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**NUCLEAR REGULATORY COMMISSION**

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Proposed Rule

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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PUBLIC MEETING ON DRAFT NEW REACTOR GENERIC  
ENVIRONMENTAL IMPACT STATEMENT AND PROPOSED RULE

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WEDNESDAY,

NOVEMBER 13, 2024

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The meeting was convened via  
Videoconference, at 1:00 p.m. EST, Lance Rakovan,  
Facilitator, presiding.

PRESENT:

LANCE RAKOVAN, Facilitator

CHRISTOPHER REGAN, Director, Division of  
Rulemaking, Environmental, and Financial  
Support

STEWART SCHNEIDER, Rulemaking Project Manager

STACEY IMBODEN, GEIS Project Manager

LAURA WILLINGHAM, GEIS Project Manager

DANIEL BARNHURST, Chief, Environmental Project  
Management Branch 3

ALSO PRESENT:

KALENE WALKER

MARTIN O'NEILL, Nuclear Energy Institute

SPENCER TOOILL, Breakthrough Institute

JEFFREY MERRIFIELD

NIKO MCMURRAY

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

1:00 p.m.

MR. RAKOVAN: Good afternoon, everyone. I've got 1:00, so we'll go ahead and get started. Welcome to the Nuclear Regulatory Commission or NRC's public meeting on the proposed rule generic environmental impact statement for licensing of new nuclear reactors, otherwise known as the NR GEIS. My name is Lance Rakovan and it's my pleasure to facilitate today's events. Let's go to slide two, please? Thank you.

Our objectives today are to discuss the proposed rule to amend the NRC's environmental protection regulations involving environmental reviews under the National Environmental Policy Act of 1969, otherwise known as NEPA, specifically to talk about the development of the new reactor GEIS, otherwise known as NUREG-2249, to describe how you can provide your comments and to gather your comments. Slide three, please?

Here's an in-depth agenda, but essentially the meeting will have two parts. First, we'll hear a presentation from the NRC staff on the topics at hand, information that we think is important for you to

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understand. We're going to try to keep that presentation fairly short so we can get to the real reason that we're here this afternoon, to listen to you and to gather your comments. Slide four, please?

This is a comment gathering meeting by the NRC's definition, so we will be actively seeking your input once we complete our presentation. We'll be going over the various ways you can provide your comments later in the meeting, and we'll go through how you can provide your comments specifically at this meeting once we have finished the presentation.

Until then, participants will be muted, and at that point, I'll go through how you can raise your hand and provide your comments. Keep in mind that we are transcribing our meeting today to make sure that we fully capture your comments.

You can help us get a clean recording by making sure that when you do speak, that you have any distracting noises down to a minimum, and it will also help us out on the transcript if you could identify yourself and any group that you're with.

And again, we'll go over that once we get to the commenting portion of the meeting. And I'd like to stress that no regulatory decisions will be

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made at today's meeting.

So, we do have a number of NRC staff that are participating today, but I wanted to take a moment to introduce a few or call out a few specifically that are online. Chris Regan is the Director of the Division of Rulemaking, Environmental, and Financial Support at the NRC.

Stewart Schneider is the Rulemaking Project Manager for this project. Stacey Imboden and Laura Willingham are the Project Managers for the NR GEIS, and we also have Dan Barnhurst with us, who is the Chief of the Environmental Project Management Branch 3.

So, again, lots of NRC staff here, but I wanted to call out those specific few, including the ones who will be our primary speakers today. But before we get to that, I'd like to turn things over to Chris Regan for some opening remarks. Chris, are you with us?

MR. REGAN: I am. Sound check. Can you hear me okay?

MR. RAKOVAN: We can.

MR. REGAN: Very good. Okay, thanks, Lance. Good afternoon, folks. Again, my name is

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Christopher Regan. I'm the Director of our Division of Rulemaking, Environmental, and Financial Support here at the NRC. Before we move on to today's presentation, I'd like to briefly introduce you to the NRC.

As I expect you are aware, the NRC regulates the civilian use of nuclear materials. This includes nuclear power plants, research test and training reactors, nuclear fuel cycle facilities that produce the fuel for nuclear power plants, and the use of other radioactive materials in medical, academic, and industrial settings.

The NRC has been regulating the civilian and commercial use of nuclear materials in the U.S. for more than 50 years. The NRC was created by the Energy Reorganization Act of 1974, and this separated the former Atomic Energy Commission into a regulatory body, the NRC, us, and a more promotional body which later became the Department of Energy. The NRC is not part of the Department of Energy, and our role and function is performed independent of the Department of Energy's activities.

To guide implementation of our mission, the NRC establishes a four-year strategic plan that's

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periodically updated. The NRC's current strategic plan can be located by scanning the QR code on this slide. If you have some time, I encourage you to take a look. There's a lot of good information there.

The plan's three-year strategic goals, three strategic goals are key to the agency successfully fulfilling its mission, and these goals are, the first one, ensure the safe and secure use of radioactive materials, the second one, continue to foster a healthy organization, that's our inward look, and the third goal is to inspire stakeholder confidence in the NRC.

For this third goal, inspiring stakeholder confidence, we've used meetings like this one to involve you in the process. We learned during the pandemic that webinars or virtual meetings make our work more accessible to a broader audience so we can continue to leverage participation technologies as we engage with the public.

We look forward to hearing your insights and ideas today, and thank you so much in advance for your participation. We very much appreciate it. With that, I believe I'm going to turn it over to Stacey who will begin with the presentation materials.

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Stacey?

MS. IMBODEN: Thank you, Chris. I'll start on slide six. The draft new reactor generic environmental impact statement or GEIS analyzes environmental impacts from construction, operation, and decommissioning. The new reactor GEIS analyzes issues common to many new nuclear reactors that can be addressed generically.

This allows staff and applicants to focus on site and facility-specific issues to be addressed once an application is submitted, improving efficiency in our licensing reviews. Project-specific issues would be addressed in a supplement to the new reactor GEIS. Slide seven?

We began developing a new reactor GEIS in 2019 by exploring how useful a GEIS would be for advanced reactor licensing. We concluded a GEIS would generically resolve many environmental issues, save resources, and provide predictability for applicants.

In 2020, the Commission approved the development of the GEIS and directed staff to codify the results of the GEIS in NRC's regulations. Earlier this year, the Commission approved the proposed rule and draft GEIS for publication.

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The notice of availability of the draft GEIS was published in the Federal Register on October 4, and the public comment period began on that same day. Slide eight?

The Commission's approval of the proposed rule and draft GEIS included a few changes to the rule's language. The Commission directed the staff to change the applicability of the GEIS to any new nuclear reactor application that meets the values and assumptions of the plant parameter envelope, or PPE, and site parameter envelope, or SPE, used to develop the GEIS.

Due to the Commission direction, staff changed the title of the GEIS from advanced reactor GEIS to new reactor GEIS. The Commission's direction also clarified that any applicable site-specific and conditionally site-specific issues identified in the NRC's separate decommissioning GEIS will need to be addressed in project-specific environmental reviews.

The Commission's direction also removed references to fusion reactors, which are being considered under other NRC regulations, and required review of the new reactor GEIS every ten years, identical to the provision for the license renewal

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GEIS. Slide nine?

The new reactor GEIS was developed using an approach to set performance standards applicable to any reactor technology. The new reactor GEIS uses a PPE with values and assumptions relating to the design and operation of the nuclear reactor such as building height and water use.

The SPE contains values and assumptions relating to the siting of the plant such as the site size and size of water bodies supplying water to the reactor. The new reactor GEIS evaluates the environmental impacts of a proposed nuclear reactor that fits within the bounds of the PPE on a site that fits within the bounds of the SPE. Slide ten?

Staff developed a set of bounding values and assumptions for each of these plant and site parameters based on the following, regulatory limits and permitting requirements, other NRC generic EISs such as the license renewal GEIS and continued storage GEIS, evaluations and analyses for previous new reactor and operating reactor reviews, values and assumptions from other documents using the plant and site parameter envelope approach, and subject matter expertise and experience in specific resource areas.

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Slide 11?

The staff identified issues corresponding to environmental impacts that could potentially result from construction, operation, or decommissioning of a new nuclear reactor. Category 1 issues are environmental issues for which the NRC has been able to make a generic finding of small adverse environmental impacts for a reactor facility and site that falls within the PPE and SPE that support the generic finding. In addition, beneficial impacts are Category 1 issues.

Category 2 issues are those environmental issues requiring consideration of project-specific information. Category 2 issues will be addressed in a project-specific evaluation that tiers off of the new reactor GEIS and may result in small, moderate, or large impacts. In addition, there's a third group of issues for which the environmental impacts are uncertain. Slide 12?

The NRC's subject matter experts identified 122 specific issues across 16 environmental resource areas such as land use, water resources, including surface and groundwater, terrestrial and aquatic ecology, and radiological and non-radiological

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hazards. Out of the 122 issues identified, 100 are Category 1 issues, 20 are Category 2 issues, and two are uncertain.

Table 4-1 in the GEIS includes a list of all 122 issues identified and the plant and site parameter envelope values and assumptions for each issue. Appendix G of the GEIS contains the basis for these values and assumptions. The proposed rule would codify the new reactor GEIS findings into 10 CFR Part 51, the NRC's regulations implementing the National Environmental Policy Act. Slide 13?

This chart lays out the issues addressed for the resource areas along with the categories of those issues. Most of the issues are Category 1 issues, as shown here in blue. Category 2 issues are orange and the uncertain issues are green. The other issues at the bottom of this slide include issues that apply across resource areas such as climate change and cumulative impacts.

These are Category 2 issues. Other issues also include project-specific issues that are not tied to any specific environmental resource, including purpose and need for the project, need for power, energy alternatives and system design alternatives.

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Slide 14?

On this slide, we can see that onsite land use is a Category 1 issue resulting in a small environmental impact if the PPE and SPE in the right-hand column are met. This is how the individual issues appear in the GEIS visually. This is from Table 4-1 of the GEIS if you'd like to take a closer look at those values. Slide 15?

And here is an example of a Category 2 issue. Surface water quality degradation due to chemical and thermal discharges is a Category 2 issue because project-specific information must be analyzed to determine impacts once a site and facility are identified. Slide 16?

An applicant can adopt Category 1 findings if the PPE and SPE values and assumptions are met and there is no new and significant information that changes the generic finding. NRC staff would verify that the applicant has demonstrated it meets the PPE and SPE for Category 1 issues and audit the applicant's new and significant process for those issues.

Staff would produce a supplemental environmental impact statement to the new reactor GEIS

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that focuses on Category 2 issues and any Category 1 issues that do not meet the PPE and SPE values and assumptions. Now I will turn the presentation over to Stewart Schneider, the Rulemaking Project Manager.

MR. SCHNEIDER: Well, thank you, Stacey, and good afternoon and welcome. I'm Stewart Schneider, the Rulemaking Project Manager for this rulemaking activity. Slide 17?

The proposed amendments to Part 51 would establish new requirements for environmental reviews of applications for an early site permit, or a construction permit, or an operating, or a combined license for new nuclear reactors.

The specific changes proposed by this rulemaking are as follows: one, adding new Appendix C to Subpart A to codify the generic findings of the new reactor GEIS, two, require review of the new appendix on a ten-year basis and update if necessary, three, revise application requirements so applicants can choose to use the new reactor GEIS when preparing their environmental reports, number four, revise requirements so that the NRC staff must use the new reactor GEIS to prepare its draft EIS if an applicant uses the new reactor GEIS, and lastly, number five,

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add new requirements on NRC staff directions on preparing a final EIS. Slide 18, please?

We've also used, I'm sorry, we've also issued two supporting guidance documents for public comment. The proposed revision to Regulatory Guide 4.2 would assist applicants relying on the new reactor GEIS when preparing their environmental report.

The draft interim staff guidance, known as COL-ISG-030, would apply to NRC staff environmental review of an application that relies on the new reactor GEIS's findings. We will incorporate the draft ISG supplement into what is known as NUREG-1555, titled Environmental Standard Review Plan, in a future update to that NUREG. Slide 19?

You can find the key supporting documents for this rulemaking in our electronic database known as ADAMS by searching on the accession number of each document provided in this slide. Next slide?

Our draft regulatory analysis determined the expected quantitative costs and the benefits of this proposed rule and the associated guidance. The draft analysis concluded that the proposed rule and the guidance would save the NRC and applicants up to \$40.1 million or \$2 million per application if the new

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reactor GEIS is fully utilized.

This slide also shows the rule's net benefits when the seven and three-percent discount rates are used. The NRC staff assumed that 20 applications, based on letters of intent that the NRC has received, would be submitted over the ten-year period following the final rule publication in 2026.

Now, we only analyzed the proposed rule savings attributable to the Category 1 issues. Since Category 2 issues require a project-specific analysis, the new reactor GEIS would not result in savings or added costs to the applicant. Slide 21?

The proposed rule also contains amended information collection requirements. Now, the NRC staff has estimated that an applicant who uses the new reactor GEIS would reduce their reporting burden by 6,500 hours and save \$1.9 million. Slide 22?

Our overall rulemaking schedule started with the NRC sending, the NRC staff sending the proposed rule to the Commission during November 2021, and then we next published the proposed rule just last month on October 4. The 75-day public comment period will close on December 18, and this figure also identifies where we are regarding the comment period.

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We expect to provide the draft final rule to the Commission on December 1 of 2025 for review and their approval, and finally, we estimate that the final rule and guidance will be published on June 1 of 2026. Slide 23?

The Federal Register notice for the proposed rule also identified six topics which the NRC is specifically interested in comments and supporting rationale from the public. Those topics are: topic one covered PPE and SPE values and assumptions, and the question is has an inappropriate value been used to result in a small impact?

Topic two covered environmental issues evaluated, and the question pertaining to this topic is are there any environmental issues that the NRC omitted? Regarding topic three, categorization of issues, the question here is are the Category 1 and 2 issues categorized appropriately? Slide 24?

With respect to topic four covering scope of proposed rule changes and new reactor GEIS, this topic has two questions, the first question being is the applicability of the new reactor GEIS clear, and the second question being do the proposed rule revisions adequately address all licensing scenarios

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associated with evaluating the environmental impacts?

Topic five covers the guidance for applicants, specifically draft Reg Guide 4.2. The question pertaining to topic five is are the methods described in that draft Reg Guide 4.2 for demonstrating values and assumptions appropriate? Slide 25?

The final topic, topic six, covers limited work authorizations, also known as LWA. A limited work authorization allows an applicant for a construction permit or combined license to perform any preparatory activities before a final licensing decision.

As proposed, the rule does not address LWAs. For this topic, the primary question is should the new reactor GEIS and rule be expanded to include LWAs for new reactor applications?

Now, regarding that quest, there is a secondary set of questions. The first one basically covers should an LWA applicant be able to rely on the generic findings for a Category 1 issue, and the second question, should the NRC be able to rely on the generic findings for that Category 1 issue?

Now, in responding to these questions, we

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would be most appreciative if you would consider the following aspects in your response: one, to include and explain the basis for your position and your conclusion, two, to specify any proposed regulatory text changes and the basis for those changes, and finally three, regarding the draft guidance, describe and justify any methods that you believe are not appropriate. Slide 26, please?

There are several ways for the public to submit comments on this rulemaking activity. The first way is verbally at today's meeting. As described in the Federal Register notice, you can also submit comments online, by email, U.S. mail, fax, and hand delivered to the NRC. This slide gives the details for each of these methods. And as a reminder, the comment period again ends on December 18, and your comments should reference Docket ID number NRC-2020-0101. Slide 27?

All of the publicly available documents pertaining to this rulemaking can be found at [regulations.gov](https://www.regulations.gov) by searching on Docket ID NRC-2020-0101, and you can also access the NRC project website to find the project documents and to also follow rulemaking activity. Slide? Next slide?

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To wrap it up, I'm the Rulemaking Project Manager. Stacey Imboden and Laura Willingham are the New Reactor GEIS Project Managers, and we can be reached at the contact information provided on this slide, and that concludes my presentation.

MR. RAKOVAN: All right, thank you. So, let's go ahead and take a moment to see if anyone has any clarifying questions on our presentation before we move into our commenting phase, so if you can go to the next slide, please?

So, if you are participating on Teams, just look for that microphone, or look for the raise your hand button. I will take hands in the order I see them. I will allow you to use your microphone, but you will still need to unmute, so then you'll look for that microphone button and go ahead and click on that. For those of you who are on the phone, and I see we have one person on the phone, if you hit \*5, that is the same as raising your hand.

So, again, I'm just going to pause real quick to see if anyone has any clarifying questions specific to the presentation that we've given before we open the floor to comments, so I'll pause for a moment to see if we get any hands.

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All right, I see we have a hand from Kalene Walker. Kalene, you should be able to -- you have unmuted. Please go ahead with your question.

MS. WALKER: Thanks. Could you have somebody correct the orientation of the slides, the ML number for the slides? They're sideways, so that's just a technical request.

MR. RAKOVAN: Oh, so you're saying that the slides in ADAMS are --

MS. WALKER: Horizontal instead of --

MR. RAKOVAN: Horizontal, okay.

MS. WALKER: Yeah.

MR. RAKOVAN: Okay, we'll take a look into that. Thank you.

MS. WALKER: Thank you.

MR. RAKOVAN: Okay, anyone else have any clarifying questions on the presentation? All right, so I'm not seeing any, so let's go ahead and go into commenting. Again, we're looking for comments on the NR GEIS and related materials. If you ask a question, we might try to take a moment to address your question, but really we want to kind of be in receiving mode at this point to listen to your comments.

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If you wish to provide a comment, again, we ask that if you're on Teams, you use the raise your hand feature, so look for that handprint that says raise and go ahead and hit that. If you are on the phone, you can hit \*5 and that will do the same thing.

I will take hands in the order that I see them and activate your audio, but again, you will still have to unmute once I activate your audio. So, again, if you have any comments that you would like to provide on the NR GEIS, please raise your hand, and I'll pause to see if we get any hands.

All right, while we're waiting, can we back the slide up to the various ways that people can provide their comments? Perfect. So, again, today is just one way that you can provide your comments. We do have a second virtual meeting scheduled for tomorrow at 6:00 p.m. Eastern Time. We wanted to try to stagger these meetings to allow people with different schedules and different time zones, et cetera, to be able to participate in at least one meeting.

You can go to the website [regulations.gov](https://www.regulations.gov) and search for NRC-2020-0101 and provide your comments online that way. You can email your comments to

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rulemaking.comments@nrc.gov. If you would like to provide them in writing, you can provide them by mail to Secretary, U.S. NRC, that's Washington, D.C. 20555.

If you have a fax machine and wish to fax them, you can fax them to the Secretary of the NRC at 301-415-1101, or if you are local to the Rockville area and want to hand deliver your comments, you can provide them at 11555 Rockville Pike in Rockville, Maryland.

Again, we ask that you provide your comments by December 18. That way we can ensure that we can use your comments and look at them as part of this initiative. If we receive comments after that, we'll do our best to incorporate them into our processes, but we cannot guarantee that they will be.

So, again, I will pause to see. If you wish to make a comment, please use the raise your hand feature and I'll take hands as I see them pop up. All right, so just to make sure that -- oh, there we go. All right, Marty O'Neill, you should be able to unmute and provide your comments.

MR. O'NEILL: Yes, can you hear me?

MR. RAKOVAN: We can. Please proceed.

MR. O'NEILL: Okay, yeah, thanks. This is

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Marty O'Neill, Associate General Counsel with the Nuclear Energy Institute, and I believe my colleague, Kati Austgen, had attended the in-person meeting and delivered some comments, so I won't be too long or try to duplicate what she likely said.

But, you know, I think you're aware NEI is very supportive of the staff's efforts to develop the advanced, excuse me, new reactor GEIS. You know, it's been some time in the making and, you know, I think that the staff has put together an excellent document.

We're certainly reviewing it still and putting together some written comments for submittal to the NRC, but I just want to underscore how important the use of GEISs has been in NRC practice to date, you know, especially in the license renewal context.

And the courts have recognized that it is an appropriate method of NEPA analysis, you know, the generic analysis, and it really does serve to make the reviews more efficient, and we believe this is going to be critically important given the potential number of applications we could see submitted to the NRC in coming years.

I noticed that the reg analysis cites 20

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applications over the next decade. Based on an updated survey NEI did of its utility members last month, the number could actually be significantly larger than that potentially. So, in that regard, the reg analysis may even understate the potential benefits of the GEIS.

I guess one maybe question I have, and I don't know if the staff can answer this today, but there are a lot of parallel activities going on as you're aware. The staff is developing a response plan to address the Fiscal Responsibility Act amendments to NEPA. There was a SECY paper issued actually, 24-0046, I believe. The staff is putting together a report in response to Section 506 of the ADVANCE Act.

So, you know, among other things, I think whatever initiatives or rulemakings the staff ultimately pursues, you know, could impact potentially the content of this GEIS or the related guidance and how it's implemented in the future, and I guess a question to you is, is that something the staff is thinking about maybe? Does it intend to address that in the final rule?

MR. RAKOVAN: Chris, do you want to take a -- there you go.

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MR. REGAN: Yeah, thanks. Thanks very much for the question. My simple answer is yes, there are many activities that are ongoing and parallel at the moment regarding efficiencies in our environmental review program. This NR GEIS effort is one of but a few.

We are coordinating across our Environmental Center of Expertise with all of these activities, including the Commission policy paper on implementing the Fiscal Responsibility Act NEPA amendments for one, and also the content of which the report to Congress in response to the ADVANCE Act Section 506.

So, yes, they are all very well integrated, and if it comes a time when we pursue or the Commission gives us direction to pursue rulemaking in a broader sense regarding our implementation of NEPA, we'll be sure that this particular activity on the NR GEIS and that potentially future rulemaking on Part 51 or implementation of NEPA, they mesh well together, but yes, they are quite well integrated and we are coordinating across all of those initiatives as much as we can.

MR. O'NEILL: Okay, thanks, Chris. Yeah,

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and it's something that we can convey in our written comments, but I think some of the strategies, recommendations that the staff's pursuing could even affect how Category 2 issues within the GEIS are ultimately analyzed by an applicant and the staff, so I think that's something that we can touch on in the written comments we submit.

MR. REGAN: Thank you.

MR. O'NEILL: Yeah, well, again, really appreciate the staff's efforts on this front and very excited that we're moving through the rulemaking process. Thanks again.

MR. RAKOVAN: Stewart, was there something you wanted to add?

MR. SCHNEIDER: Yes, in response to the question raised or the comment on the reg analysis, as part of the final rule package preparation, we do go back and revise the reg analysis to include the most recent information at the time we revise it.

So, when the packages goes back to the Commission later this year, it will reflect the current information we have for the number of applications we believe will be submitted. I just wanted to make that clear.

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MR. O'NEILL: Okay, thank you. We really appreciate that.

MR. RAKOVAN: Okay, so I'm just going to see if anyone else has any comments they'd like to share at this point, again looking specifically for comments on the NRC GEIS. If you'd like to provide a comment, please use the raise your hand feature. If you are on the phone, you can hit \*5 and that will do the same thing. So, I'll pause to see if we get any takers. Marty, go ahead.

MR. O'NEILL: Sorry, again, I kept the comments fairly high level, but while we're still kind of analyzing the issue, it certainly seems to me that we want to maximize the applicability of the GEIS to include limited work authorizations.

I mean, they are essentially a form of construction authorization, so, and the LWA process can take quite a while to get through, I think, when you look at the steps that are involved. So, I think it's fair to say we would certainly support use of the GEIS in that context as well. Thanks.

MR. RAKOVAN: All right, again, if you'd like to provide a comment, please use the raise your hand feature or \*5 if you're on the phone. A couple

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of things that I'll go through while we're waiting to see if we get any comments, if you have any feedback on today's public meeting, you can go to the public meeting schedule page for this meeting and you'll see a link that says provide feedback, and you can let us know how we did and provide your information or your opinions electronically.

I see that we do have a hand, Kalene Walker. Kalene, you should be able to unmute and provide your comment at this time.

MS. WALKER: I went to the regulations.gov website to try and find this latest rendition. I had an earlier draft, but it hadn't changed to advanced nuclear, or it hadn't whatever it is that you just changed it to from advanced nuclear. What is that clarification that you changed?

And I'd like a -- is there an ML number for the document that we're reviewing or do you have to go through the regulations.gov? I cannot find a way to download a PDF on that site right now.

MR. RAKOVAN: Stacey or Stewart, do you want to help out a little bit?

MS. IMBODEN: Sure, we do have an ML number which we can provide, but also the NRC website

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has a link to the GEIS on the public web page. I think the public web page is listed on one of these slides if you want to pull up the address there.

MS. WALKER: As I told you, the slides are sideways, so it's really kind of difficult to navigate.

MS. IMBODEN: Oh, okay.

MR. RAKOVAN: Are you looking at the slides using Adobe?

MS. WALKER: No, just straight clicking on the link that you provide.

MS. IMBODEN: Okay, there's the accession number.

MS. WALKER: Okay, great, yeah.

MS. IMBODEN: I'll try to make it bigger so I can read it for you.

MS. WALKER: No, I'll take the screenshot. Thank you. I got it.

MS. IMBODEN: Oh, okay.

MR. SCHNEIDER: Lance, there were some other questions. I believe one was on the title. So, the original title of this rulemaking action which started around the 2019-2020 time frame was advanced nuclear reactor GEIS, but in the SRM that the

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Commission issued on the proposed rule, they asked us to change it to any new nuclear reactor.

Now, we went back to establish, redo the titles as much as we could, but some of them, we can't, and when you read the Federal Register notice, we tried to make that distinction of when that change occurred.

So, for instance, any documents that were issued prior to that SRM, we can't go back and change those titles to new clearly, and again, we did go back and change as many of the titles for tracking systems that we could which were not specifically hardwired. Was there another question?

MR. RAKOVAN: Go ahead.

MS. WALKER: Thanks. Following up on that, so advanced nuclear reactors, according to NEIMA, meets certain requirements. I mean, they did - - Congress enacted NEIMA because of the thought okay, there's going to be less spent fuel, there's going to be more safety, inherent safety features and all. Are the licensees required to show how they meet those requirements of NEIMA? Is that part of the evaluation of these new technologies?

MS. IMBODEN: This is Stacey Imboden.

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This new reactor GEIS is not only applicable just to advanced reactors, but to any new nuclear reactor that can meet the plant and site parameters, so, no, they wouldn't have to demonstrate that they met the NEIMA definition. They would just have to demonstrate that if they're relying on the findings in this new reactor GEIS, that they met the plant and site parameter envelope values.

MS. WALKER: Okay, so there's an interesting kind of flip there because advanced nuclear reactors are kind of new-of-a-kind, and any new reactor, if it's an old design that's been evaluated, that's really different, so I'm seeing a little wiggle room in there that doesn't seem to be quite tied up as far as following NEIMA. You did reference NEIMA even in this presentation? Anyway --

MS. IMBODEN: No, I don't believe we did. We removed the definition of advanced reactor from the GEIS because it's not only applicable to advanced reactors. Like I said, it's not limited to a certain type of reactor or size reactor.

Any reactor, new nuclear reactor that can meet the plant and site parameter envelopes can rely on those generic findings, so it's broader. I guess I

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would just say it's applicable to more than just the advanced reactors addressed under NEIMA.

MS. WALKER: Okay, thanks.

MS. WILLINGHAM: Stacey, if I could, there was on a slide, per Commission direction to -- the rule had the NEIMA definition of advanced reactors when it applied to just advanced reactors, but the Commission direction was to remove that definition and to apply the generic environmental impact statement to all new reactors, so it was mentioned in that context early in the presentation.

MR. RAKOVAN: Thanks, Laura. All right, again looking for comments on the NR GEIS. If you have any comments, please use the raise your hand feature, or if you're on the phone, please use \*5. Again, we'll pause to see if we get any takers. All right, it looks like Spencer Toohill. Spencer, you should be able to unmute and provide your comment at this time.

MS. TOOHILL: Hi there, and good afternoon, everyone. My name is Spencer Toohill and I'm with the Breakthrough Institute. I joined you all last week in person as well and provided some comments, but I just wanted to reiterate our

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organization's appreciation for the staff efforts on this rulemaking.

And I wanted to piggyback just a little bit off of Marty's comments in terms of the limited work authorization, and I just wanted to -- well, we are still diving into the document and we will provide more in-depth and detailed written comments, but just in terms of the limited work authorizations, our perception is if the limited work authorization is within the bounds and scope of the PPE and SPE, that LWA would, by definition, be part of the larger project impact and should not exceed it. If the project qualifies to use the GEIS, the LWA should as well. The LWA should be tied to a specific project to ensure it's part of the larger environmental review.

And overall, BTI is very supportive of the rule of the limited work authorization aspect as well, and I just wanted to share some thoughts, but definitely stay tuned for the written comments we'll provide. Thanks so much for hosting these meetings. We're very appreciative.

MR. RAKOVAN: Thank you. All right, we'll go ahead and see -- Marty O'Neill back again. Marty, you should be able to unmute.

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MR. O'NEILL: Yes, I apologize. I'm like a virtual zombie here. I guess I keep coming back. I just thought I'd take the opportunity to maybe ask, you know, one more clarifying question. You know, in addition to the GEIS itself and the rule, the modifications to Reg Guide 4.2, the ISG, staff has also asked for comment on a couple of separate documents.

You know, one is the white paper, energy and system design mitigation alternatives, and the other one relates to recommendations for applicant calculations of activity data for greenhouse gases. And, you know, I gather from the proposed rule that applicants can rely on information contained in these documents.

I guess ultimately, do you have a vision as to how these two documents will be kind of treated or, you know, within the regulatory framework? Will they remain white papers, become ISGs, somehow incorporated as appendices to a reg guide?

I just was curious if you have any thoughts, but that understanding is correct, right, that these documents are intended to help applicants address the issues, the Cat 1 or 2 issues in those

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papers?

MR. RAKOVAN: Stacey or Laura, do you want to take a shot at that?

MS. IMBODEN: Yeah, they were developed as white papers, like you said, to assist the applicants in putting together those different types of analyses.

I can't answer the question as to if they will remain white papers or not. Laura, do you have any insights on that?

MS. WILLINGHAM: I would just say those -- guidance documents are updated periodically, and when that happens, we'll take a look at whether or not it makes sense to add the white papers to either Regulatory Guide 4.2 or the NUREG-1555, which is the staff guidance on development of EISs, but if you had any thoughts or recommendations, you could include those in your comments.

MR. O'NEILL: Yeah, but the intent, the present intent is that they will serve as guidance essentially, right?

MS. WILLINGHAM: Yes.

MR. O'NEILL: Something that applicants can reference, I guess, in their applications.

MS. WILLINGHAM: They could choose to use

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those methodologies if --

MR. O'NEILL: Yeah, yeah.

MS. WILLINGHAM: It's their decision.

MR. O'NEILL: Okay.

MR. SCHNEIDER: Marty, this is Stewart Schneider, Rulemaking Project Manager. To that, further to answer your question, one of those documents, before we could issue it, we had to add a PRA section to it because it was considered to be additional guidance in addition to the reg guide, and so that's why you see a PRA statement if that answers your question. Yes, it could be considered guidance.

MR. O'NEILL: Okay, thank you.

MR. RAKOVAN: All right, I've got a hand from Jeff Merrifield. Jeff, you should be able to unmute.

MR. MERRIFIELD: Thank you very much. Appreciate the work that's being done today and all the hard work that went into this proposed rule. I think there's a lot that you've done which is quite good and many of the elements that are designated as Category 1, I think, are very positive.

A couple of areas that have been designed as Category 2 are need for power and alternative

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siting criteria, the origins of the need to address those issues dating back to the 70s and 80s when utilities were all regulated and there was a lot of over-building going on. I think there's a lot more flexibility that the NRC has within NEPA.

I would argue that these two categories should be potentially reclassified, principally because in terms of both need for power and alternative siting criteria, those are evaluated by states either as regulated utilities, and thus, you have an economic regulator at the state level that is making a determination about that need for power or where those sites should occur, or in the market today, no one would be building nuclear reactors without having an assurance that they've got a set of users who will be conducting an off take on that, and certainly those developers would also be considering alternative sites given the fact that many of these would only incorporate criteria that would really, you know, the release criteria at the fence line.

I think the need to impose these kind of requirements on licensees is outdated, and so as you are continuing to move forward on this effort, we certainly recommend a reassessment of both those

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criteria and the need for detailed assessment to be placed on potential applicants. Thank you.

MR. RAKOVAN: Thank you for your comment.

Any other comments that folks would like to provide right now? Again, if you'd like to provide a comment, please use the raise your hand feature if you are on Teams. If you're on the phone, that would be \*5 and that will raise your hand on my board just like anyone who is participating in Teams. Again, we'll pause to see if we get any comments.

And again, I'll remind folks that we do have another virtual meeting, this will be our third meeting involving this topic, planned tomorrow for 6:00 p.m. Eastern Time. That meeting will essentially be the same as this. We'll be going through the same presentation and then opening the floor to comments as well.

Similar to this meeting, we will need you to register for that meeting, so if you plan to participate, you might want to give yourself a little bit of time just to make sure that you get that link through email by registering.

All right, well, I'm not seeing any hands, so maybe we should slowly move to close? Chris, are

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you still with us? Are you going to close us out today or is someone else going to be closing us out?

MR. REGAN: No, I can close us out, Lance. Thanks.

MR. RAKOVAN: Okay.

MR. REGAN: Yes, so thanks for the comments. And I see we just had a hand go up, Lance.

MR. RAKOVAN: Yeah, should we take it?

MR. REGAN: Yeah.

MR. RAKOVAN: Okay, let's take it. Niko McMurray, you should be able to unmute and provide your comment at this time. Niko, are you with us?

MR. REGAN: It looks like he's still muted.

MR. RAKOVAN: Yeah, give me a sec. I'll try one more thing.

MR. REGAN: There we go.

MR. McMURRAY: Can you all hear me?

MR. RAKOVAN: Yes, please go ahead, Niko.

MR. McMURRAY: Awesome. I just want to say thank you to the NRC staff for all of the work that's gone into developing the new reactor GEIS. I know it's been many years, and I do also really appreciate the staff being open to feedback on

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broadening the applicability beyond just a certain megawatt limit or megawatt thermal limit, as well as really trying to look at how to make it as broadly applicable as possible.

I think this is a really great example for the NRC looking at making a performance-based, technology neutral, and risk-informed regulation, and so I just wanted to make sure I shared my appreciation for the staff to really take this effort five years ago at this point and really continue to drive it towards completion, so thank you all.

MR. RAKOVAN: Thank you. All right, back to you, Chris.

MR. REGAN: I do want to make sure that we provide folks information on what our next steps are, and I think Dan Barnhurst, if you'd like to pop on here real quick and give folks a quick overview of what our next steps are moving forward before we close out?

MR. BARNHURST: Okay, I can do that. Thanks, Chris. Yeah, my name is Dan Barnhurst. Excuse me. I manage the Branch of Environmental PMS that helped to develop the GEIS and would be using it to perform the reviews of new reactors if approved.

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We want to thank you all for taking the time to attend today, to review the package in advance, to listen to our presentation, and to offer your comments.

Our intent in holding these meetings over the comment period is to understand the ways that our analysis and the document might be improved. This is our second meeting as Lance mentioned. We do have one more tomorrow night, but the comment period stretches until December 18.

So, what are the next steps? After the comment period ends, we'll be working to address the substantive comments received and make any changes to the GEIS and the associated documents. Our overall plan, as you saw on the schedule slide earlier, is to complete any changes and to finalize the rule package in order to provide it to the Commission for review by December 1 of 2025. With that, I'll turn it back over to you, Chris, for any additional comments and to close out our meeting today.

MR. REGAN: Thanks, Dan. Yes, so as it was mentioned in the beginning, we're doing a series of three meetings. We did one in person last week and we're doing two virtual this week to ensure we reach as broad an audience as possible.

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I will say that we had a few folks attend in person last week, but we've had, I've seen the numbers, you know, approaching 60 participants in this particular virtual meeting, which really is a testament to our ability to reach a much broader audience.

So, for those that joined us today virtually, thank you very much. For those of you who made comments, we very much appreciate it. This is your opportunity to participate in our processes and provide us your comments and feedback on our proposed new reactor GEIS.

Again, thank you very much for participating today and we look forward to potentially hearing from you tomorrow after you've had a chance to digest, if you have more comments. So, thanks, and with that, I will ask that we adjourn the meeting and thanks, everybody. Have a great evening.

(Whereupon, the above-entitled matter went off the record at 1:55 p.m.)

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