I think it's critical that the NRC work with the disposers, especially WCS and EnergySolutions, to get detailed accurate estimates of what the cost increases will be, so that we can do quantifiable estimates of what the impact will be.

Finally, my last statement I'd like to make, more from the perspective of the public than from the licensee, so I think the NRC has a duty to the public to ensure that disposal costs are accurately estimated.

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And the reason why is that many of the decommissioning costs of the generators and processors are based on those disposal costs. And if we low-ball the costs for disposal of depleted uranium, you're essentially allowing the processors and the generators to low-ball their decommissioning costs and what they set aside for funds.

So, I ask the NRC to work with the WCS, EnergySolutions, and we are willing at LES to sit down and help you generate some quantifiable numbers. Thank you.

MS. LOPAS: All right, thank you. Reminder to the folks on the phone, press *1 if you want to make a comment or you can go ahead and submit them via the webinar software. I am watching that. Brandon, do we have anybody else on the line?

OPERATOR: I'm currently showing no questions on the phone line.

MS. LOPAS: Okay.

OPERATOR: Oh, actually, it looks like a question just came in. Our question is from Karen Hadden, your line is open.

MS. LOPAS: Hi, Karen.

MS. HADDEN: Hi. I have a question about

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what this rule would do? Would it allow the depleted uranium to go into the low-level Compact Commission facility at WCS, as opposed to the federal facility at WCS?

MR. SUBER: Yes, this is Gregory Suber from the NRC. And since we haven't evaluated an application from WCS, I'm not sure exactly where that would go. That's a little outside of the scope of the meeting that we're having today.

MS. HADDEN: In what way does it impact a generic disposal facility, then?

MS. LOPAS: Could you repeat that, Karen?

MS. HADDEN: Your --

MS. LOPAS: I'm sorry, could you repeat that question again? I had a little trouble hearing that.

MS. HADDEN: So, please clarify, does this apply to any disposal facility?

MR. SUBER: Does the rule apply to any disposal facility?

MS. HADDEN: Yes.

MR. SUBER: Go ahead.

MR. COMFORT: This is Gary Comfort. Well, based on the direction by the -- the original

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proposed rule and draft final rule would have applied to any operating, as well as any future disposal facility.

The Commission direction that we have on the SRM is to allow, as indicated, was to allow a case-by-case review, meaning some of the facilities may not have to meet those, particularly if they're not going to be taking any additional quantities, large quantities of depleted uranium on their sites anymore. But otherwise, it would apply to them.

MS. HADDEN: What is the logic behind reducing the compliance period from 10,000 to 1,000 years?

MR. COMFORT: That was a Commission policy decision.

MS. HADDEN: Why?

MR. COMFORT: They -- in their vote sheets, they basically indicated that they were trying to simplify the process. They thought the decision between making long-lived -- the discretion between long-lived versus short--lived more simple, is what the indication was. But we're still developing that.

MS. HADDEN: Well, it strikes me as less

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protective, is that not also true?

MR. COMFORT: We're going to be doing more analysis to make that determination and we'll provide information. And that may very well be a good comment to make when we put out the supplemental rule.

MS. HADDEN: And what additional information is there right now, analysis that's been do so far, that the public can access?

MR. COMFORT: Well, we've developed -- in the past, we've issued both the proposed rule, as well as you can look at the draft final rule that we've issued, as well as there were some early draft white papers that we did on disposal of the material back in 2009 time period, I think.

MS. HADDEN: And have those been updated?

MR. COMFORT: They have not recently been updated.

MR. SUBER: Okay. It might be helpful -- this is Gregory Suber, again. It might be helpful if you went to the NRC public website, under the Radioactive Waste, there is a tab for Low-Level Waste Disposal.

And under the Low-Level Waste Disposal,

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we have a webpage that is dedicated to the entire rule. And what you'll find on that webpage is a chronology, starting back from the LES hearings all the way up to the current SRM that was issued in September.

So, you can follow the paper trail from the beginning to the current status of this rulemaking, through our public webpage.

MS. HADDEN: I thank you for that, but I do want to also express deep concern. I'm a resident in Texas and I have watched the WCS site expand and expand, and to see the regulations loosened time after time, and this strikes me as a horrendous step down that same path. And I oppose it strongly.

MR. COMFORT: Okay. Well, we welcome your comments, but particularly those, we'd prefer you wait until we do the supplemental rule, unless it's related to the cost for the regulatory analysis. But thank you.

MS. LOPAS: Okay. We're going to a comment in the room here.

MR. CAMPER: Larry Camper, Advoco Professional Services, Talisman International. I

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have an observation and a process question. The focus at this time is on the regulatory impact analysis and cost. And there's a tendency to gravitate quickly to Item Number 5 in the SRM, for the pass-through costs and so forth.

But I want to come back to something that Gary Comfort mentioned in some of his early comments, and that is actually Item Number 1 in the SRM, where the Commission is directing the staff to reinstate the grandfathering provision. 61.1, as you pointed out, Gary, talks about the grandfathering on a case-by-case basis, but it also goes on to say, through the use of license conditions and orders.

And my point is, there's a cost implication associated with that. And arguably, there's a different cost estimation associated with that, given that it appears that two states would be handled differently than the other two.

And so, my question for you is, from a process standpoint, given that we don't know yet what that will look like, when Item Number 1 is completed by the staff, what's going to be the best opportunity to gain cost insights into that issue?

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I mean, I look at Question Number 2, where it says, are there additional factors that the NRC should consider in the regulatory action, what are these factors? Is that a place to raise that type of question or will you come back to the public again, from a cost consideration standpoint, once you have the language that would reinstate the grandfathering position?

MR. COMFORT: Okay. There's two points on that one. One, right now, we're just looking for information. So, that kind of consideration would be a great comment to provide us on it. How we're actually going to implement it is something that we're still looking at, because there could be a difference in cost.

If we go off and do the 61.1(a) directly, as it is, that would potentially cause a state regulator to -- they'd still have to adopt our regulations, but now they'd have to go back and implement license changes and orders directly to the licensee.

Another alternative that we may even consider is going back and doing the compatibility tables of basically, in there, making some type of

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designation saying, the state doesn't have to change their regulations if they get a site that's already in existence and no new sites are being put in, and then they wouldn't have to change their existing regulations at all.

That would be a different cost. So, until we determine which way, as you said, there will be some consideration, but that's a good point, that we would have that.

There will be another opportunity, as we said, to provide additional comments on the regulatory analysis, when we issue the supplemental rule, because that document -- the updated regulatory analysis will be issued at that point and we'll look forward to additional comments.

And then, for process, for everybody's process, similar to the proposed rule, after we get all this information, we will go back and then, the staff will go back and develop a new draft final rule, which will respond to both the comments we receive during the supplemental rule comment period, as well as they'll continue to address any comments that were put in the original proposed rule, that will still carry over.

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And that would be expected probably about a year later, for the draft final rule, to go back up to the Commission. And then, the Commission will again have the opportunity to either affirm it or make additional changes.

MS. LOPAS: All right. Another question in the room here that we'll take.

MR. TONKAY: Hi, I'm Doug Tonkay, from the Department of Energy. And I appreciate the opportunity and I know we've talked before, Gary and Gregory. So, I have a statement that I brought, I don't -- that was officially approved and I'm going to submit it for the record, so it will save some time.

But I think your presentation helped focus more of what you guys are looking for in terms of the analysis. So, I'll pull a couple of things out of here, and I do have a question.

I want to build on what the gentleman from LES said that, besides LES, DOE and essentially the taxpayers are the owners of and will pay for the disposition of the largest quantity of DU in the country.

So, we have, at DOE, sort of a keen

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interest in the proceedings, as well as that I'm aware that you're dealing with the Agreement States and oversight of the regulation, but we're probably, as an agency, one of the only groups that's directly sort of regulated with the oversight that Gregory's group does on our WIR determinations and one of the examples in my statement has to deal with that.

But we see real impacts from your regulations because of use of Reg Guides on our work. So, we've seen real impacts from the 10,000-year compliance period being applied to some of our facilities. So, that's something we can talk to you about.

Obviously, you're going back to 1,000 years, so that example may not be one you want to hear. But in our comments earlier, we talked about the changes to the radon, consideration of radon and the doses and, in particular, the impacts there do impact if radon is indeed put into the 25 millirem dose limit versus the way it is now, measured with flux.

We do think that there's some impacts there on costs of the actual design of the covers and it could be a couple of million dollars or more

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to the facility. So, we would ask that, you need to look at the implications of that.

So, that's an example of what -- so, my question is, does the regulatory analysis also look at the impacts on other federal agencies, like DOE, of the changes in the regulations?

MR. TRUSSELL: Thanks, Doug, for that comment. Currently, it doesn't. We don't have any other -- we have the Agreement State costs included in that. That's something that I'll get back with the staff and we'll look at that again and consider that. Currently, it doesn't, but we'll look at that moving forward.

MR. COMFORT: And to add onto that, I think that falls under that category of pass-through costs, because I think that's where your costs are coming from, is the disposal aspect.

And that's one of the things the Commission has asked us to look at. So, any information that we can get that will help us evaluate that would be helpful.

MR. TONKAY: And we're going to talk about it internally, because we take into account NRC regulations, we have our own orders that apply,

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but when things happen, we try to keep them somewhat in-step, and we'll be making comments, obviously, on the new rule.

MR. COMFORT: I understand what you're saying is that, because you try to make somewhat -- sometimes your standards are trying to be similar to NRC, that if we make the change, there would be an impact to you guys also on that. And that's something -- yes, we would appreciate comments on that.

Pass-through costs are basically the costs that, because of the rule, that aren't -- you basically have the direct costs to the disposal facilities, but then, of course, those disposal facilities aren't going to take all those costs themselves, they're going to charge additional money, and that's what LES was basically saying.

That's going to increase their costs, because of the result of the rule. Now, I mean, one of the key things to do is that, yes, costs are important, but we also want to make sure the rule does provide adequate safety. So, I mean, costs are just one part of the aspect of our considerations on all this.

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MR. SUBER: Doug, can I make sure I understand what you just said? When you're talking about the consideration of DOE in the rule, were you saying that you believe that in the regulatory analysis, we should look specifically at the NDAA program or the impact of the rule on NDAA? Because I don't believe that that is part of the regulatory analysis.

MR. TONKAY: I question whether we were considered, at all. I wasn't suggesting we do or --

MR. SUBER: Oh, okay. Because you're a waste generator, right?

MR. TONKAY: We are both a waste generator and an operator of our own facilities and subject to NRC's coordination review.

MR. SUBER: Right, but -- right. So, it's sort of two --

MR. TONKAY: Different pieces of the pie there.

MR. SUBER: Right. So, it's sort of, to the fact that you're a waste generator of course, and you dispose of waste in a commercial site, it's considered. But I don't think we do a special consideration for DOE-only waste or DOE-generated

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waste.

MR. TONKAY: Not to mention, we do have a lot of uranium in storage out at the ES Clive Facility, that's been sitting there waiting for this regulatory activity to end. So, it can't go into the ground, it was shipped to Clive for disposal, but it can't go into the ground.

And so, we're paying -- I saw Dan Shrum here at the meeting and reminded me that we are continuing to pay a monthly fee for storage out there, just because we can't get to a conclusion on this. So, that's just a side comment.

MR. SUBER: All right, thank you.

MS. LOPAS: Okay. We have another couple questions in the room. So, Joan will make her way around.

MR. SHRUM: First of all, thank you for holding this public meeting and informing us on these next steps. If I may, before I ask my question, would you go back to Slides 7 and 8, please? I know you can't do them at the same time, but let's look at 7 first.

MS. LOPAS: Yes, please, can you please -

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MR. SHRUM: Dan Shrum with Energy Solutions.

MS. LOPAS: Perfect.

MR. SHRUM: So, this is a sample cost from the draft final RA and I see a total operational cost of \$848,000. And if we go to Slide 8 now, would you explain to me how Slide 8 correlates to Slide -- or Slide 7 correlates to Slide 8?

MR. TRUSSELL: Yes, thanks for that comment. This is Greg Trussell again. Slide 7 is an example of the type of calculations. And we did this RA site-specific. So, you can imagine, in the spreadsheet, there was a different spreadsheet for each of the impacted entities.

And I rolled everything up into a summary for each of the impacted sites, which is Slide 8. So, the implementation costs that are on Slide 7, and the operational costs, are rolled into the totals on that summary sheet.

MR. SHRUM: Okay. I should never do math on the fly, but I see -- I don't see -- just going to the industry costs, so, that should be divided amongst four facilities, theoretically?

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MR. TRUSSELL: Oh, yes, the -- that's a good question. With this particular RA, and I got some really good feedback from the technical staff, is we did site-specific assumptions. So, some costs were much higher than others.

So, this is -- cost on Slide 7 does not apply to all the impacted entities, that's just one that I picked out. So, some are higher and some would be lower, but the total of the four sites and for the four Agreement States is what's reflected in the summary table on 8.

MR. SHRUM: Okay. Thank you for that. So, now, for my comment.

MR. TRUSSELL: And when that -- all that information is in the RA, I think, that's available on ADAMS. So, you can get those details.

MR. SHRUM: So, to my specific comment is, we have conducted, at considerable expense, a performance assessment for our Clive Facility. And just for our Clive Facility, we're already meeting the numbers on Page 8.

And we will provide information to that, so that maybe help inform, as opposed to a generic number, it looks like that's what you did in Slide

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7. We'll be providing more accurate -- this is what it has cost us to date. And what's unique about ours is it was just for depleted uranium.

So, we had done models in the past, performance assessments in the past, but we wanted to just take depleted uranium, that was the only purpose of our performance assessment. So, we'll provide those to you and hopefully you can work those into the calculations.

One of the questions that was asked is that the delta on Question 4, the delta between 1,000-year and 10,000-year compliance, and now we're moving it back to 1,000-year. And we will also be providing comments, because our other facility, the Barnwell Facility, is nearing completion of its life.

It's still open, open to the Atlantic Compact, but the pass-through costs would be very different for that facility, because those pass-through costs would have been put onto those few utilities that are in the Atlantic Compact, for an analysis that would not have benefitted them. So, we will be providing that also.

And as was just mentioned, we'll also be

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providing costs of storage, because there is a real cost of not disposing of this material, as evidenced by the fact that we have a very nice, shiny building storing depleted uranium at our site as we continue to work through this issue. So, those are my comments. Thank you.

MR. TRUSSELL: Thank you.

MS. LOPAS: We've got one in the back, and then, we'll go to you. One right in the back first, sorry. Then you, sorry. We'll just need you to introduce yourself, before you --

MR. GRIEVES: John Grieves. So, Gary, it's a comment, not a question. Two points are going to be extremely important. How are you going to implement the two reinstatements, the first two lines on your slide?

So, how are you going to implement the reinstatement of the case-by-case language? And then, how are you going to implement the 1,000-year criteria? So, my comment is, I recommend you consider, if you've got room in it, to have a little bit of a workshop on those issues.

You can't do it here today, but just an example, case-by-case, one way to implement that is

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to go back to the language you had before. And I can assure you, some people are thinking that's what you're going to do, reinstate it.

And if you do reinstate it, the implementation of that case-by-case analysis is in the hands of the Agreement States, there's nothing for you to do. I'm not sure that's what you're going to do.

So, whatever you're going to do on these first two items, I, among others, would enjoy having some dialog on that to avoid some false traps. If you wait until you put the rule out -- so, I'll stop there.

So, just a recommendation, if there's any room to have a good discussion of what you're thinking about for those two items, I think it would be useful and may avoid some unintended consequences. So, I'll stop, if you've got a question for me, ask it. But it's a comment.

MR. COMFORT: I appreciate the recommendation, we'll look into that.

MS. LOPAS: All right. We're going to take another comment here in the room and then, we'll check on the phone. So, if you have a comment

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and you're on the phone, webinar, press *1.

MR. TONKAY: Doug Tonkay, Department of Energy, just a clarifying comment. The comments you want on the regulatory analysis, particularly like Question 4, we're supposed to reference the delta between the final proposed rule that went out and then, the new SECY?

I mean, I'm just a little confused about the reference points for the -- where you wanted the costs and benefits from? Is it -- or does it go back to the original 61?

MR. COMFORT: What we're looking on that is, we put out -- the draft final regulatory analysis is out there. We're planning on using that as our start point for redevelopment. In that one, we had -- we based all the costs on -- for sites that are going to take additional long-lived wastes of a 10,000-year compliance period.

And so, instead, hey, we've got that costs, is that -- now, it may be -- based on some of the comments we've gotten, the costs that we have in there may be more appropriate for a 1,000-year compliance period and are well underneath a 10,000-year.

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But we're just basically asking, are those costs anywhere in the ballpark or how should they be adjusted, is what we're trying to get the information on that one.

The draft regulatory analysis that was part of SECY 16-106 that I referenced in our slides that you can get access to through ADAMS or on our website. There was a question as to what that document was -- or where I was referencing to as the start point.

MS. LOPAS: All right. Brandon, do we have any questions on the phone?

OPERATOR: Yes, we have a question from Charles Maguire. Your line is open.

MS. LOPAS: Okay.

MR. MAGUIRE: Hi, this is Charles. This has all been very informative. I'm sorry I wasn't able to be there in person, but I am glad we have the opportunity to participate through web portal and by phone.

My question, as we've looked at how to respond to you from our position as an Agreement State here in Texas, with the WCS site in particular, as some of you would know, our

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requirements as it relates to the compliance period are more stringent than what NRC proposed in its rule with the 10,000-year compliance, and now with the 1,000-year compliance, because we look at a compliance period that's associated with peak dose, which with the depleted uranium is longer than the 10,000 years.

And so, as we would respond to you, sort of to know what you might be looking at from us, do you want us to address our comments relative to Agreement State costs and the things that we see operationally with our federal waste facility and our Compact waste facility?

Do you want us to look at it strictly based on a 1,000 and 10,000 or do you want us to speak to you from the standpoint of what our state-specific rules require relative to the peak dose requirement?

MR. COMFORT: I presume that, and I'll let Greg follow up on this, but because we did a site-specific regulatory analysis, that we were looking at costs that would affect each site directly, we would hope that we would get costs that were associated with the specific sites themselves.

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One of the things that we're considering, however, is also to do more of a generic, in case we do get -- we're not expecting any new licensees, but we may still include in our updated regulatory analysis just a generic site that may come up and what we expect the total cost would be.

So, all that information together, we're hoping will add up into that. But for -- in response to your question, I would say that we want site-specific information and Agreement State-specific information, to the extent that it can be provided.

MR. MAGUIRE: Okay. And so, then, just to be clear, in terms of what we see in terms of our expectations for compliance periods and I guess we don't know for sure even yet whether or not this will be a C-compatibility, but it doesn't seem like the Commission has a notion to change the C-compatibility, where we could have a more stringent requirement in Texas than the NRC rule.

MR. COMFORT: Right. Because the Commission did not direct any change to compatibilities and we did have a C on the original

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direct final rule provision -- I mean, if you remember, in the proposed rule, it was a B.

The staff went forward recommending it go to C, so there could be more conservative requirements, and the Commission did not change that. So, the expectation that we'll go forward with a C-compatibility.

MR. MAGUIRE: Okay, that helps me. Thank you.

MS. LOPAS: Anybody else on the line, Brandon?

OPERATOR: I'm showing no further questions or comments on the phone line.

MS. LOPAS: Okay. We'll go back to the room, then.

MR. CAMPER: Larry Camper, Advoco Professional Services, Talisman International. Let me add my thanks to the staff, first. And also, let me thank you for continuing the work on what has been a very long and, at times, challenging rulemaking. So, God speed as you work your way through the next year or so.

The question deals with Item Number 5 in the SRM, where the Commission directed that, be

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informed by a broader, more fully integrated, but reasonably foreseeable, costs and benefits, so forth and so on. So, I'm curious as to, how does the staff interpret, reasonably foreseeable future?

And then, it goes on to say, at the very end of the sentence, it says, including pass-through costs to waste generators and processors. As you have articulated, the regulatory impact analysis sites the cost of the waste site operators and industry to satisfy the regulation, for the operators.

But this question of pass-through cost to the waste generators and processors, how will you get that, given that there's no reporting requirement for such information to be provided to the Agency?

MR. COMFORT: Well, I mean, our hope is that some of the -- based on our request for information here, that some of the waste generators will provide that. But we realize that there's no requirement that they have to provide that type of information and to the extent that we get it, we'll try to incorporate it.

Otherwise, we will probably do some sort

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of analysis of different ways that the waste generators could pass-through or divide the costs and all, to get some ranges. But we can only use the information that we can get, that we have to make those calculations.

And this is something that the Commission has directed and if we can't get anything, we'll explain that in our development of the information, of how we did develop it.

MR. TRUSSELL: Yes, this is Greg Trussell. Just to add to that, when we do publish the supplemental proposed rule next year, you'll have an opportunity to comment on those additional costs, those pass-through costs.

MS. LOPAS: Okay. Any other questions here in the room? Comments? Brandon, do we have anybody else on the line?

OPERATOR: I'm showing no questions on the phone line.

MS. LOPAS: Okay. And there will be a chance at the end of this meeting to go back, to ask additional questions. But, Joan, do you want me to hand it back to you or should we just go ahead and take a short break? Sorry, Joan's got to get

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herself to a microphone that works.

MS. OLMSTEAD: Hello, does this work? Yes. I'll try to fix my microphone during the break. But I would like to thank everybody for their comments and questions. I just want to remind anyone that they want to have formal comments, you have to submit them through regs.gov.

And we'll take a break now and start at about, let's say 3:25. And take a break until then. So, thank you very much.

MS. LOPAS: Yes, stay on the phone and stay on the webinar, we'll be back at 3:25.

(Whereupon, the above-entitled matter went off the record at 3:14 p.m. and resumed at 3:27 p.m.)

MS. OLMSTEAD: Hello, everyone. Welcome back. I'd like to introduce our next panel. We have Robert Lee Gladney, he's a Project Manager for Low-Level Waste Branch. We have here Adam Schwartzman, Risk Analyst, Performance Assessments Branch.

And Gregory Suber, who is the Branch Chief in the Low-Level Waste Branch. And Maurice Heath, who also works for the Low-Level Waste

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Branch. Okay. So, now, I'm going to turn this over to Lee to start our presentations.

MR. GLADNEY: Thank you, Joan. As Joan mentioned, my name is Robert Lee Gladney. I'm a Project Manager within the Office of Nuclear Material Safety and Safeguards, NMSS. I would like to thank you all for, first, coming to the meeting today and for attending our presentation.

This discussion that I will have today will be involving our alternative disposal request guidance, commonly referred to as the 20.2002 guidance. This guidance is part of our Very Low-Level Waste Program and, in particular, our Low-Level Waste Program.

As you see from our slide, following me will be Adam Schwartzman, Risk Analyst, who will present later in this discussion. Next slide, please.

Before I discuss the guidance itself, let's first discuss very low-level waste, or VLLW. Very low-level waste is a term used to refer to those low-level radioactive wastes that contain some residual radioactivity, including naturally occurring radionuclides.

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These wastes are a small fraction of the Class A limits in 10 CFR Part 61. The current very low-level waste primary disposal option is disposal in a licensed low-level radioactive waste facility.

However, there are existing alternative disposal options, which include disposal in a RCRA facility or by other means under the provisions of 10 CFR 20.2002. Also, 40.51(b)(3) and 40.13(a), which we'll discuss a little bit later, provide a mechanism for transfer of unimportant quantities of source material exempt from licensing.

One of the reasons why this is becoming an increasingly important topic is that increased very low-level waste volumes are expected in the near term due to reactor decommissioning. Next slide. Okay.

The NRC evaluates alternative disposal requests on a case-by-case. Licensees submit applications to their regulator authority, either the NRC or the Agreement States, as applicable.

The NRC processes the issuance of 20.2002 authorizations for those requests that are approved, concurrent with specific exemptions from the licensing requirements. Some of these examples

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include 10 CFR 30.11, 40.14, and 70.17. Next slide, please.

In addition, other regulations address disposal options for radioactive material. 10 CFR 40.13 allows for exemptions from the licensing requirements for certain materials containing uranium and thorium that are referred to as unimportant quantities.

In particular, 40.13(a) exempts any person from NRC licensing requirements, to the extent that such person receives, possesses, uses, transfers, or delivers source material in any chemical mixture, compound, solution, or alloy in which the source material is by weight less than 0.05 percent of the mixture, compound, solution, or alloy.

The regulations in 10 CFR 40.51(b)(3) apply to the transfers of licensed source material to any person exempt from the licensing requirements, the Atomic Energy Act, or AEA, and the regulations in Part 40, to the extent permitted by the exemption.

10 CFR 40.51(b) provides licensees a mechanism for transfer of unimportant quantities of

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source material exempt from licensing under 40.13(a). Next slide.

Now, I will discuss the alternative disposal request guidance itself. The original version was issued in 2009, as publicly available, and was entitled, "Review, Approval, and Documentation of Low-Activity Waste Disposals in Accordance with 10 CFR 20.2002 and 10 CFR 40.13(a)," also referred to as EPPAD 3.5.

It was the first single procedure covering safety and security reviews, the preparation of an environmental assessment, and coordination with stakeholders for alternative disposal requests. It was primarily focused on 20.2002, but it also included 40.13(a). I will point out that 20.2002 reviews are more commonly done than 40.13(a) reviews by the NRC.

The draft interim procedure was issued with a plan to finalize it after it had been implemented and used for more alternative disposal requests. Next slide.

Following the issuance of the original alternative disposal request guidance, the NRC conducted the programmatic assessment of its Low-

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Level Waste Program in 2016. We have the SECY number right there on the slide as well.

This guidance has been revised to improve the alternative disposal request process by providing more clarity, consistency, and transparency to the process. In addition, the revision also clarifies the meaning of disposal relative to 10 CFR 20.2002 to include reuse and recycle.

Another thing I would note about this guidance is that, in our programmatic assessment, we identified it as a high priority, which is one of the reasons why we have definitely considered the importance of this procedure revision.

The NRC has completed its final draft guidance document revision. It has been made available for public comment and a *Federal Register* Notice has been issued. It has been made available for public comment for a 60-day comment period, as we'll discuss later in the presentation.

The NRC is interested in receiving comments related to the guidance revision from stakeholders, including professional organizations, licensees, Agreement States, and the public.

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Comments will be considered for additional changes to the guidance document. The issuance of a completed revision, the final guidance, is expected in early 2018. Next slide.

The NRC's outreach has been extensive. This past summer, we reached out to the Agreement States, discussing the guidance revision during the July 2017 OAS call and making a presentation on the guidance during the 2017 Organization of Agreement States annual meeting.

Our NRC webpages also have additional information on low-level waste, very low-level waste, and the 20.2002 process. This also includes information on the revision of the guidance, as well as the status, which will be updated continuously.

Earlier this week, the NRC made a presentation on the guidance at the Low-Level Waste Forum. As we mentioned earlier, a *Federal Register* Notice, or FRN, for the guidance has been issued.

As I mentioned previously, there's a 60-day public comment period, which ends on December 18th. This *Federal Register* Notice included a notice of a public meeting, which is our meeting today.

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In addition, we will follow the public meeting up with a webinar later in the comment period, and this webinar is expected to occur on November 15th.

I will now turn this presentation over to Adam Schwartzman, who will continue. Thank you.

MR. SCHWARTZMAN: All right. So, before I start, I was to emphasize that the endeavor that we're pursuing here is not to change the 20.2002 policy. It is mainly to update the document, the guidance document that we use when evaluating the 20.2002's that are submitted.

And we basically -- our goal is just to make this document better to understand for everyone that uses it, whether it's us, the NRC reviewers, the people involved in the Agreement States and the Regions, as well as the licensees that use this document to help in developing their 20.2002 submittals.

As far as some of the items that we've updated -- we're planning on updating within the document, we plan on providing more clarification on what a few millirem actually means.

We are also clarifying the roles and

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responsibilities for the approvals from both the NRC and the Agreement States. Essentially, we are incorporating the scenarios that were provided in the FSME All Agreement States Letter, which is FSME 12-025.

And we are also incorporating a better understanding of the roles of the various offices within the NRC. And we're expanding a little and providing better clarification on what -- the use of recycling and reuse associated with 20.2002.

When submitting a 20.2002, licensees and advocates may request approval for reuse and recycle of license material under 20.2002. However, it is important to note that these evaluations should include consideration of doses to members of the public and the transport of the material to facilities that may reuse or recycle the material.

Consideration of reasonably foreseeable chemical, physical, and other material processes that may lead to unique worker exposure scenarios that may differ from disposal options.

Consideration of all reasonably foreseeable disposition paths that the radioactively contaminated material may go through once it's been

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recycled.

And reuse and recycling requests, we are not talking about clearance, which would involve, from previous, look-up tables and specific numbers. These are individually, case-by-case reviews to evaluate whether the acceptance of a request for reuse and recycle is acceptable. Next slide.

In general, the NRC's approach does not allow for the recycling or reuse in consumer products, including food preparation items, personal items, household items, and products used by children. And we generally only find acceptable restricted industrial uses that have been approved in the past, with direct contact of the solid materials.

Some examples from recently approved 20.2002 that involved reuse and recycle. There was some concrete from a power plant that was used as a retaining wall and we evaluated the recycling of commercial industrial oil at a commercial recycling facility that recycles oil and distributes it for other commercial uses. For reference, in both cases, the doses associated with both of those were less than one millirem per year. Next slide.

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So, similar to the Part 61 requests, if you -- these requests are -- this discussion does not constitute formal comments and so, to submit them, you should use the information provided on the slide at regulations.gov, with that docket number.

Robert is the official PM for the project. If you have any further questions, feel free to contact him. And with that, that's the last slide, so, Joan?

MS. LOPAS: We have a question here on the webinar. I don't think the questioner -- she might have had to drop off the webinar, but I'll ask her question anyway.

She asks, will the NRC be providing guidance that, if material will likely meet decommissioning screen criteria at the time of decommissioning, that the material can be left in place within the licensee owner-controlled area, without application for 20.2002 alternate disposal?

MR. SUBER: Can you read the question again, please?

MS. LOPAS: Yes. Okay. It's a little tough to read, because it's kind of broken up. Okay.

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Will the NRC be providing guidance that, if material will likely meet decommissioning screening criteria at the time of decommissioning, that the material can be left in place within the licensee owner-controlled area, without application for 20.2002 alternative disposal? You can come over and read the question, too, if it's --

MR. SUBER: Okay. Well, I guess my confusion is, why would you -- if you meet the screening criteria, why would you also have to meet 20.2002?

MS. LOPAS: That's probably an acceptable answer.

MR. SUBER: Okay.

(Laughter.)

MR. SCHWARTZMAN: If that doesn't answer their question, can you please submit again?

MS. LOPAS: Yes, so if that doesn't -- I don't know if the questioner is still online, it looks like she's offline. But she can follow up with Lee, if that does not. All right.

So, questions. So, folks on the phone, press *1. Folks in the room, we just ask that you use a microphone, work with Joan to find a mic, and

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introduce yourself. So, we'll start with Diane.

MS. OLMSTEAD: And I'd like to ask again that people identify themselves before they speak.

MS. LOPAS: Oh, the mic, I guess the mic isn't --

MS. D'ARRIGO: I'm Diane D'ARRIGO with Nuclear Information and Resource Service. I have a couple of questions on the presentation just made. Let's see, one is -- okay. So, you are going to be clarifying the definition of disposal in 10 CFR 20.2002, to include recycle and reuse.

Does that mean that it's already been interpreted as that and people just didn't really know about it, so now we have to -- you are making it clearer that this is an acceptable interpretation?

MR. SUBER: Yes.

MS. D'ARRIGO: And when did you start interpreting it that way?

MR. SUBER: It's been NRC practice for a while.

MS. D'ARRIGO: Yes, when?

MR. SUBER: I can't -- I'm not going to give you a --

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MS. D'ARRIGO: You know that the public is opposed to this, we have fought this over and over and over and we're going to continue to fight it. And if you don't want to tell me when you started doing it, then we'll just have to figure it out some way.

This is certainly not personal, this is completely an Agency misuse of its authority. The below regulatory concern policy was overturned in 1992 by Congress, or what your policies were.

So, now, under 20.2002, which are not clearly, easily -- it's very difficult to find out who's applying under 20.2002. There's not an open process. But this is the way to side-door. I do understand that this is a case-by-case thing, so there is an opportunity if you find out about it to ask some questions.

But now, you're advertising that you want to reuse and recycle into the marketplace, and there's not a safe dose. So, what's this few millirems that it's okay into recycling and when did the Agency start -- what was the first time that the Agency did this?

MR. SUBER: Okay. So, that's about four

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or five statements that you've made and if I --

MS. D'ARRIGO: Yes.

MR. SUBER: -- can clarify one? So, because I want to make sure I understand what you're saying. So, are you recommending that, as we go through the 20.2002 process, that we in some way alert the public?

MS. D'ARRIGO: No, what I'm saying is, you do not allow for recycling and reuse of radioactive materials. There's no such category as very low-level, you all made it up because you couldn't get away with BRC.

And so, now, you're trying to use all these numbers to try to legalize what's not okay. And now, you're doing it with foreign waste and you're not even letting the public know about, through generic importation, even though there are not even legal licenses for that.

MR. SUBER: Okay. So, what I recommend you do is, I recommend that you read the guidance, because in the guidance, we have specific criteria under enhanced communication where, if we've received an application for a, what we would call a nontraditional use, which is the thing that you're

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talking about, we are proposing that we engage the public and we engage the Commission.

And that has been a practice in the past. In fact, one of the disposals at the site in -- where are you from, Joe? From Idaho, when we were -- had an application to dispose of special nuclear material, we went to Idaho, we conducted a public meeting and received comments.

We sent a notice to the Commission that we were considering this nontraditional disposal pathway for special nuclear material. So --

MS. D'ARRIGO: Are you talking about why back when Haddam Neck was decommissioning?

MR. SUBER: No, I'm talking about just a few years ago. I'm talking about probably the 2010 time frame.

MS. D'ARRIGO: So, how does the --

MR. SUBER: So, we put --

MS. D'ARRIGO: -- public get to know what these -- I have to call up and ask for what's being considered, it's not on the website anywhere.

MR. SUBER: Okay. So, that's why we are putting the document out for public comment. We understand that the public may have recommendations

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on how we can improve our communications with them regarding all of our 20.2002 process, but in particular, those that we're approving for reuse or recycle.

We have what we believe is an acceptable enhanced communication process. We'd be more than happy to receive public comment on whether that is an adequate enhanced communication process, whether it needs to be supplemented, whether it needs to be increased, whether there needs to be some other mechanism that we should put into practice for alerting the public when we're reviewing these applications.

All of those are good recommendations for the guidance document, which is why we're putting it out for public comment. We've been using this guidance document since 2009, we've been receiving public comment --

MS. D'ARRIGO: How do we get a list of all the recycle --

MR. SUBER: Can I --

MS. D'ARRIGO: -- and reuse that you've done?

MR. SUBER: Can I finish, please?

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MS. D'ARRIGO: Yes.

MR. SUBER: Just finish my thought?

MS. D'ARRIGO: Yes.

MR. SUBER: We have been receiving comments from the Regions and from the Agreement States since 2009, when we put out the interim staff guidance. What we have now, we think is a pretty good document and it's ready for prime time, so we supplemented this document to clearly and transparently state some of our practices.

And you may be correct that these are be practices that one may not be aware of, which is why we're doing this. We're not trying to hide this. I mean, we have recycle and reuse right up front.

I mean, when we talked about this, we said we were going to talk about recycle and reuse, because we want to know what the public thinks and what is the best way to proceed with this practice that we have done in the past.

MS. D'ARRIGO: And so, how do we get information? All of the releases that you've made, where they've been released to? And where --

MR. SUBER: I believe --

MS. D'ARRIGO: -- what recycling, is it

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metal, is it concrete, soil, asphalt? What --

MR. SUBER: Okay. So --

MS. D'ARRIGO: -- has been approved?

MR. SUBER: I don't believe the NRC has ever approved metal recycling. I know that we have done several others that were mentioned in the presentation.

And in fact, within the guidance document, and Mr. Gladney can correct me if I'm wrong, we have examples and we have references in the draft guidance documents of previous 20.2002's.

We want to be open, we want to be transparent, we want people to see what we've done in the past and what we're proposing to do now and get comments from the public on how we can improve the process that we've already come up with.

MS. D'ARRIGO: And last question, so, the industrial oil, it's my understanding that that was an application to TDEC and TDEC consulted with the NRC. And because there wasn't a computer code to do dose assessment, that that had been rejected. Now, you're telling me that the NRC has approved release of radioactive oil?

MR. SCHWARTZMAN: So, that submittal was,

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it was submitted by the State of Tennessee and their request was that -- the request from the State of Tennessee was that, based on the State of Tennessee's regulations, that this was an acceptable process, but they wanted the NRC staff to review it to make sure that it also fell within NRC regulations.

MS. D'ARRIGO: And so, you guys said, yes?

MR. SCHWARTZMAN: So, we reviewed it and evaluated it against NRC regulations and said, yes, the doses associated with this, what would have been a 20.2002 to the State of Tennessee, were acceptable.

MS. OLMSTEAD: Diane, I think we've got to move on to some other people, too. But I think you have some good comments and questions and I encourage you to send them in to www.regs.gov. And I think we'll be able to answer some of those when the fellows have a little bit more time to look into some of the questions, too.

MS. LOPAS: Okay. We're going to go to another question in the room, here, or a comment in the room, but for folks on the phone, remember to

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press *1 if you'd like to ask a question.

MR. TAPPERT: I'm John Tappert with the NRC. So, I just wanted to emphasize a couple of points that the presenters made. So, this is not a new policy, we have -- this is not intended to establish any new policy or be an end-run around the BRC or clearance decisions. So, this is not about releasing materials with a certain level of activity.

MS. OLMSTEAD: It's not about what?

MR. TAPPERT: Releasing, just having a threshold that we can just release into the environment. This is about providing additional guidance for the 20.2002 process for alternate disposal.

Most of those disposals are being sent to RCRA sites, hazardous waste facilities, some municipal landfills, and on rare occasions, into this recycling. And so, just by completeness, we wanted to include it in the guidance.

But I just wanted to emphasize, this is not -- we're not trying to change the way we're doing business here, we're just trying to make sure that our guidance is up-to-date and is available for

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all of the stakeholders. Thank you.

MS. OLMSTEAD: John, I don't know if you introduced yourself, but that was John Tappert and he's the Division Director for the Division with the Decommissioning, Uranium Recovery, and Waste Programs. Thank you.

MR. GLADNEY: I would just like to add, first of all, thank you for the comments. I would say, just to encourage you, in Section 7.1.3 of the guidance, it does talk about criteria the NRC does utilize for reviewing 20.2002's that involve recycle and reuse.

I also would like to go to Slide 10, just for your awareness. Go to Slide 10 for a minute, please. Earlier, there was a mention of being released to the marketplace, but I did want to point out that, first of all, 20.2002's that involve recycle and reuse are rare.

There have been very few that have been conducted and when they have been done, the NRC has not released them into the marketplace, they've been approved for industrial uses. So, I did want to make that point clear.

But, again, just please send the

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comments in that you have for the NRC review and then, we will address those comments. Thank you.

MS. LOPAS: All right. Brandon, do we have anybody on the line?

OPERATOR: Yes. I would like to remind participants, when you press *1 to please record your first and last name clearly when prompted. We do have a question from Karen Hadden, your line is open.

MS. HADDEN: Hi, this is Karen Hadden. I wanted to ask for further clarification about what was the scenario with the cement that was moved from a nuclear reactor and where it went and how it got used?

MS. LOPAS: We're gathering notes, Karen.

MR. SCHWARTZMAN: All right. This is Adam Schwartzman. So, the concrete came from an area on a nuclear power plant where it, when it was on the facility, was used as shielding in an area.

And then, when it was released, it was used at -- one of the employees on the site also owned a convenience store that was along the side of a stream. And when it was released, he used the concrete as a retaining wall along the stream, as a

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method of erosion protection.

MS. HADDEN: And where was that and when?

MR. SCHWARTZMAN: Where was -- excuse me, can you repeat that?

MS. HADDEN: Where was this and when? What reactor and --

MR. SCHWARTZMAN: The reactor was Yankee Rowe and I want to say roughly 2006. I can give you the ML number.

MS. HADDEN: Great. Yes, if somebody could text it or email it. And then, did anybody test that material for the extent of radioactivity before that was done?

MR. SCHWARTZMAN: Yes. The material was evaluated. It was carbon-14 and tritium. And the doses, as I mentioned in my talk, the yearly dose was less than one millirem.

MS. HADDEN: Thank you.

MS. LOPAS: All right. And I have Karen's email, so I'll be able to --

MS. HADDEN: Thank you.

MS. LOPAS: Okay. Anybody in the room? And, Brandon, is there anybody on the line? Anybody else on the line?

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OPERATOR: I'm currently showing no further questions on the phone line.

MS. LOPAS: Okay. Okay, we have a question in the room.

MR. REGNIER: Hi, I'm Edward Regnier from the DOE.

MS. LOPAS: You have to speak right into that.

MR. REGNIER: Edward Regnier from DOE, R-E-G-N-I-E-R. The definition of unimportant quantities in 10 CFR 40, my question is, was that based on the strategic value of the material in relationship to non-proliferation or was it based on health effects?

MR. COMFORT: This is Gary Comfort. The number, the 0.05 percent that was in there was basically based on, at the time Congress implemented it, which was in the -- well, the NRC implemented it through Congressional direction that we could adopt a number, was based on, at the time, what was considered an economic amount that, if you went below that, it really wasn't worth regulating at that time.

They didn't have the technology to do it

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very well at that time and all. It was not based on a pure safety number at that point. That's just what it is.

MS. LOPAS: All right. Any other questions in the room? Comments in the room?

MS. OLMSTEAD: Yes, I'm going to ask -- I think we've got both of these mics on the stands working now, instead of the handheld. So, please use the mic on the stand. Thank you.

MS. LANE: Hi, Hilary Lane, NEI. Greg, my question is probably mostly for you, just a general question. There's a lot of ongoing activities in the Branch right now.

Is the staff considering kind of an integrated, holistic, coordinated view of all these different activities? We have the two that we mentioned today, we have the scoping study, so that one activity may inform the results of the other.

MR. SUBER: Thank you. Yes, we definitely are. We have coordinated action plans. We have worked within the Branch, in fact, for our very low-level waste type activities, it's the same staff that's working on each of those separate activities.

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So, of course, one activity informs the other. The reason we have staged them the way that we have was basically due to how the activities fell out in the programmatic assessment.

The programmatic assessment, revising this guidance document came out as a high priority, but then, we looked at the landscape and saw some of the things that were happening in decommissioning and decided that after the guidance document for 20.2002, we would move into very low-level waste.

As you know, we are planning a scoping study for very low-level waste. Now, that was originally a medium priority, if I'm correct, from the programmatic assessment that we actually moved up in importance, because we thought that it would be a good follow-on activity to conduct after we settled on the revision of this guidance document.

So, the answer to the question is, yes. It might have been a long yes, but it's yes, we have taken an integrated look at our approach.

MS. LOPAS: All right. Brandon, do we have anybody on the phone?

OPERATOR: I'm currently showing no questions on the phone line.

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MS. LOPAS: All right. I'll go just a little bit longer, so press *1 to get your question in. And anybody in the room here? And I think, if you guys would like, we can open it up to overall questions or comments.

So, if we missed anything on the first presentation, now is your chance. So, press *1 or go ahead and use a mic here in the room. Okay. Brandon, anybody on there?

OPERATOR: I'm currently showing no questions on the phone line.

MS. LOPAS: Okay. All right. Well, I will give it back to Joan, who will then hand it over to the NRC staff, who will close it out for us.

MS. D'ARRIGO: Actually, I do have another question. Could someone describe how all this that's going on, that's being clarified, the extent that it's used for import, when radioactive substances, materials, I know they don't call it waste anymore when they're importing it for reuse and recycle, through generic importing, how much of that is going on under NRC and Agreement State authority?

MR. SUBER: Okay. Now, we can get back

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to you on that question, but that's more of a questions for the staff in the Office of International Programs. But we can get back to you.

MS. D'ARRIGO: Okay. But, so, just to point out that, as you're talking about this, we're talking about it not only for U.S. industry, but for the whole world, because now it can come in through 10 CFR 110, as long as there's a facility licensed to do these things or to release the material, there's no limit on the amount of material, radioactive material that can come in from other countries and be processed and released and recycled.

And so, how you calculate your one millirem, I've never understood how you can think that the result is only one millirem per year when there's an unlimited amount of material that can lead to that dose.

MR. SUBER: Okay. I'm a little confused by your question. When a material is imported into the United States --

MS. D'ARRIGO: Yes.

MR. SUBER: -- and if there's a purpose for the recycle, the material can be recycled.

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Whatever residual waste is generated in that process will be disposed of consistent with Part 61 disposal practices. So, I'm --

MS. D'ARRIGO: Right. So, the waste --

MR. SUBER: -- not understanding --

MS. D'ARRIGO: -- the stuff that continues to be radioactive waste has to go back or go to a licensed facility.

MR. SUBER: Correct.

MS. D'ARRIGO: But what I'm saying is that we're not just looking at the Department of Energy and the NRC licensed and Agreement State licensed facilities using this process, but there's no limit on the amount of foreign waste that can come in and be processed under this procedure. And is that something that is being evaluated, considered, estimated?

MR. SUBER: Okay, so you --

MS. D'ARRIGO: That's what I'm saying.

MR. SUBER: Right. Okay. You can submit that and we can review it as a comment.

MS. D'ARRIGO: Okay.

MR. SUBER: Thank you.

MS. LOPAS: All right. Brandon, just

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double-checking, any last comments on the phone?

OPERATOR: I'm showing no questions at this time.

MS. LOPAS: Okay. Joan?

MS. OLMSTEAD: Okay. Thank you very much. And before Andrea gets her final remarks and adjourns the meeting, I want to remind everyone who hasn't signed in to please do so. Sign-in sheets are near the entrance to the meeting room.

And for those on the phone, please contact Gregory Suber, his contact information is in the meeting announcement, and make sure he has your contact information for the phone sign-in sheet, too.

Also, please don't forget to fill out your meeting feedback forms. Your input helps us to improve our future meetings. And now, Andrea will adjourn the meeting for us. Andrea?

MS. KOCK: I'll be very, very brief. I just wanted to thank everybody for coming and for their comments. There seems to be still some questions, so I would encourage you to submit questions, comments in writing, so we can respond to those.

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We realize these documents have only been out for a matter of a few days, so please do submit your comments in writing and we will consider everything that we heard today as well in revising the guidance document and moving forward on the reg analysis for Part 61. And thank you for your time.

MS. LOPAS: All right. Thank you, Brandon.

OPERATOR: You are welcome. This now concludes today's conference, all lines may disconnect.

(Whereupon, the above-entitled matter went off the record at 4:05 p.m.)

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