This document is a redacted publicly available version. In January 2025, the NRC staff identified information within this document that may be Critical Electric Infrastructure Information (CEII) as defined by the Federal Energy Regulatory Commission (FERC). The original file is non-public, designated as CEII, in ADAMS ML25022A025.

NRC staff actions were taken in accordance with:

• The Memorandum of Understanding Between US NRC and FERC Regarding Treatment of Critical Energy/Electric Infrastructure Information found at: https://www.nrc.gov/reading-rm/doc-collections/memo-understanding/2024/ index.html.

• The FERC definition of CEII found at: https://www.ferc.gov/ceii, and, https://www.ferc.gov/enforcement-legal/ceii/designation-incoming-dam-safety-documents.

Official Transcript of Proceedings

NUCLEAR REGULATORY COMMISSION

Title: Public Meeting to Receive Comments on the Draft Site-Specific Oconee Environmental Impact Statement

Docket Number: (n/a)

Location: teleconference

Date: Wednesday, February 21, 2024

Work Order No.: NRC-2731

Pages 1-47

NEAL R. GROSS AND CO., INC. Court Reporters and Transcribers 1716 14th Street, N.W. Washington, D.C. 20009 (202) 234-4433 UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

+ + + + +

PUBLIC MEETING TO RECEIVE COMMENTS ON THE DRAFT SITE-SPECIFIC OCONEE ENVIRONMENTAL IMPACT STATEMENT

+ + + + +

WEDNESDAY,

FEBRUARY 21, 2024

+ + + + +

The meeting convened at the Clemson University Conference Center and Inn at 230 Madren Center Drive, Seneca, South Carolina, at 7:00 p.m. EST, Lance Rakovan, Facilitator, presiding.

NRC STAFF PRESENT:

LANCE RAKOVAN, Environmental Review Lead, NMSS

STEPHEN KOENICK, Branch Chief, NMSS

KEION HENRY, Region II

PAGE

Welcome and Introductions	3
Environmental Review Process and Findings	7
Next Steps	14
Public Comments	19
Closing	46

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

7:05 p.m.

3

MR. RAKOVAN: Good evening, everyone. My name is Lance Rakovan. I am the environmental project manager for the relicensing of Oconee Nuclear Station, Units 1, 2, and 3 at the Nuclear Regulatory Commission. And I'd like to invite you all to this public meeting tonight to receive comments on the draft environmental impact statement.

So after we go through some opening remarks and some introductions, we'll go ahead and give a brief presentation on the environmental impact statement or EIS preliminary findings. At that point, we'll open the floor to see if anyone has public clarifying questions on the presentation itself. And then we'll move on to opening the floor to providing comments on the draft document.

If you have questions that are kind of larger issues or issues that aren't specifically clarifying questions to our presentation, we ask that you hold those and we can have a more informal discussion after the meeting. So again, this is a comment gathering meeting by NRC's definition, meaning that our primary purpose here is to listen and to take comments, again, on the draft environmental impact

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

statement or EIS.

We ask that you stay in listen only mode if you will until we get to that portion of the meeting. And I wanted to stress that no regulatory decisions will be made at today's meeting.

So Mark Yoo is the safety review lead. He unfortunately was not able to be with us today. But again, I'm Lance Rakovan. I'm the environmental review lead. With us, I also wanted to point out that we have our resident inspectors who report to the plant and live in the area which are Jared Nadel, Evan Robinson, and Nick Smalley. They're with us tonight.

And I also wanted to ask Stephen Koenick who is my branch chief. He's chief of the Environmental Project Management Branch 1 at the NRC to come up and give some opening statements. So Steve, if you would.

MR. KOENICK: Thank you, Lance. Good afternoon. As Lance mentioned, my name is Steve Koenick, and I am the chief of Environmental Project Management Branch 1 of our environmental center of expertise.

I would like to note the last time I was here at Clemson was last May for my son's graduation. So go Tigers. So welcome to today's in-person

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

meeting regarding the Oconee draft site-specific environmental impact statement regarding the Oconee subsequent license renewal application.

The purpose of this meeting, as Lance mentioned, is to inform you of the results of the draft results and to get your comments. The NRC's process encourages public participation. And public participation, openness, and transparency are all keys to NRC activities, including the licensing of nuclear power.

After Lance describes the preliminary results, we'll solicit your comments on the draft environmental impact statement. The public comment period is open for 45 days and closes on April 1st, 2024. And really our goal is to hear from you and collect comments that you may have so that we may fully consider then during finalizing our environmental impact statement.

So thank you in advance for your participation here tonight. And with that, I'll turn it back to Lance. Thank you.

MR. RAKOVAN: Thanks, Steve. Just one of the logistic issues for tonight. Once we do go to commenting, I'm going to ask folks to come up here to provide their comments.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

(202) 234-4433

We do have a court reporter here that is taking transcription of our meeting tonight so that we can make sure that we fully capture whatever comments you provide. And she has a separate microphone here. So we just wanted to make sure that she gets a full accounting of, again, the discussions tonight. I'll go into a little more detail about that once we get to that portion of the meeting.

So just going into my presentation tonight, a little bit about the NRC's regulatory role. You can find our governing statutes in the Atomic Energy Act. And specifically the work that we're doing in terms of the environmental impact statement can be found in the National Environmental Policy Act as amended or NEPA.

Our mission at the NRC is to protect public health and safety, promote common defense and security, and of course to protect the environment.

So a little bit specific to Oconee, the original licenses for the plants were in 1973 and 1974. They were renewed in 2000. Current expiration dates are in 2033 and 2034. And the proposed expiration dates if the plant is relicensed would add 20 years to those dates. So we'd push them into 2053 and 2054. So the way the NRC does our environmental reviews is we have what we call our GEIS, our Generic Environmental Impact Statement. And this addresses what we call Category 1 issues which are environmental issues that are either common to all plants or a subset of plants. And this is used during license renewal to allow us to kind of do a smaller dive or a less in-depth analysis of those generic issues.

Now at the time that we began Oconee relicensing, this was our policy. After we started relicensing, our Commission dictated that that document could no longer be used for subsequent license renewal such as for the Oconee plants. So what we have done for Oconee is created a sitespecific environmental impact statement.

So we had to go back and address both Category 1 and Category 2. So all environmental issues that would be subject to relicensing we had to look at in-depth. So this is a different kind of review again than we previously would've done, but the Commission dictated this policy change.

There is a new Generic Environmental Impact Statement or GEIS that has been developed and will be going up to our Commission for finalization later this year. But again, what you'll find here is

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

a draft site-specific environmental impact statement.

This is just a graphic that shows some of that the aspects we look at as part of our environmental review, including water resources, alternate sites and energy sources, land use, visual noise impacts, geologic, environment, et cetera. This, I believe, matches the poster in the back of the room as well.

So in general the way that we define the impacts are three categories. SMALL in that the effects are not detectable or are so minor that they won't destabilize or noticeably alter important attribute of a particular topic. MODERATE, the effects are sufficient to alter noticeably, but not to destabilize important attributes of a particular resource. Or LARGE which would be effects are clearly noticeable and are sufficient to destabilize important attributes of the resource. So again, these are kind of the wide swatch categories that we use to define most of the impacts.

There are a number of impacts that are defined differently for various reasons, though. For federally listed species and critical habitats, we use the language of the Endangered Species Act which is either no effect, may effect but is not likely to

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

adversely effect, or may effect and is likely to adversely effect. Again, very similar to the small, moderate, and large but just different language.

For essential fish habitats, we use the language of the Magnuson-Stevens Act. This is, again, very similar except there's four categories instead of three, but you can kind of get the general idea.

For the Natural Marine Sanctuary Act, again, the language is the same: no effect, may effect but is not likely to destroy, cause the loss of, or injury, or may effect and is likely to destroy, cause the loss of, or injure. So again, very similar to the small, moderate, and large.

For cultural and historic resources, we use the language of the National Historic Preservation Act. So either would or would not adversely affect. And for environmental justice, it's is there disproportionally high and adverse human health and environmental effects because of the action.

So looking at the preliminary findings in the draft document, you'll see that all the resource areas listed on this slide were deemed to be small. So again, we would not expect to see any major impact from the continued operation of all three Oconee units for an additional 20 years on these various resource

areas. And again, if you have a copy or if you look at a copy of the draft environmental impact statement, I believe it's ES-1 that is in the there's a table. this executive summary that provides all of detail, information in even greater but it's essentially a summary of the preliminary findings for all of the resource areas in the document. So that's a good place to find this information. Aqain, it breaks it down into somewhat smaller, more granular topics if you will. There might be several subtopics for each of these. But again, the overall finding is that we found these resource areas to be small.

Again, looking into a few of the other areas that don't use that small, moderate, and large labels for historic and cultural resources, the preliminary finding is that the continued operation of the plant would not adversely affect known historic properties for environmental justice.

We found that no disproportionately high and adverse human health and environmental effects on minority and low-income properties. Cumulative impacts is something that we look that takes into account the operation of the plant looking at it in terms of the cumulative impact of other impacts to the environment, from other industries, onto other facilities in the area, et cetera. It doesn't really have an easy label to put on. So again, I would just prefer you to take a look at the draft EIS itself. And that would be Section 3.15.

So going through of the other preliminary findings that don't follow that small, moderate, large. These are for special status species and habitats. The continued operation of the plant may affect but it is not likely to adversely affect the monarch butterfly and the tricolored bat. And then no effect is expected on these other species listed. And also, there were no essential fish habitat or national marine sanctuaries present. So that was not looked at.

Alternatives that were looked at as part of this action, no new and significant information was identified regarding the following alternatives, power replacement including new nuclear power, natural gas combined cycle power, or a combination of new nuclear with other things. And then of course, something that is always done as part of NEPA is the no-action alternative. What if nothing happens and the plant just ceases to operate? What impact would that have? So I'll read this and then I'll say it again plain preliminary in language. The

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

(202) 234-4433

recommendation from this EIS is that the adverse environmental impacts of subsequent license renewal for Oconee for an additional 20 years beyond the current expiration dates are not so great that preserving the option of subsequent license renewal for energy-planning decision makers would be unreasonable. We hate this language. I will just say that. This comes almost directly from our regulations. I don't believe any of us were around when those regulations were being written.

But essentially, since the NRC are not the energy decision makers, our role here in creating this environmental impact statement is to let decision makers know if we think -- or what impact we believe continued operation of the plant would have on the environment if you will.

In our opinion, what this really says is that we don't see any issues with the potential continued operation of the plant that would make energy decision makers -- energy-planning decision makers say, no, we need to shut the plant down, the environmental impacts are too great. So we think it is a viable option, if you will, to keep the plants open if they decide to do so from an environmental standpoint.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

There will be -- or there has been, if you will, a safety evaluation that was already done again. Because of that change that I mentioned with the way that we can no longer use our generic environmental impact statement, the safety evaluation got ahead of the environmental. So we're playing a little bit of catch up here.

But the safety folks have the option as well to make a decision in terms of the continued operation of the safety of the plant, if you will. So just to go through a little bit about how we got here and where we're moving towards, the draft EIS was published earlier this month. The start of the comment period was February 16th. That starts with an EPA federal register notice. And the citing on that is 89 FR 12335. Again, that is 89 FR 12335. That's the EPA's Federal Register notice that was issued on February 16th which officially kicked off a 45-day comment period on this draft environmental impact statement.

If you're looking for the NRC's Federal Register notice that announced the availability of the document, that was issued on February 13th. And the citing for that is 89 FR 10107. Again, that's 89 FR 10107. We have our in-person public meeting here. And then next week, we will have a sister virtual meeting scheduled for February 27th at 1:00. You can find details on that on our public meeting schedule at NRC.gov. Just look under public participation, and you can find all the information on that meeting. Again, that will be a fully virtual meeting.

As I mentioned before and as Steve mentioned, we're hoping to receive your comments on the draft environmental impact statement by April 1st. If you provide your comments after that date, depending on where we are in our process, we will attempt to take them into account in our processes. But depending on when we receive them, we may or may not be able to do that.

So again, we ask that you provide your comments by April 1st. And I will go into how you can provide your comments momentarily. And again, our goal is to issue our final environmental impact statement in August of this year.

So if you're looking for a copy of the EIS, we did have a couple on our table out there. So you can grab one if you feel like -- I think somebody characterized it as it would make a good doorstop. If you need a doorstop, you can take one with you. I

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

think we have a couple copies.

We dropped two copies off at the Oconee Public Library earlier today. So if you do wish to flip through a hard copy of it and you don't want to take one of those, you can find it at that library.

You can also find them several places online. The Oconee project public website is listed here on the slide. And also, you can look for it in our ADAMS, our Agencywide Documents Access and Management System, under the accession number ML24033A298. And again, all of these slides you can find on the public meeting or schedule for this meeting and for the virtual meeting.

So again, if you go to NRC.gov and you look under public participation, you should be able to find the slides to this meeting. And again, they're going to essentially be the same except for a few differences just because of the virtual aspect of the next meeting. But all the information should essentially be the same for that meeting as well.

So a little bit of additional information on this project, our project website is listed here. Again, you can get this link from the slides on the website. It provides all sorts of information in terms of links to the subsequent license renewal

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

(202) 234-4433

application and supplements, including the environmental report, the current schedule for both the safety and environmental reviews. And it'll tell you who the project managers are.

MS. COOPER: I can't really read that.

MR. RAKOVAN: Yeah, I apologize for that.

MS. COOPER: It's too blue. Could you hand out some sheets or whatever?

MR. RAKOVAN: I don't know that we can hand out some sheets, but I can show you. If you go -- thank you for the prompt. If you pick up any of the cards that we have on the table, they have QR codes and the links to these pages. That will take you to this website that has all the information. And then the other side of it will take you to regulations.gov which is where you can provide your comments.

MS. COOPER: Did you not notice the dark blue on blue?

MR. RAKOVAN: It actually looks a lot different on my screen, believe it or not. It looks much worse projected.

MS. SWEENEY: You've got lights up in front of you.

MR. RAKOVAN: Yeah, so I apologize that you can't see the links. Thanks, Angela. So the

various ways that you can provide your comments, obviously, you can provide them here tonight and we'll get to that momentarily.

Again, we do have a court reporter, so we can collect all your comments. If you wish to provide them by mail, you can send them to our office of administration. It's by the mail stop here. And again, that's Washington, D.C. 20555.

The website, again, which is -- you can find the QR code and the link on the cards is to regulations.gov. The docket ID to search is NRC-2021-0146. It looks like we've got two NRCs there, so I apologize for that. I'll have to fix that in final.

Or you can send an email to OconeeEnvironmental@nrc.gov. Any of those ways that'll be taken the same again as if you made a statement here tonight. Again, we ask that you submit your comments by April 1st.

If we receive them after that, we'll do our best to incorporate them into our processes. But we can't guarantee. So that is essentially my presentation tonight.

Before we go ahead and open the floor to comments -- and I do have some folks that I know would like to have some time at the microphone. But

certainly, you did not have to sign up if you wish to speak. We'll certainly allow folks that didn't necessarily do that initially some time at the microphone if they would like it.

But before we do that, I just wanted to do a quick check to see if anyone had any clarifying questions about the presentation. I wanted to make sure that everybody understood. Again, I apologize for the awkwardness, but if you do have a question, we'd ask that you come up here and go ahead and ask it. And that way, we can make sure that we get it all on the court reporting. Steve?

MR. KOENICK: You might want to point at the railing.

MR. RAKOVAN: Oh, okay. Yeah, good idea. Yeah, we do have a railing over here if anyone needs it. Thanks, Steve. That's a good point. Please, ma'am, if you could come up.

If you're going to ask a question or provide a comment, if you could -- you can come up -if you could just --

MS. SWEENEY: Both at the same time, or just wait for my comment?

MR. RAKOVAN: Do you have a question?

MS. SWEENEY: I have a question.

MR. RAKOVAN: Okay. How about this. Why don't you come up and ask your question. And if nobody has any other questions, then we'll let you go ahead and give your comment. How's that?

MS. SWEENEY: Okay. I'll come prepared.

MR. RAKOVAN: Okay. Thank you. If you do come up and ask a question or provide a comment, if you could just let us know who you are so we can make sure that we have that accounted for as part of the transcript for this evening. I will step aside.

MS. SWEENEY: Good evening, everybody. And I want to say thank you for having this in-person hearing. And I have a question about how you decided there were small impacts to uranium fuel cycle and waste management because I have several friends in the Indigenous communities out in New Mexico who would beg to differ with you about the uranium fuel cycle and its impact.

And it doesn't start and stop at Oconee. So did you look into -- and also the waste management. Where is all of this spent fuel going to go from keeping these reactors going?

My understanding is that the dry casks are not -- their longevity isn't very -- 20, 30 years, they're going to have cracks and things. And the way

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

they're set up, they're not going to -- you can't put them back in a hot cell and move those spent fuel rods into a safer cask once they're in these casks that are not safe for 100 years which is your own. The NRC says they have to be safe for 100 years, but the casks that we have now are not.

So those two things that you said were small impacts, I have a question of how you decided that. My name is Joanne Sweeney. I am with Nuclear Watch South, and I live in Salty, Georgia which is within the 50 mile emergency planning zone of these reactors. So those are my questions.

MR. RAKOVAN: All right. But you're going to have a separate comment as well?

MS. SWEENEY: I do have one.

MR. RAKOVAN: Okay, okay. I'll leave it up to you if you want to go sit down or if you want to

(Simultaneous speaking.)

MR. RAKOVAN: -- just hang loose. Okay. All right. Thank you. So we don't necessarily have the folks that can go deep into your questions here tonight because we don't have those particular experts here. I can tell you that, again, in terms of the storage of the spent fuel at the plant, the structures

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

(202) 234-4433

that they're stored in are robust. And the Commission has expressed that they have confidence that they can hold the waste until we have or figure out what else we're going to do with it.

I can see by the look on your face that you're not particularly thrilled with that. But that is our official policy. If you would like, I do have your name and if I can get your contact information if you'd like to have a more in-depth discussion about the uranium mining and the spent fuel storage I can put you in touch with the right person to have that. Does anyone else have a question?

MS. COOPER: This question has been asked over the years.

MR. RAKOVAN: I'm going to have to ask you to come up so you can -- if you have something so I can make sure I can get you on the transcript. Okay. All right. Any other clarifying questions? If no, I'll go ahead and see if Ms. Sweeney wants to come back up. Would you like the floor back?

MS. SWEENEY: Everybody else is too shy.

MR. RAKOVAN: Well, we've got a couple other people signed up to speak. But I mean, we might as well. We'll let you finish up.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

MS. SWEENEY: All right. This t-shirt

that I'm wearing has the names of all my grandchildren on it. And that's who I'm here to represent. We're kicking this can down the road about what to do with the waste, about the impact on the environment, and expecting them to deal with it.

MR. RAKOVAN: Here, I'll hold it for you. MS. SWEENEY: Okay. This is a map of the 50 mile emergency planning zone for the Oconee Nuclear Reactors. And we are within the 50 mile zone. I just went to church on Sunday and asked folks if they would be willing to sign a petition that addresses the concern about flooding potential here.

And also the fact that this is just a draft environmental impact statement. And your own rules say you're supposed to start the comment period after you have the finished environmental impact statement and then start the clock ticking on public comments. So I'm wondering about that.

So at church, I've got this many signatures on Sunday afternoon. But these folks didn't come with me today because they are at Wednesday night church. So having this meeting during the time when there's a conflict like that on short notice is something that I'm concerned about if you really want public participation. So that's it.

NEAL R. GROSS

Thank you.

MR. RAKOVAN: All right. So a number of things there, number one, did you want the materials that you had there included as part of the transcript?

MS. SWEENEY: Yes.

MR. RAKOVAN: Okay, great. I can take those then.

MS. SWEENEY: And there will be more petitions coming.

MR. RAKOVAN: Okay. And in terms of your comment about when to provide comments on the draft document, I'm going to assume that you're speaking about the period to request standing in a hearing as opposed to comments on the draft document. That is up for discussion right now. The way that we interpreted it was that our draft document was essentially supposed to be, if you will, the end of our work in that if we didn't receive comments on a draft EIS, then the draft would essentially become the final.

But again, I understand that's being discussed right now and there has not been a decision on that. We are waiting for that decision as well. So I understand your concerns there. Okay. I will make sure this goes into the transcript. And let's see. The next speaker that I have is Steve Snider.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

(202) 234-4433

Renewing Oconee's operating license a second time is important to not only Duke Energy but our community. Our employees have lived and worked for 50 years and we're excited to be part of the community's future as well. Since it began operating, Oconee has generated more than 900 million megawatts of reliable, safe, clean electricity for Duke Energy customers and reached a record of reliability milestone in 99.4 capacity factor in 2023.

Duke Energy, six nuclear sites in the Carolinas produced 98 percent of the company's clean energy in 2023 and are an essential part of Duke Energy strategy to reach our net zero carbon emissions by 2050. I do appreciate the NRC's thorough and comprehensive review of our application, including the safety evaluation that was completed in 2022. And we're looking forward to the completion of the environmental impact statement that is the subject of tonight's meeting.

Our staff of scientists and engineers will continue to review the draft and provide any comments prior to the end of the comment period. And we do value the public's input and encourage you to do so. And we look forward to receiving the final statement later this year and remain confident that our subsequent licenses will be issued to support Duke Energy's clean energy transition. Thank you.

MR. RAKOVAN: Yes. Ms. Sweeney, my branch chief reminded me as I came down from the break, the other point that I wanted to make. Yes, I apologize that we are having this meeting on a Wednesday evening. But part of the reason that we have the virtual meeting scheduled for next week Tuesday was to allow folks if they couldn't make it here tonight to be able to at least participate in that.

So I apologize for the scheduling conflict tonight. But hopefully those folks can participate in next week's meeting. The next person that I have here is Rosellen -- I believe it's Aleguire. I can't tell if it's an A that starts your name. So if you could -- sorry.

MS. ALEGUIRE: Bless my mother for naming me Rosellen. All right. My name is Rosellen Aleguire, and I reside in the Oconee emergency planning zone. I moved here in 1984, and I take issue with the NRC staff where they say that the effects of

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

climate change on the operation of the Oconee Station are outside the scope of this environmental review.

Outside the scope, climate change. This is a dangerously shortsighted and probably illegal. Please look at the April 2nd, 2019 NRC oversight hearing before the U.S. Senate Committee on environment and public works.

Climate change flooding and reactor operations are scrutinized in remarks by Rhode Island Senator Sheldon Whitehouse to the Commissioners. And he says, does anybody contest that post-Fukushima? It's been established that flooding interferes with nuclear plant operations. And inside specialists at NRC has told us that it takes only **means** of water around the reactors to have a Fukushima style meltdown right here in Oconee.

Senator Whitehouse wonders how an NRC post-Fukushima flood protection rule originally mandatory was watered down to voluntary industry actions and questioned -- he questioned the trustworthiness of this commission. Climate change is putting communities around the reactors that operate below large dams like ours, 70 feet below water, that have alluded a serious evaluation of risk from severe flooding that can cause a number of -- cause a nuclear

accident, be deemed outside the scope of the NRC review. This is reckless.

In my own experience of living here for 40 years, I can tell you that climate change is real. It has affected my life. In 2017 was Hurricane Maria that shredded all the leaves on the trees around my home, just shredded them like confetti.

Two years ago -- two to three years ago, there was a tornado that came through Seneca and took the roof right off my house and put it on the ground, 165 mile an hour wind. After that, there was another tornado that took all the high trees down on the left side of my house. Tornado after that took the tree down right in front of my house that luckily hit another tree so it didn't come through my living room.

So climate change is real and we all know it. Today's industry must be held accountable to prepare for tomorrow's climate change or be denied this extreme operating license extension. Thank you.

MR. RAKOVAN: Okay. The next speaker I have is Frank Powell.

MR. POWELL: Thank you, Mr. Rakovan, and others representing Duke Energy and the NRC. Jared Nadel, thank you for responding to my emails and phone calls and giving me the impression as a couple of your

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

(202) 234-4433

predecessors has that you have my best interest at heart in your job as senior resident inspector. My name is Frank Powell.

I live at 1098 Dug Hollow Road in Seneca. My wife Jane and I live 1.4 miles from the Oconee Nuclear Station Reactor No. 1. We're just under a half a mile from the Lighthouse Restaurant.

We're in our 37th year living on Lake Keowee. I suppose that the issue that has most concerned me is the impact of reading about flooding in the Fukushima reactors. Fukushima intentionally reduced their front end cost by lowering the intake for their ocean water cooling a good many feet and as a result produced that trillion dollar catastrophe.

I'm unsure whether the Oconee Nuclear Station could be licensed today. I suspect that sitting under hundreds of millions of gallons of water behind an earthen dam. And it appears that earthen dams have a half-life of 100 years.

So each year that is passing, there is an increased probability that an earthen dam such as the Jocassee dam could fail. About 102 years ago, 26 inches of rain fell north of Lake Toxaway. That's the record in the southeast, 26 inches of rain in one day.

Now I'm assuming that Duke Energy and the

NRC has modeled this kind of -- do we call it an atmospheric river? They're occurring now all over the world. But I suspect that there would be some devastating results upstream of Lake Jocassee given another half dozen dams about us.

I was concerned that in January of 2011, I was attending this same required public meeting. Jane and I have on three occasions been the only citizens who have come to these meetings held at the World of Energy. And the NRC required Duke to protect Oconee from a potential flood.

This was pre-Fukushima based on modeling of Jocassee dam failure. Two months later, the four reactors at Fukushima were destroyed by flood induced explosions. What did the NRC do? In less than three years with a lot of inside work produced a study that showed no **second** of flooding but only

of flooding would occur should the Jocassee dam breach.

Well, why is it okay that we have not resolved the actual potential probability of flooding from dam failure? Why is this new information about a Jocassee dam failure not considered currently as part of the Oconee license renewal? What about the public's health and safety? That's why I'm attending

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

(202) 234-4433

this meeting. Thank you.

MR. RAKOVAN: Okay. I have Audrey Jones as the next speaker. Audrey Jones?

MS. JONES: Thank you very much. Good evening. I'm Audrey Jones. I love in Columbia, South Carolina. I am relatively new to coming into awareness about the Oconee Nuclear Station, surrounding communities.

I happen to care very much for folks who live in the 50 mile radius. I've grown close and developed great friendships with folks. I have family that attend Clemson, nieces that want to go to Clemson. And I just have a love for this area. I lived and raised my son in Western North Carolina. And I just -- yeah, I care. I'm here because I care.

I wanted to bring some numbers to us this evening. Let's see. The length of a football field, it's about 360 feet. Big Ben is about 310 feet. The Statue of Liberty is about 305 feet.

When I learned that these three reactors are 370 feet below the Jocassee dam, getting a visual for that, to echo what Mr. Powell said, would it be licensed today? Would we build something like this today? And I think the answer is a resounding no.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

Another number I came up with is 250.

That's how many miles it is from the Oconee Station to the Charleston Harbor. Ten, ten hours ago, the National Hurricane Center along with AccuWeather and the Colorado State University sounded alarm bells for a supercharged Atlantic hurricane season.

Category 6, we're hearing more and more about development of Category 6, whether it's flooding, whether it's -- that there's a high risk for many more storms. Why is flooding and climate change out of the scope? When you had your slides earlier about the small, medium, and large impact, maybe it's just me. Maybe it's just a million of us who think that climate change should be considered.

And we're all a little shocked. And the gentleman from Duke, I appreciated you commenting about how the jobs, it provides jobs in the area. And I got to thinking what good are these jobs when this risk that's in front of these folks and their families and the generations to come.

There could be clean, renewable energy jobs right there waiting to take the place. And just want to echo that there's established science that climate change is here and it's not going anywhere. It's just going to get worse. Kind of depressing. But thank you. That's all.

MS. JONES: Thank you.

MR. RAKOVAN: Okay. I have Elaine Cooper.

32

MS. COOPER: Hello. I'm Elaine Cooper from the Sierra Club. I came down here from Columbia to help support these amazing citizens who live close to this Oconee Nuclear Plant. First of all, you probably have seen me document photos of the room.

It's a shame that the public is not here. Of course, that clearly indicates to me that there isn't much of an effort to reach out to the public. So you might be out of touch with the public.

You might be out of touch that you live in South Carolina, a state that's predominantly filled full of houses of faith and that it is a Wednesday night. So that first is a barrier. No one, no group, no one has a public meeting on Wednesdays in South Carolina, no one.

Okay. So you have to wonder if you do not want public input. Then the second point I would like to make is that maybe you're out of touch with the public and you haven't noticed that people cannot afford and do not take newspapers. So maybe you advertise in the newspaper. Folks don't read because they can't afford and they're not reading the newspaper. What? They are watching their local television stations where you did not advertise this meeting. Shame.

You can look around the room and see that this must have some truth in what I'm saying. And then I'll go on to my other comments. But it is a shame. Please try and do better.

So this is a premature meeting. It's not existent. I don't know why we're having it because the public is not attending. I'll bet there won't be that many more of the public who are directly impacted by this license to an 80 -- that plant will be in 2053, 2054 actually, 80 years old.

Hell, that's -- sorry, that's older than I am, and I'm no spring chicken as you can see, 80 years old in 2054. Wow. That is something to think about. Let's reflect on that.

Other than that, you're probably aware that the Biden administration will look into appointing a new chair in June, June 30th, I think. Therefore, this meeting again is premature. It's happening before there's a change of a chair.

That is alarming. So that's another important point. Of course, another interesting point

again that many people have pointed out tonight is that this impact statement is not taken into effect climate change. By that, we are referring to other than the increasing storms is the flooding.

I have attended statewide governor's resilience meetings and looked at the data and the floor impact statements throughout our entire state. And there is data to reflect. There is scientific basis on how much the flooding is increasing throughout our entire state.

So I don't think this impact statement is taking into account flooding and climate change but it must. So you might want to just reconsider bringing in the science, bringing in the governor's resilience office, and then starting over again with your statement and involving the public. That's really some of my main points. Thank you.

MR. RAKOVAN: All right. That was the number of folks that I had that at least had indicated upon signing in that they would like to speak. If anyone would like another chance at the microphone or if there's anyone else who would like to come up and say a few words, the floor is certainly open. Just give me some indication.

Please come on up. And again, if you

could just let us know who you are and if there's any group that you identify with. We would appreciate that.

MS. LEHMACHER: Hello. My name is Eunice Lehmacher. I live at 232 Kings Way in Clemson, South Carolina. That's in the 50 mile radius area. And I'm a member of the Sierra Club, League of Women Voters, Universe of Lutheran Church, many organizations that are in the 50 mile radius area.

I'm speaking on the point that climate change is outside of the scope of the review for this. You mentioned animals. Animals are affected by climate change, right?

This is -- I live in a place with lakes. A lot of my friends moved here for the lakes. Any of you -- I mean, I live off of Issaqueena Drive near here. And I can see flooding there all the time, including people's homes flooded.

There's a road that I would drive my children to school that closes now because it gets flooded, a state road, right? So I think all of us have watched the floods, not just here, such as in Columbia, South Carolina, Pickens County, but all over the world which are an effect of climate change. And I think there is almost no question that flooding will

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

(202) 234-4433

www.nealrgross.com

affect the Oconee Nuclear Station, especially when you consider there's some earthen dams, right?

So we all know -- I'm 60. So when I was 10, I didn't very often have to turn around and go a different way because a flood had closed my road. But our state funds have been spent to fix lots of bridges because of flooding, because of climate change, because of human caused climate change.

Ninety-seven percent of climate scientists believe climate change is real. And thousands, millions more scientists besides that and most people believe climate change is real. So I think the Nuclear Regulatory Commission also believes that.

I believe there's a lot of scientists involved and that we should consider all the effects of climate change. And since you're considering the animals and the neighborhoods and all those things, how they would be affected. A flood that affects the plant that would get toxic waste into the water would affect the animals.

So perhaps your estimation of how it affects the animals needs to include climate change to say that, yeah, if there's a flood, which there probably will, that will affect all the animals around here which I love and care about as well. Thank you

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

www.nealrgross.com

for taking comments. I'm glad you're having a public comment session on the draft.

MR. RAKOVAN: Okay. Again, would anyone else like a second chance at the microphone or anyone else that has -- please. If you could just reintroduce yourself so we make sure that we have you properly noted in the transcript.

MS. COOPER: Elaine Cooper with the Sierra Club. Okay. I forgot to mention I was at Columbia State House today. And I was talking to some legislators about this issue.

They were shocked. They had no idea that a company was looking to extend their license. I just felt like -- as you noticed, I'm not a person who could really rely on spoken words. I'd rather rely on my actions.

So I really have taken it on myself to talk to every single legislator at the state house because they were so surprised. They said, of course, of course there's climate change. Of course there's flooding. Of course there's severe weather.

What's going on? Why wouldn't that impact statement consider all of this? They were deeply shocked at the state house today, this morning. Thanks.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200

MR. RAKOVAN: Sure. Just to follow up on that, the NRC does have an Office of Congressional Affairs. So if you speak with those folks again in the future and you want to refer them directly to them.

MS. COOPER: The state senators -- (Simultaneous speaking.)

MR. RAKOVAN: Well, still, still. Or you can refer them to Region II. We have a state liaison officers in our region that work with those individuals. So if they weren't aware, then -- yeah, oh, yeah. Hey, we've got one here. I'm sorry. I forgot you were here, Keion.

MR. HENRY: They were notified in the past 30 days. I promise.

MR. RAKOVAN: They were notified within the past 30 days. Okay, thank you. Oops, careful. Please. Again, if you could reintroduce yourself.

MS. COOPER: Not all the legislators had been notified. And of course what happened to Oconee will affect our entire state.

MS. SWEENEY: Okay. Joanne Sweeney with Nuclear Watch South. And I would just like to again drive home the importance of looking at the nuclear fuel cycle because nuclear energy is being touted as a

green energy, a clean energy to meet these standards that are coming up. But the mining, the milling, and the processing of uranium fuel have very -- they do have a carbon footprint that is not in your figures for nuclear energy.

And then how to -- we don't have any kind of solution of what to do with the waste that we're piling up the longer you run these reactors. And it's dangerous stuff. And we don't even have the transportation figured out when they do decommission these plants, about how to get it to wherever that pie in the sky place is they're looking for to put the waste.

And right now, they're calling it consolidated interim storage. And they're wanting to put it on our neighbors in New Mexico who don't even have nuclear reactors for their energy. They do have nuclear weapons industry there.

And what it all boils down to it seems to me is money. And there's a lot of money that goes into the nuclear fuel chain, into the nuclear power. And in my own state in Georgia, we have had very expensive, two new reactors come online, billions of dollars over budget.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

Still with some tweaking they've got to do

there, when the water goes down in the Savannah River which this is all part of the Savannah River watershed, it's a dangerous thing to be banking on that nuclear energy is sustainable. So I'm very concerned about that for my children, my grandchildren, and all children. It's just not a smart thing to do, and I'm upset about it. Thank you.

MR. RAKOVAN: Okay. Again, I'm going to offer the microphone to anyone who's been here would like to make another statement or anyone who hasn't been up here to come up and make an initial statement. Please.

MR. POWELL: Could Mr. Snider respond?

MR. RAKOVAN: Hold on. Sir, we're not going to be able to get you on the microphone. But I hear your comment is for Mr. Snider. This is an NRC public meeting, so no one else is obligated to speak.

MR. POWELL: Sure. And I'm not picking on you, Mr. Snider. You or any of your staff might want to comment on the mitigation of flooding risk currently at the Oconee Nuclear Station. Are you aware of the allegations that we've been making?

MR. SNIDER: This is an NRC meeting. This is not an appropriate time.

NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

MR. RAKOVAN: Yeah, again, this is an NRC

meeting. They are free to come and address your question if they'd like to. But they're under no obligation to.

All right. I'm going to remind folks how to provide comments outside of this meeting. Again, you can do them by direct mail, written mail to our Office of Administration at U.S. NRC, Washington, D.C. 20555. You can go to regulations.gov which also is on the cards that we have on the table. There's a link and a QR code that you can use. And you want to look for NRC-2021-0146. Or you can send an email directly to OconeeEnvironmental@nrc.gov.

Again, you will see a transcript from this meeting that we will publish along with the transcript for our meeting next week on the 27th. And we will be mining the transcripts from both of those meetings to see what comments we received on the draft document. And then we'll be putting an appendix in the final report that provides those comments and how we disposition them. So if you would like to see --Dave, oh, please. Thanks, Dave. Again, if you could introduce yourself, please.

MS. POWELL: I'm Jane Powell. I'm the other half of Frank. We've been here a long time. We moved from Greenville to enjoy the lake. We

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

(202) 234-4433

www.nealrgross.com

appreciated all the wonderful things that Duke provides the community.

I'm not quite sure. They advertise that they're a good neighbor. They advertise that they are working on renewables. That's wonderful.

It seems to me that it's a perfect opportunity now when you're wanting to relicense to step aside on relicensing until you've got the waste issue solved, until you have a better feel on it. I sure don't want waste in a train going across from here to New Mexico which is what I understand has been proposed. So I would like to see Duke as they claim to be a good neighbor to be a good neighbor and to work on some alternatives that are renewable which we have plenty of.

In South Carolina, we've got plenty of sun. So it seems to me that would be a better way of taking the people that are into this that are questioning you. It would be a nicer way to be able to say, well, you know, I understand your concern, but we are trying to do this, rather than it kind of feels like you're defending yourself. And I don't like that feeling.

I makes me even more uneasy about what might happen, what you might do. And so if you don't have anything to hide or you're not suspicious that -or you don't want to spend enough money to be able to make it safer, then show us. Show the public so we can all broadcast it. I'll be glad to broadcast it. These folks will be glad to broadcast it. Thank you.

MR. RAKOVAN: Okay. Open the floor one more time. So again, we're putting together a meeting summary of both this meeting and next week's virtual meeting. We'll be including the transcripts, the raw transcripts if you will from both meetings.

And again, we will be reacting to all the comments that we receive, both at these meetings and through the various mechanisms that I detailed earlier, as an appendix in the final document. If you wish to be on our mailing list, you can reach out to me. And again, I know that it's hard to see those on the screen, and I apologize for that.

So I'm just going to back up to where my name is. Oh, went too far. My email address -- yeah, just give me a second. My email address is lance.rakovan -- that's L-A-N-C-E dot R-A-K-O-V-A-N --@nrc as in Nuclear Regulatory Commission .gov. So again, that's lance.rakovan@nrc.gov. Please, if you want more chance. Yeah, please.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1716 14th STREET, N.W., SUITE 200 WASHINGTON, D.C. 20009-4309

MS. JONES: Oh, thanks. I haven't studied

the charts in the back. But I like charts. I like the colors. They look good. The one says the ROP action matrix assessment, the reactor oversight process action matrix. And is that created by the NRC or by your project management?

MR. RAKOVAN: Yes, so the ones on the back to the right are the ones specific to us and the environmental review. The ones on the left are some of the gentlemen that we have here, the residents that work at the plant and some of the folks from our regional office. And they can walk you through those posters once we've closed if you'd like.

MS. JONES: Thank you.

MR. RAKOVAN: Sure.

MS. JONES: Is it possible to get an ROP action matrix assessment for flood mitigation and climate change?

MR. RAKOVAN: You're going to have to ask them that. I can't answer that question. I apologize.

MS. JONES: And then I'll just finish with three words because I'm a history English major. But here I am tonight with numbers. Three words: do better Duke. Thank you.

MR. RAKOVAN: Keion, do you want to come

up and introduce yourself?

MR. HENRY: Hello. I'm Keion Henry, the Region II government liaison officer. And I wanted to address the woman in blue's comments. I apologize. I don't recall your name at this moment, but I realize that when you made your comment, you were speaking about the legislators or the legislature of South Carolina. The people that I notify would be the environmental -- the emergency -- I'm butchering the name because I'm a little bit nervous. I don't speak up this frequently.

But the emergency response organizations in the state of South Carolina, the state liaison as well, so that would be under the governor of South Carolina but not necessarily the legislature staff themselves. That's all. Thank you.

MR. RAKOVAN: Thank you. All right. Steve, would you like to come up and close us out?

MR. KOENICK: So thank you, Lance. And thank you for being here today. So on behalf of Lance and the staff, I would like to thank everyone for taking the time to be here tonight and providing your comments on our draft environmental impact statement.

Just to summarize, reiterate what Lance had talked about with the next steps. So we are --

now that we published our draft, we are taking the comments. We have -- this meeting is transcribed.

The meeting next Tuesday will be transcribed. And we will go through all of the comments and we delineate these comments and then we disposition them in -- and you can find that in the final within the appendices. So we have that meeting next week, and that's on Tuesday at 1:00 p.m. And that's a virtual meeting. So hopefully some of the people who couldn't attend today could attend next week.

MS. SWEENEY: If they're not working.

MR. KOENICK: Yes. And so with that, like I said, thank you for your comments. We will consider and address them appropriately. And with that, I'd like to wish you a happy -- oh, yes.

MR. RAKOVAN: Just didn't want him to close. Again, we've got a number of NRC folks here that can speak to the operation of the plant. So I think they're going to be hanging out kind of to the left side of the room where their posters are. And those of us that were directly involved in the environmental impact statement will be hanging out in the right-hand side of the room if there's any questions that you have or want to have discussion.

So with that, I think we can go ahead and close. So thank you very much for coming tonight.

(Whereupon, the above-entitled matter went

off the record at 8:17 p.m.)