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Title: Southern Nuclear Operating Company

Vogtle Electric Generating Plant, Unit 3

Docket Number: 52-025-LA-3

ASLBP Number: 20-967-03-LA-BD01

Location: teleconference

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2	NUCLEAR REGULATORY COMMISSION
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4	ATOMIC SAFETY AND LICENSING BOARD PANEL
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6	HEARING
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8	In the Matter of: :
9	SOUTHERN NUCLEAR OPERATING : Docket No.
10	COMPANY, INC. : 52-025-LA-3
11	:
12	(Vogtle Electric : ASLBP No.
13	Generating Plant, Unit 3) : 20-967-03-LA-BD01
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17	Wednesday, July 1, 2020
18	Teleconference
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20	BEFORE:
21	G. PAUL BOLLWERK, III, Chair
22	DR. SUE H. ABREU, Administrative Judge
23	DR. GARY S. ARNOLD, Administrative Judge
24	
25	

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10:02 a.m.

Today, we are here to conduct an initial pre-hearing conference in this proceeding in which Applicant,

Southern Nuclear Operating Company Incorporated requests an amendment and an associated exemption for its existing 10 Code of Federal Regulations, or CFR,

Part 52, combined license or COL, to construct and

operate the Vogtle Electric Generating Plan Unit 3.

Vogtle 3, one of a pair of Advanced Passive-1000, or AP1000, pressurized water reactor units being constructed at Southern's existing Vogtle facility in Burke County, Georgia was issued a COL by the NRC in February 2012. The requested license amendment concerns changes to the Voqtle 3 Appendix С, inspections, tests, analyses, and acceptance criteria, or ITAAC, and plant-specific Tier 1 information and the corresponding Tier 2* and Tier 2 information in the Vogtle 3 updated final safety analysis report, or US -- sorry, UFSAR.

Specifically, Southern asked to modify the north/south minimum seismic gap requirements above grade between the nuclear island and the annex building west of column line 1, or I -- I'm not sure,

we'll have to clarify whether that's a one or an I --141 feet through 154 from elevation feet accommodate as-built localized non-conformances in the annex building south wall. Further, because this proposed change requires a departure from Tier 1 information AP1000 into generic design document, or DCD, associated with the AP1000 certified design being used to construct the facility, Southern also has requested an exemption from the requirements of the generic DCD Tier 1 information in accordance with Title 10 of the Code of Federal Regulations Section 52.63(b)(1).

In response to a March 10, 2020 Federal Register notice of an opportunity -- I'm sorry --Federal Register hearing opportunity notice published in Volume 83 of the Federal Register at page 13,944, on May 11, 2020, Petitioners, Blue Ridge Environmental Defense League and its chapter, Concerned Citizens of Bluff collectively referred to as submitted а hearing request that included contentions challenging the Southern license amendment request. The answers submitted on June 4th and June 5th, 2020 respectively, Nuclear Regulatory Commission staff and Southern have sought for denial of BREDL's intervention petition, asserting BREDL lacks standing

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to intervene and/or has failed to provide an admissible contention. This pre-hearing conference has been convened to conduct an oral argument that will allow the participants to present their positions regarding and respond to Board questions concerning these contested matters.

Before we begin the argument, however, I'd like to introduce the Board members and have the representatives of the participants identify themselves for the record. Judge Sue Abreu is a physician with a specialty in nuclear medicine and is also a lawyer. Judge Gary Arnold is a nuclear engineer. My name is Paul Bollwerk. I'm an attorney and the Chairman of this licensing board.

We're all participating by telephone from different locations as is our law clerk, Taylor Mayhall. At this point, I'd like to have the counsel representatives for the various parties identify themselves for the record. Why don't we start with Applicant, Southern, then move to the NRC staff, and finally, BREDL. And so we can have some understanding of your circumstances for logistical purposes, I'd also appreciate if the participants would indicate whether their representatives are joining us by telephone from a common location or are, as are the

1	members of the Board, in different locations. So
2	perhaps we could start with counsel for Southern.
3	(No audible response.)
4	JUDGE BOLLWERK: And you may be muted.
5	We're not hearing anything.
6	MR. BLANTON: I'm sorry. Can you hear me
7	now?
8	JUDGE BOLLWERK: Yes, I can. Thank you.
9	MR. BLANTON: We have too many mute
10	buttons in this room, Judge. Judge Bollwerk, good
11	morning. Stan Blanton for Southern Nuclear Operating
12	Company. I have with me here Peter LeJeune, and we're
13	in a conference room with speakerphones. So we're
14	here together.
15	JUDGE BOLLWERK: All right. Thank you
16	very much. The NRC staff, please.
17	MS. EZELL: Good morning. Julie Ezell for
18	the NRC staff and my colleague, Michael Spencer, as
19	well. We are in different locations.
20	JUDGE BOLLWERK: All right. Thank you
21	very much. And then the representatives for the Blue
22	Ridge Environmental Defense League, BREDL?
23	MR. ZELLER: Yes. Good morning, Chairman
24	Bollwerk. This is Lou Zeller and the principle
25	speaker and the representative of the Blue Ridge

Environmental Defense League. I'm also executive director. Briefly on the line in the virtual courtroom are our technical exert, Arnold Gundersen. At another location, I have Reverend Charles Utley. And at another location, I have Reverend Claude Howard.

JUDGE BOLLWERK: All right. Thank you very much. I would like to note that prior to beginning this call, I asked all the participants' representatives to try to remember as they start to speak to identify themselves so that it will be clear to the court reporter who's speaking.

Also, as the participants' representatives are aware, we're monitoring the speaker lines in an effort to see if anyone drops off unexpectedly so we can take steps to try to ensure that we don't move forward with the argument until they're able reconnect. If, however, any of our eight participant representatives with speaker lines should decide to leave this conference call before it's concluded, we would ask that they inform us before dropping off so leaving the teleconference know they're can voluntarily rather than because they were disconnected.

Also, we spoke briefly about the need to

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mute your phone if you are not speaking. It does help. That will avoid the problems with papers being moved around and someone on the record or a cell phone or something else ringing in the background. So we would, again, ask you that you please try to make an effort to mute your phone. That's generally a button with a microphone on it or something like it on your cell phone or if you're using a Polycom of some kind.

Additionally regarding telephone connectivity, we made available to the participants and via the NRC's website and an agency press release information on how members of the public could access this conference by telephone on a listen-only basis. We hope that all the members of the public or others who wish to listen to this conference have been able to access the bridge line this morning. I would observe as well that a transcript of this conference will be prepared and should be available in the NRC's electronic hearing docket by next week.

As I mentioned earlier, the subject of today's oral argument will be whether BREDL has shown it has standing to intervene in this proceeding and whether either or both of its two contentions, one of which seeks revocation of Southern's Vogtle 3 COL for alleged material false statements and the other of

which claims that Vogtle 3 basemat foundation and construction factors create an unacceptable operational risk, public health and safety, frame an admissible issue statement appropriate for evidentiary hearing that would be held at a later We also may discuss a BREDL claim that its review and analysis of the Southern license member request has been improperly hindered by a lack of access to documents provided to the NRC staff for review by Southern.

As to the process that we will follow for today's argument, as we outlined in our June 8, 2020 issuance, each participant's self designated primary representative has been allotted a period of time within which to present its position regarding these matters. We will hear first from BREDL which has been given a total of 30 minutes of which it may reserve up to 10 minutes for a rebuttal presentation following the Southern and staff presentations. Southern and the staff, who will be heard from in that order, have each been allotted 20 minutes to present their arguments.

And I would note that Board members may interpose questions during the participant's presentation or wait until all the participants'

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representation -- presentations, excuse me, are concluded. We also recognize that our questions and participants' answer may consume a portion of the participants' argument time, and we'll take that into the account in enforcing the time limitations I mentioned previously.

Finally, I would observe that this matter has been fully briefed. We've read the participants' pleadings. So, as we indicated in our June 8th order, we hope the participants will focus on identifying the principle points in controversy and the information that supports or rebuts their legal and/or factual claims regarding those matters.

And as we also noted there, because this evidentiary hearing, argument is not an the participants should not attempt to introduce evidence during the argument. Hopefully, this entire proceeding will not go much beyond an hour. looks as if we're going -- if that is going to be the case, we may take a short break and then resume. that being said, before we begin with BREDL's initial presentation, I wanted to ask counsel for Southern a background question. Namely, what is Southern's currently planned schedules for fuel loading operation for Vogtle 3?

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1 MR. BLANTON: Your Honor, the current date 2 on the schedule is November 23 of this year. 3 say that because of the issues around the coronavirus, 4 the schedule is being reviewed currently. And that 5 fuel load date is one of the milestones that's under 6 review, so it could change. 7 JUDGE BOLLWERK: And what about actual 8 operation? 9 Actual operation, MR. BLANTON: 10 currently regulatory required date under the State Public Service Commission is November of 2021 for Unit 11 3 which is what this amendment -- Unit 3, all this 12 amendment involves. I think the working schedule has 13 14 attempted to build a few months of margin into that. 15 But that, again, is under review right now. 16 JUDGE BOLLWERK: All right. Thank you 17 very much. Appreciate the information. And now let's go ahead and turn to Mr. Zeller for the initial 18 19 presentation. And Mr. Zeller, I'd like to ask you how much time you wish to reserve for rebuttal. 20 MR. ZELLER: This is Lou Zeller. 21 thank you, Judge Bollwerk. 22 I would like to reserve ten minutes for rebuttal. 23 24 JUDGE BOLLWERK: All right, very good, Then you can begin your initial presentation. 25 sir.

MR. ZELLER: Very good. Thank you. This is Lou Zeller, and good morning to Dr. Abreu, Arnold, and Mr. Chairman. Thank you for the opportunity to present our petition and to intervene and request for a hearing. The issues for the panel today center on physical changes in the nuclear island of Plant Vogtle's Unit 3 still under construction. Southern Nuclear Operating Company and NRC staff claim it's just a minor construction flaw. But in reality, the measured change in the plant's nuclear island points to fundamental problems in the foundation.

With your permission, I will address, in order, the questions related to standing, expert qualifications, and contention. Number one, standing should be granted. Residents of Shell Bluff, the community surrounding Plant Vogtle on the Georgia side of the Savannah River would be those placed most at risk from a seismic accident causing radioactive releases.

SNC opposes standing in this matter, but the risk is there nevertheless. The level of risk hinges on how well buildings in and around the nuclear island are prevented from impacting one another during a safe shutdown earthquake. Southern is treating one inch as an acceptable margin during normal operations,

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but that is not the case as clearly stated in the license amendment request.

The license amendment states, quote, as described in the UFSAR Subsection 3851, the annex building is structurally separated from the nuclear island structure by a three inch minimum gap above grade. It continues, the maximum relative seismic displacement between the roof of the nuclear island and the annex building is less than two inches. This results in a clearance or gap between buildings greater than one inch during a seismic event. That's the LAR at page 3.

What this says, in other words, UFSAR requires a minimum gap, three inches, as part of the design for normal operations in order to ensure that any settlement that occurs during an earthquake does not reduce the distance to less than one inch. This reduction in the permissible gap size is inconsistent with the rationale for the three inch requirement and increases the potential for interactions between the nuclear island and the adjacent Category 2 buildings during a seismic event. Thus it raises the potential for an accident that could harm the public.

SNC finds that the maximum relative -- in LAR at page 5, the maximum relative seismic

displacement between the nuclear island and the annex building is such that the reduction of the seismic gap does not affect the required maintain one inch minimum gap during safe shutdown events. However -- that was the LAR at page 5. However, SNC does not account for the fact that more settling may occur during an earthquake and thus the proposed margin of two inches is not enough. Petitioner has presented written justifying standing and has declarations from four local residents, two of those individuals, Reverend Charles Utley and Reverend Claude Howard, both lifelong residents, are here today in the virtual courtroom. If permitted, Judge Bollwerk, they are prepared to make brief statements in support of standing. I respectfully request your permission, Chairman Bollwerk. JUDGE BOLLWERK: At this point, I don't think that's necessary, unless the other judges wish to hear it. JUDGE ARNOLD: Not I. This is Judge Arnold. And this is Judge Abreu. JUDGE ABREU: Not I. I think it's fairly JUDGE BOLLWERK:

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clear, Mr. Zeller, from the affidavits you filed and from the -- well, from the affidavits you filed that these individuals -the individuals that you presented, I guess you gave us four affidavits. Αt least one of them was within about seven miles or perhaps a little closer to the plant. I take it that's correct? MR. ZELLER: That's correct, yes.

JUDGE BOLLWERK: Okay. All right. I don't think we need then to have any other information about that at this point. Thank you.

well. All right, very MR. ZELLER: Reverend Claude Howard had a comment regarding that his brothers and sisters would get together and talk about events when they felt the group shake. And Reverend Utley said words to the effect that this is my home. From experience and understanding, he's worked for 40 years counseling students who live in the area exposed to contamination. It affects his family and his church family which continues. strives to keep his family and church members safe. So that's pretty much a synopsis of what they would have said.

In sum, the issue before the Panel center on earthquake impact and safety factors which I have

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detailed. Therefore the proximity factor, proviso granting standing for individuals within a 50-mile radius is met. Those are members who live and work less than half that distance away from Plant Vogtle. Also we note that although standing is disputed by Southern Nuclear Operating Company, NRC staff does not oppose granting a standing in this matter.

Okay, I'll move on to Southern Company disputes Gundersen's expert witness. Southern Company states that Petitioner fails to establish how Mr. Arnold Gundersen is qualified to provide expert testimony. That's SNC's answer at 11.

It is hard to imagine a more qualified information than Mr. Gundersen who has an advanced degree in a nuclear engineering degree, was a licensed nuclear reactor operator, performed structural engineering assessments, rose to become a senior vice president for a nuclear licensee, and is sought by the industry itself provide nuclear to expertise. Petitioners replied to SNC includes a detailed litany of Mr. Gundersen's qualifications. I'll now move on to our contentions.

Number one is license revocation for material false statements and Contention No. 2, base mat foundation and construction package create

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unacceptable operational risk to public health and safety. I will dwell on Contention No. 2 primarily. I understand or I've come to understand that license revocation may be outside of the hand of the Atomic Safety Licensing Board in this matter. So I will leave that as it is.

Regarding Contention 2, in their license amendment request, Southern Company claims that change in the current design requirement is localized, reducing a three inch gap between the nuclear island and the annex building two and one sixteenth inches and that it does not affect the relative displacement between the roofs of the two buildings or the gap below grade. This is not the first request from the company for such an amendment to its combined operating license. Is the seismic gap an isolated event or a series?

A license amendment granted by the NRC in 2018 to Southern Nuclear for Plant Vogtle stated, changes relax -- the proposed changes relax the minimum gap requirements above grade between the nuclear island and the annex building, turbine building, and remove the minimum gap requirement between the nuclear island and the RAD waste building. That's from the license amendment request of 2018, 18-

002. The requested changes were from ITAAC and corresponding Tier 1 information.

The exemption allowed changes in the DCD, the Design Control Document, and the combined operating license. The 2018 license amendment assuredly addressed the same issues posited in the 2020 amendment, stating separation is provided between structural elements of the turbine and annex buildings and the nuclear island structure. This separation permits horizontal motion of the building in a safe shutdown earthquake without impact between structural elements of the buildings. That is from the LAR of 2018.

stated, quote, the latest AP1000 generic 2D SASSI analysis shows that the maximum relative seismic displacement between the annex building and the nuclear island is 0.95 inches and between the turbine building and the nuclear island is 1.04 inches. In 2020 comes another request for license amendment at Plant Vogtle asking the Commission to grant further narrowing of the distance between the nuclear island and adjacent building.

So is the 2020 nonconformance a one-time event? Clearly not. Is there reasonable doubt that

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the causes driving the need for amendment after amendment, are spent? Clearly yes. What is that cause? Uncertain. Clearly, further independent analysis is justified.

Comparing apples to oranges, issuing a differential settlement, both SNC and NRC confuse or mischaracterize BREDL's argument regarding the occurrence of dishing. The UFSAR acknowledges that the differential settlement under the nuclear island foundation could cause the base mat buildings to tilt. Differential settlement shows up again and again. That's NRC's answer I quoted from at 24.

Further, the NRC states, design-specific parameters for Vogtle Unit 3 address expected settlement citing AP1000 DCD Section 3A542. But the discussion centers on differential settlement and bounding parameters for the nuclear island. The stated final safety analysis report and plant-specific design control documents cited by NRC discuss a differential settlement throughout, not dishing.

The difference is critical to understanding the safety concerns raised in our petition. Differential settlement is linear. With differential settlement, the base is not level but it stays flat. Dishing is different. It is curved.

Dishing creates unanalyzed stresses.

Our petition states that to dismiss concerns about one phenomenon by confusing it with a similar but critically different process would sidestep the safety issues we have identified. In this license amendment request, Southern Company states, nuclear island base mat has deflected more at the center and less at the perimeter. It continues.

Theoretically -- this is Southern Company.

Theoretically, this suggests that the nuclear island tends to tilt away from the annex building. That is from the license amendment request 20-001 at page 8.

In this application, Southern Company has admitted that the sinking is not linear, more at the center, less at the perimeter. Arnold Gundersen made reference to such in his declaration supporting our petition for intervention and it is part of Contention 2.

However, SNC attempts to limit the scope to a change in wall and not to the dishing of the base mat. They brought up dishing without using the term in the license amendment request. They admit that tension at the bottom of the base mat is different than compression at the top. According to SNC, this is representative of dishing. That's from Southern

Nuclear Company's answer at 21.

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Nuclear island basemat is sinking more in the middle. We would not have known that without this license amendment request. There still is no publicly available data on the rate of sinking, but we now know as a result of the license amendment request that it is nonlinear. An Applicant must satisfy requirements of 10 CFR 50.90 and demonstrate that the requested amendment meets all applicable regulatory requirements and acceptance criteria and does not otherwise harm public health and safety nor the common defense and security. And 10 CFR 52.97(b) controls NRC's review of license amendment. A mere theory about why buildings in the nuclear island are shifting does not meet these requirements.

Further, a propriety claim screens information without public scrutiny. NRC staff and the Structural, Civil, Geotech Engineering Branch conducted an audit during March 10 to April 30. SNC and Westinghouse made those documents available via a portal of Westinghouse Electric Company electronic reading room. This is a memorandum from the NRC.

This non-docketed information, which is unavailable to the public, was used by NRC to, quote, evaluate the acceptability of the proposed changes to

the license, end quote. NRC spent 400 dollars reviewing Vogtle seismic analysis, but took no documents out. Their conclusion, quote, based on the review of information provided by the internet portal, the NRC did not identify any outstanding issues, from the memorandum of the audit at page 3.

Also, NRC reached a no significant hazards determination. We understand that NRC's no significant hazards consideration is not subject to challenge in adjudicator proceeding. Nevertheless, this Petitioner has filed a FOIA request which is in process.

On Friday, we received word that, quote, records that are subject to your FOIA request, NRC 2020-000234, had been sent to the submitter/licensee for review of records that originated from their agency. Once we receive the respective agency's disposition of the release of these records, we will continue processing your request. So that is in process.

Finally, the Atomic Safety Licensing Board may provide relief short of license revocation. As you know, the license amendment may be approved or rejected by the NRC or withdraw by the licensee. This is in many places, including in the Nuclear Energy

Institute's Revision 2 guidance. The Atomic Safety Licensing Board alone has the power to initiate the level of review required to ensure public safety by withholding approval of the license amendment requested by Southern Nuclear Operating Company. Dr. Abreu, Dr. Arnold, and Chairman Bollwerk, thank you.

JUDGE BOLLWERK: I have just a couple questions at this point, and I may have some others later. But let me just ask you briefly a couple things that you talked about. You mentioned, I guess, Contention 1 that you did not have a lot more you wanted to say about it given the presentations that have been made about the authority of the Board to revoke the license.

But much of the contention appeared to be based on the assertion that the walls in question were finished as long as five years ago. And I guess Southern and the staff made a point in their pleadings or answers that, that fact was not the case. A lot of it wasn't completed until 2019. And your reply didn't say anything about that. I just want to see if you had anything further you wanted to say about that.

MR. ZELLER: Yes, thank you, Judge Bollwerk. This is Lou Zeller. And part of the problem for us at least from the beginning has been

their keeping proprietary of the scheduling for the construction at Plant Vogtle Unit 3. In response, one of the answers pointed to a public website maintained by Georgia Power and Southern Nuclear Company which had some very beautiful photographs the constructions which was ongoing. But they were not something which you could rely on to say, happened and when. So we're still at a loss determine the exact timing of it because information is kept proprietary of the schedule of what happens at Vogtle. So therefore, we're looking for further information.

JUDGE BOLLWERK: All right. I guess your reply also indicated you've been contacted by the Section 2.206 coordinator, that the staff had referred your concerns to -- so that you could use the 10 CFR Section 2.206 process. Can you tell me anything about the status of that?

MR. ZELLER: Certainly. This is Lou Zeller, and the 2.206 unit did contact me. And we've had a brief discussion as recently as last week. The discussion is ongoing. I would add that we have been involved in 2.206 enforcement petitions in the past and with no -- I'm not saying anything bad about any of the people there. But it is a leaky vessel for

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hope because deadlines are oftentimes missed and it does not have the gravitas of the appearance of a hearing like the one we're having today before the Atomic Safety Licensing Board. So we much prefer to continue with this process today, and we'll hold judgment on the 2.206 pending how the discussions go with that unit.

JUDGE BOLLWERK: All right. Thank you. One other question. BREDL had previously been involved in a couple of licensing proceedings before licensing boards dealing with the Vogtle facility and other license amendments that had been requested. And there were two decisions that were issued, LPB 16-5 and LPB 16-10, one dealing with the wall thickness, the other dealing with hydrogen igniters.

And in both of those cases, the licensing board indicated that BREDL didn't challenge the exemptions associated with the license amendment request at issue. Your petition contains challenges to the license amendment request with those cases but said nothing about the extension request. Are you contesting the exemption request here? Both the licensing boards in those previous cases indicated you were not contesting the exemption.

MR. ZELLER: We are. We mean to contest

1	them, yes, Judge Bollwerk.
2	JUDGE BOLLWERK: But you certainly haven't
3	said it in your petition.
4	MR. ZELLER: Well, I guess maybe that's
5	that may be true, explicitly.
6	JUDGE BOLLWERK: All right. Thank you.
7	Let me just see if either Judge Abreu or Judge Arnold
8	have any questions at this point for Mr. Zeller.
9	JUDGE ARNOLD: Yes, this is Judge Arnold.
10	I have one question. You mentioned something about an
11	earlier license amendment that had to do with wall
12	spacing, correct?
13	MR. ZELLER: That's correct, yes.
14	JUDGE ARNOLD: I did not find anything
15	about that in your petition. So is this a new
16	argument on your part?
17	MR. ZELLER: There were if I understand
18	the question correctly, this is Lou Zeller, there were
19	two previous license amendment requests which BREDL
20	challenged at Plant Vogtle. Those were separate
21	proceedings, one on cement tolerances, the other one
22	on hydrogen igniters. I'm not aware of any
23	association between those two things except that they
24	were in the same place for the same reactor.
25	JUDGE ARNOLD: Well, no, I'm just asking

1	because you discussed them just now. And I don't see
2	anything about them in your current petition
3	concerning this license amendment request. So are you
4	adding a new argument to your discussion?
5	MR. ZELLER: This is Lou Zeller. No, this
6	is the discussion or the inclusion of license
7	amendment request 18-002 is part of the record of this
8	proceeding. It was raised, in fact, by NRC staff in
9	their answer, for example. And it is one that we did
10	not challenge back in 2018.
11	JUDGE ARNOLD: Okay. No more questions.
12	JUDGE BOLLWERK: So I take it, Mr. Zeller,
13	your argument is you're incorporating that. Now it's
14	part of your argument because the staff raised it?
15	MR. ZELLER: Yes, so that there is more
16	this is an ongoing process in terms of the base mat
17	dishing and continuing or a continual process which
18	required at least one exemption and license amendment
19	in 2018. And that was granted, and that's in the
20	record of this proceeding. And now they're coming
21	back to the bar for another license amendment. That's
22	the point.
23	JUDGE BOLLWERK: All right. Thank you.
24	Judge Abreu?
24 25	Judge Abreu? JUDGE ABREU: I have no questions at this

time.

your turn.

JUDGE BOLLWERK: All right. Well, at this point, I think we'll go ahead and move on to Southern. And I should say, Mr. Zeller, you obviously have some time for rebuttal. It's also possible that some of the matters that you've raised in your direct argument may become the subject of some questions after we've heard from all the parties' arguments. So we'll leave it at that at this point. Thank you very much for your presentation, sir.

MR. ZELLER: Thank you, Judge Bollwerk.

JUDGE BOLLWERK: I guess Mr. Blanton, it's

MR. BLANTON: Yes, sir, Judge. Thank you. This is Stan Blanton for Southern Nuclear. Southern Nuclear certainly appreciates the opportunity to express its position on this petition to intervene with the Board. My plan, Judge, is to give sort of an overview of our argument and then address each of these contentions in slightly more granular level of detail.

Before I do that, I'm going to try to respond as much as I can to some things I heard Mr. Zeller say in his argument. There may be some cleanup at the end. And then my hope is that there's plenty

1 of time for the Board to ask questions after that. Is that acceptable, or are there any questions right now? 2 JUDGE BOLLWERK: It's certainly acceptable 3 4 Judge Arnold or Judge Abreu, any comments you 5 have? JUDGE ARNOLD: That's fine with me. 6 7 JUDGE ABREU: That sounds fine. 8 JUDGE BOLLWERK: Okay. Then Mr. Blanton, 9 why don't you proceed. 10 MR. BLANTON: Yes, sir. I want to make clear and it sounds like the Board is clear. But I 11 want to make clear because of something I just heard. 12 The license amendment request at issue here -- and if 13 14 it's okay, I'm going to refer to the license amendment 15 request as a LAR. 16 LAR 20-001 seeks only to reduce 17 minimum distance for a portion of the auxiliary building and annex building walls from three inches to 18 19 two and one sixteenth inches in both the UFSAR and the associated ITAAC. I think I heard Mr. Zeller in his 20 argument say that something to the effect that the 21 amendment was to make the minimum distance one inch 22 under normal operating conditions. 23 That's 24 accurate. That's what he said. The one inch that's referred to in the 25

amendment is the clearance between the walls during a safe shutdown earthquake event. The amendment in question seeks only to reduce that portion of the auxiliary building or the minimum distance of that portion of the auxiliary building and annex building walls from three to two and one sixteenth inches, less than an inch of change. That's all of our request, and the only issues that are within the scope of this proceeding are those that are material to whether the distance between the walls as changed will provide reasonable assurance that they will not interact with each other as a result of the ground motion produced by the safe shutdown earthquake.

This LAR does not request a change to the one inch minimum distance between the walls that is specified in the FSAR to be maintained during the SSE. Also, the LAR does not seek a change to the settlement parameter for the AP1000 set out in the AP1000 certified design and incorporated by reference in the Vogtle Unit 3 license. Intention regarding settlement or structural issues that are not material or whether affected portions of walls the of the buildings will remain separated during the SSE are simply not material to this LAR and are not within the scope of this proceeding.

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In fact, BREDL's contentions, as originally filed has contrasted to their argument today, barely make reference to the changes requested by LAR 20-001. To the extent they do, they utterly fail to draw any logical connection between their contentions and issues such as the stiffness of a respective wall which are material to the amendment request. There is no explanation in the petition of how the dramatic but unquantified and unsupported allegations regarding the settlement of a foundation of the nuclear island make it more or less likely that the buildings would interact during a safe shutdown earthquake nor could they since both LAR and the undisputed publicly available information regarding Vogtle the settlement of the nuclear island demonstrate that it is well within the parameters approved by the NRC and the AP1000 design certification.

Without some logical connection to the findings NRC must make to approve the changes requested by LAR, the contentions are outside the of this proceeding. Moreover, as in our brief, the allegations discussed in contention consist solely of bare assertions without the support required to create an issue of fact and in

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refuted by undisputed publicly many cases are available information. although Further, submits the declaration of Mr. Gundersen, there is nothing in Mr. Gundersen's discussion that education and experience would suggest he is an expert in the complex fields of structural or geotechnical engineering which we submit would be required to give an opinion about these issues in this matter.

Finally, BREDL has failed in its petition to establish representational standing on behalf of Reverend Utley and Howard and the other individuals who filed affidavits. Not because those individuals are not interested in the safety of Plant Vogtle as we all are, but because standing in this proceeding cannot be based merely upon proximity or interest but must be based on a showing by the Petitioner that the specific changes at issue create obvious potential for all site consequences. BREDL has not even attempted to make such a showing as it relates to the specific change requested by this amendment.

BREDL, while pro se, is an experienced litigant before this Board and the Commission and should be well acquainted with those standing requirements. It is appearing pro se and should not excuse its failure to properly establish its standing.

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Now I'd like to turn to and address Contention 1 in more detail.

Contention 1 alleges that SNC has somehow supplied false or incomplete information to the NRC. The contention is grounded on an allegation that the walls in question were constructed five years ago. And for some unexplained reason, Southern Nuclear decided to wait until now to submit this LAR.

The contention seeks the revocation of the Vogtle license. Obviously, as the Board has already pointed out, a license, and as I think Mr. Zeller has conceded, a license amendment request is not the proper avenue for a Petitioner to purse an action to revoke a license. 10 CFR 2.206 is the proper avenue for such a request, not this proceeding. So the request is out of scope for that reason alone.

Second, the linchpin in Petitioner's contention that SNC has somehow sat on information regarding the nonconformance motivating the LAR for five years is demonstrably false. The walls in question were only constructed in 2019. The survey revealing the nonconformance were done in 2019 and confirmed in 2020.

These facts are established by any number of publicly available sources that are listed in

detail in our answer which include NRC inspection reports that are publicly available. Petitioner has presented no information to dispute these facts. Moreover, the dates of the walls in questions were constructed as a matter of fact, not expert opinion.

BREDL cannot alter the undisputed facts regardless of the qualifications or allegations of its witness. And there's no factual basis in the allegation to support that the walls were constructed in 2015. The result, Contention 1 is out of scope, it's unsupported, and it's inadmissible.

Turning to Contention 2 in this discussion The gist of Contention 2 is that Vogtle Unit 3 -- excuse me -- the Vogtle Unit nuclear island quote, sinking or dishing. foundation is, The contention alleges that the nonconformance that is the subject of a LAR as a result of this dishing. Ιn essence, that the COL -- and argues in essence that COL should be suspended until the, quote, structural integrity, close quote, of Vogtle Unit 3 includes not only the Voqtle COL but also the AP1000 is effectively re-reviewed certified design reapproved by NRC.

Again, the relief requested by BREDL in contention was obviously available in this proceeding.

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In any event, the relief would stand the finality, accorded certified designs, and issues resolved in COL proceedings on its head. Apart from that, however, the contention is based on a collection of misunderstandings, misstatements and unsupported bare assertions that fail to satisfy the NRC's contention admission requirements.

First and perhaps most importantly, Contention 2 is based on a demonstrably false premise that differential settlement for the nuclear island foundation and adjacent buildings was ignored in LAR 20-001 and was, quote, not anticipated in the AP1000 By the contrary, the LAR expressly includes an evaluation of differential settlement. Moreover, the AP1000 DCD, which is incorporated by reference in the Vogtle FSAR, not only anticipates differential settlement of the foundation. It provides parameters for settlement within which no further evaluation of the settlement is required.

The safety evaluation report for 18-002, and I'm glad to hear Mr. Zeller is aware of the record for 18-002. But that safety evaluation report prepared by NRC staff demonstrates that differential settlement at Vogtle Unit 3 is well within the parameters of a DCD, and is in fact 40 percent less

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than what the AP1000 model predicts due to the stable characteristics of the Vogtle site. The petition provides no factual support to review this facts.

And I would say that the distinction we've heard this morning between, quote, dishing included differential settlement is not the petition and constitutes evidence trying be presented in this contention admissibility proceeding which is not permitted. In fact, the Vogtle DCD -- or the Vogtle FSAR which incorporates the AP1000 DCD does evaluate many different construction sequences which evaluate settlement across the foundation, do including greater stresses in the middle of foundation than at the perimeter. This is precisely how Mr. Gundersen defines dishing, and it's been and approved part of the reviewed as certification process and is not subject to challenge in this license amendment proceeding.

Certainly, the argument that the current condition of localized nonconformance is not the asbuilt condition -- the quote, as-built condition of the subject walls. Neither makes sense nor is it supported by anything other than speculation. There's no evidence other than Mr. Gundersen's bare unsupported assertion that the affected area of the

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auxiliary building wall is not in the same condition as it was when construction was completed. In any event, the as-built condition simply means you have the actual condition of the wall at the time its inspected.

As contrasted, we have the design configuration. Petitioner's arguments regarding whether the wall is in its, quote, as-built condition is a red herring. It demonstrates their lack of experience with structural concepts.

Absent evidence that the differential settlement of the Vogtle nuclear island and annex building not only exceed the parameters approved in the AP1000 DCD but also adversely impact requirement that the walls not interact during a safe shutdown earthquake. Settlement is simply relevant to the pending license amendment request. The AP1000 DCD makes clear that settlement within the parameters does not affect the safety function of the equipment in the nuclear island. That's the certified design by the NRC.

Petitioners cannot challenge that DCD provision or the DCD settlement parameters in this license amendment proceeding. There's absolutely nothing in the contention or the record to suggest

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that differential settlement of the nuclear island or the annex building exceed or is rationally expecting to exceed these design parameters that were approved NRC. To the contrary, the settlement the evaluation in the LAR clearly states that settlement survey data for 2019 suggest that long-term differential settlement of foundations should relatively small or a thick layer of engineered backfill between the blue bluff morrow bedrock and the 6-foot thick reinforced concrete foundations of the Petitioner has provided nothing of nuclear island. substance to refute that evaluation.

Although the Petitioner has made a general request for information supporting the LAR -- and now I'm going to turn to the issue of what information Petitioner has available to it. Although Petitioner has made a general request for information supporting the LAR, there's no contention of omission in the petition asserting that the LAR lacks necessary NRC conducted a sufficiency review of information. the license amendment request and determined that the technical evaluation included in the LAR was adequate and it's neither challenged nor challengeable. acceptance review is neither challenged or challengeable.

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The failure of the Petitioner to assert a contention of omission makes any complaint about lack immaterial. detailed information Ιn short, dramatic language does not substitute for the lack of supporting information and a material contention under NRC's rules. Finally, we're going to address -- or we're going to address Mr. Gundersen's qualifications which we have challenged in petition to intervene.

Issues of structural integrity of especially in structures, the context of the interaction with soil vibration during a safe shutdown earthquake are among the most complex and theoretical issues confronted in the approval of a standard nuclear plant design and the licensing of a nuclear plant site. I remember well, Judge Bollwerk, the hearing we had on these issues in the ESP and COL This is truly an area where expertise is necessary in order to provide meaningful opinions to an Atomic Safety and Licensing Board.

At a bare minimum, the Board should expect the witness' credentials to include degrees in structural or geotechnical engineering and direct hands-on experience in dealing with structural and seismic issues. Mr. Gundersen's credentials,

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impressive though they are in some areas, evidence no such training or experience. Certainly, managerial relationships with specialists in a discipline does not convert the manager into an expert in each of the disciplines overseen and reliance on materials found in literature or the internet also don't substitute for professional credentials.

Just as an example, and with all due respect to Mr. Gundersen, in paragraphs 36.5 and 39 of Mr. Gundersen's declaration, he expresses conclusion that this amendment concerns two 12-foot high walls when the LAR itself makes clear that we are really dealing with a 12-foot vertical span in an approximately 50-foot high wall, most of which, both above and below the nonconformance, maintains the 3inch gap required by the design. A cursory review of the FSAR or the DCD would have revealed that the two walls in question are approximately 50 feet high, not the 12 feet that Mr. Gundersen concludes. It is not too much to ask the witness proffered as an expert, to understand such basic facts.

Nor is it enough for Mr. Gundersen to cite the work of others or in one case, the New York Times.

If BREDL wants to rely on the opinions of those individuals, they need to provide a declaration from

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them, address the specific issues raised by this amendment request and demonstrate their qualifications as an expert. Otherwise, the allegations of the declaration are no more than speculation of a lay witness.

Finally, I'll address standing. It's clear that in а license amendment proceeding, proximity alone does not establish standing. contention must go further and provide some plausible or credible causal change between the change requested by the amendment and the potential for offsite consequences. Although the NRC staff correctly notes that the allegations establishing standing are a separate question from whether they are meritorious, the Petitioner is no less required to provide some logical connection between the change requested and the offsite consequence asserted.

BREDL has failed to do that. Here, Unquantified and unsupported allegations that the foundation of the building are, quote, sinking, do not logically lead to any risk of damage to the buildings damage to the reactor as BREDL speculates and certainly don't directly address the change requested bv this license amendment. Without causal connection between the requested change and

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offsite consequences, there is no standing, notwithstanding these individuals very understanding interest in the safety of Plant Vogtle. I think that's all I have, Your Honors, and I'd be happy to respond to any questions or try to.

JUDGE BOLLWERK: This is Judge Bollwerk. Thank you, Mr. Blanton. I do have some questions. Let's start with standing. That's the last matter you dealt with. So on its website, the NRC has a glossary terms which defines auxiliary building as building at a nuclear power plant which is frequently located adjacent to the reactor containment structure and houses most of the auxiliary and safety systems associated with the reactor, such as radioactive waste chemical and volume control systems, systems, emergency cooling water systems. I'd be interested in any information to can give us about what equipment or operations are in the auxiliary building that's the subject of the license amendment in the exemption request.

MR. BLANTON: Well, I think you've done it yourself, Judge. They are they support systems for the equipment in containment, and there are any number of safety-related systems in that auxiliary building. Our argument is not based on the lack of safety

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45 1 significance of the auxiliary building. 2 JUDGE BOLLWERK: Okay. Just out 3 interest, what are the equipment and operations that 4 are in the annex building subject to the license 5 amendment and the exemption request? Yeah, the annex building 6 MR. BLANTON: 7 tends to house -- first of all, the auxiliary building is a seismic Category 1 building which means it has to 8 9 survive a safe shutdown earthquake. The building is a seismic Category 2 building which means 10 that it cannot interfere with a seismic Category 1 11 building during a safe shutdown earthquake. 12 annex building houses -- again, it's a pretty large 13 building and it has a lot of stuff in it. But it has 14 15 things like labs. It has low-level radioactive waste, 16 think, storage maybe. Whereas the auxiliary 17 building houses everything from a control room to any number of different sorts of safety-related equipment. 18 19 JUDGE BOLLWERK: All right. Can you say anything about the equipment or operations that are in 20 the annex building and the auxiliary building at the 21 22 portion of the wall that's in controversy here,

somebody a question about that, Your Honor.

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exactly what's there?

MR. BLANTON:

I'm

I'd probably have to ask

46 1 sorry. 2 Okay. JUDGE **BOLLWERK:** One other question. When I did my introduction, I talked about 3 the proportion of the wall. 4 Is that -- were we 5 talking about -- hold on one second here. Is that -well, I guess the question is, is that an I or a Roman 6 7 numeral one that's talking about that portion of the wall? 8 9 MR. BLANTON: Judge, I asked BREDL the 10 same thing when I started working with this, and I believe that's Column I. 11 JUDGE BOLLWERK: Column I. So it's the 12 Okay. Thank you. 13 letter I. 14 MR. BLANTON: And that sort of -- if I can describe it -- this is difficult to describe over the 15 16 But the area of nonconformance is actually 17 coming from the auxiliary building. Okay? So there's slightly less than one inch of the auxiliary building 18 19 that bows out, and it's about -- I think about 40 feet 20 up from grade. And so it runs in a -- I guess an east to west direction to basically the corner of the 21 auxiliary building. 22 23 JUDGE BOLLWERK: So it's the auxiliary

building, not the annex building, that's the one

that's bowed?

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MR. BLANTON: Correct.

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JUDGE BOLLWERK: Okay. And you had mentioned but you dropped off just at the point you said the wall. Did I hear you say 30 feet high rather than 12 feet?

The wall in question --MR. BLANTON: there are different elevations for both of these buildings based on where the roof line is. But it's my understanding that the way in question starts at about 100 feet of elevation and goes up to about 155 feet of elevation. So the orsix area of nonconformance starts about 40 feet and ends about three feet below the roof line.

you say and I know it's Southern's position that a safe shutdown earthquake will not cause a seismic gap between the auxiliary building and the annex building to be compromised. But if an event were to occur, if the wall of the annex building breached the opposing auxiliary building wall, what would be the potential impacts of such an event in terms of safe operations or radiological releases?

MR. BLANTON: Well, I'm told, first of all, that in the area of the -- well, first of all, the annex building, you've got restrooms and hallways

in the vicinity of the nonconformance in the annex building. As far as the question about what would happen if the walls interacted during a safe shutdown earthquake, our position is not that, that would not be a safety consequence from that. I mean, I don't know that we've analyzed it, but that's not what our standing argument is based on. Our standing argument is based on the fact that the Petitioner has made no such case, and this hearing is not the place to do that.

JUDGE BOLLWERK: All right. I mentioned to Mr. Zeller the two previous Vogtle license amendment cases back in 2016. And in both of those instances, the licensing board found that BREDL had standing to intervene. I'm recognizing that both standing holdings were based on factual circumstances presented in those cases that involve containment material, wall thicknesses, and hydrogen igniters.

And in the case of LPB 16-10, there was an appeal to the Commission. The Commission declined to address a standing holding. But you really haven't made any attempt to discuss or distinguish those cases. What's your position on those cases? Are they distinguishable, or were they wrongly decided? What's your position?

1 MR. BLANTON: Yes, sir. They are. In 2 each of those cases, the contention -- I'm sorry. 3 (Simultaneous speaking.) 4 JUDGE BOLLWERK: Are they distinguishable 5 or wrongly decided? I guess that's my question. BLANTON: 6 MR. They're distinguishable. 7 We're not arguing --8 JUDGE BOLLWERK: Okay. 9 -- if they're wrongly MR. BLANTON: 10 In both of those cases, the contention was 11 much more closely related to the change being requested than here. In one of those cases, we had 12 argued that essentially that the offsite -- and really 13 14 in both of them, that the offsite consequences alleged 15 were either speculative or had such low probability 16 that they really weren't real offsite consequences and 17 did not satisfy that standard of sort of a plausible, credible risk of offsite consequences. And in both 18 19 those cases, obviously the Board disagreed with us. 20 Here, our argument is different, is that the Petitioner has failed to even try to connect the 21 offsite consequences it alleges with the particular 22 change in question. If you look at Mr. Gundersen's 23 24 affidavit and the contention, it is much more in the

nature of a failure of the nuclear island foundation

that causes some severe damage to the nuclear island structure itself due to settlement rather than the walls interacting during a safe shutdown earthquake.

They barely mention the distance between the walls and their contention or in Mr. Gundersen's declaration. It's all about the foundation. And our position is they've at least got to tie their offsite consequences to the particular change being requested which is a very small change in this distance between -- minimum distance between the two walls -- between a portion of the two walls.

All right. JUDGE BOLLWERK: One last standing question. If you look at the staff's NUREG 800 standard review plan, Section 14.3 concerning inspections, tests, analyses, and acceptance criteria, the ITAAC review responsibilities, it indicates that Tier 1 information is that portion of the designrelated information contained in the generic design control document, the DDC -- DCD, excuse me, that's approved and certified by design certification rule and should include, quote, the top level design features and performance characteristics, unquote, that are, quote, the most significant to safety, unquote. And that's from the standard review plan at page 14.3-16.

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As is the case for both the previous Vogtle LAR cases, the license amendment exemption here involves a change to Tier 1 information. Isn't that a strong indication of the potential safety significant of requested changes? It's something that needs to be taken into consideration in standing?

MR. BLANTON: Well, certainly if they had made a contention that addresses our amendment, yes, And believe me, we are not contending that change to an ITAAC does not have significance. It does, and we can see that. That's the reason we filed the LAR is because you couldn't address this under Tier 2. So yes, it has safety consequences that just because an amendment has safety consequences does not necessarily, we would propose, confer standing on individuals without the necessary showing of a causal link to the offsite consequences from that specific change, not from some general risk.

JUDGE BOLLWERK: All right.

MR. BLANTON: It's not -- to put it another way, I would contend that it's not up to the Board and it's not up to the parties other than the Petitioner to divine their standing from the petitions and the underlying regulatory documents. They're supposed to do that themselves. And in this case,

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JUDGE BOLLWERK: All right. Thank you. Let ask you а couple questions related Contention 2. Under the settlement evaluation portion of the LAR at page 8, Southern makes a statement. From a practical perspective, as construction load inducted settlement occurs, even if walls were to lean towards the gap, construction means and methods require that as wall construction progresses upwards, walls are installed at original design location offsetting any minor tilt that may have occurred in the walls below, effectively minimizing building tilt induced by the short term settlement.

Now I may be -- you mentioned the fact that think Mr. Zeller doesn't have a lot Ι construction knowledge. I think you put it as lack of expertise with construction concepts, and I may be displaying the same thing here. But what this seems to suggest is that if the wall position is -- wall position, excuse me, is monitored so as to maintain the appropriate vertical wall placement to avoid any wall lean during construction. didn't Why this identify approach compensate for the and nonconformance with the annex building that caused the seismic gap problem? In other words, why did the wall

end up bowing out if you were monitoring it all the time?

MR. BLANTON: You know, that's a good question, Judge, and you've hit on the necessity of this license amendment. Although we don't deem it material to this LAR and we're certainly not trying to introduce evidence here, the way these walls are constructed or in phases as NRC staff has pointed out and the concrete is poured into a stay in place form while it sets. And in this particular case, the belief is that one of those stay in place forms bowed out slightly while the wall was being poured and while it hardened and allowed this less than one inch bowing out of the wall and in the encroachment.

So it wasn't a situation where the wall was leaning towards the -- into the gap and they poured it anyway. The wall was plume. They poured the wall. And while the wall hardened, the concrete slightly bowed. Does that make sense?

JUDGE BOLLWERK: I understand what you're saying, yes. But I guess the LAR also indicates that the -- the discussion portion of it indicates -- the survey data also indicates a foundation deflection contour in the annex building is uniform in the vicinity of the nuclear island which did not result in

tilted parameter structures toward the nuclear island. So I guess with respect to the annex, you're saying that one is straight up then?

MR. BLANTON: Well, we're saying that some the data collected so far indicate that that building in itself, which is -- and again, settlement was anticipated and approved in the design -- that that annex building is basically settling uniformly at the perimeter so that there's no even indication of a tilt one way or the other. The nuclear island, the settlement data indicates that it's settling somewhere more in the center than at the perimeter. emphasize that the settlement of both of buildings are both very small and a fraction of what the design limits are and that the reference to the tilting of the wall of the nuclear island theoretically if it were to tilt, it falls away from the gap.

There's not -- first of all, the tilt would be almost imperceptible to the human eye, and there's no -- the amendment does not take the position that it is tilting, only that it would tend to tilt away from the gap to the extent it did. The settlement evaluation is presented in the LAR to support the safety of the reduction in the minimum

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distance precisely because those two walls are not leaning toward each other.

JUDGE BOLLWERK: All right. Thank you. And Judge Abreu and Judge Arnold, I haven't forgotten about you. Let me finish up with a couple other questions, and then I'll turn to you if you have anything at that point. I want to ask you a couple questions about document access from -- relative to Southern's position and sort of its involvement.

So the BREDL claim is basically that it was not provided with, quote, complete engineering analyses or accurate information provided for review by Southern, and that's from their petition at 6. And its FOI request is described in its reply, which is the reply of one no one, seeks access to documents, data, and calculations necessary for review of the LAR regarding seismic gap and any documents, data, and calculations regarding the analysis performed by the NRC audit team.

So let me ask you a question first about the Southern February 2nd, 2020 license amendment request. It provides no references in support of the amendment, and that's the enclosure of the LAR that has a discussion at page 14. It has no -- quote-unquote, no references, but it refers to a generic

AP1000 system for ---

OPERATOR: Hello, this is the conference operator, you signaled for assistance?

JUDGE BOLLWERK: And that's a generic one as well as a site-specific SASSI analyses, including a site-specific analysis that confirmed recent building structure changes do not have a significant impact on a result of the relative displacement between the annex and the auxiliary buildings. And that's the LAR enclosure, the analysis at pages 6 and 7. And it also has Vogtle 3 settlement survey data that's referenced, at least made reference to, which is at page 8.

So there are those general references to documents that apparently support the position that Southern takes in the license amendment request, although there's no specific citation to them in terms of where they're at or specifically what they are. The staff's 5/26 audit, the May 26th audit report, which is the Enclosure 2 has Table 1, makes reference to six documents that were made available to the NRC staff for review via Southern portal but were not retained by the staff so it's become agency records. Are any of the documents -- the SASSI analyses and the survey data that's referring to the LAR, do those

coincide in any way with those six documents that the staff looked at as part of the audit?

MR. BLANTON: Well, that was a long question, Judge.

(Simultaneous speaking.)

JUDGE BOLLWERK: It's actually a pretty simple one. The LAR makes a couple of references to SASS analyses and also to some survey data. And the audit report on page -- Table 1 has six documents that are listed. I'm just trying to find out if those are the same or different or you don't know.

MR. BLANTON: I think if I recall the documents listed on the audit report, it certainly included settlement data. And the NRC has reviewed that and found that to be, I think, at least sufficient for it to continue to review the LAR. The SASSI model itself, I think it's always proprietary to Westinghouse and therefore is not publicly available.

I would just suggest and remind everybody that the same condition existed with respect to that SASSI model when NRC accepted it for the purpose of a design certification approval. So it's the same SASSI model that was approved for use by the NRC during the DCD. NRC certainly has access -- NRC staff certainly has access to the results of the model in doing its

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It's determined that the license amendment license amendment request itself sufficient for docketing. It's been docketed. The decision has to -- the license amendment is required to be based on docketed information. So if any additional information is necessary, NRC will docket that information before it makes a decision. And that whole process of NRC review is really not at issue it's under Board and Commission The NRC staff's review of the license precedent. amendment, that process is not subject to challenge here in this license amendment proceeding.

JUDGE BOLLWERK: All right. So let me ask you one other question about page 24 of Southern's answer. It has the following statement. However, Mr. Gundersen provides no specific support showing how the SASSI analysis are insufficient, and more importantly, why the SASSI analysis did not support the LAR's conclusion that the gap -- I'm sorry -- that the greater than 1 inch gap between the nuclear island and annex building will still be maintained an SSE, safe shutdown earthquake event.

And then in footnote 91 at the end of this sentence, you reference Section 3.7.2.4 of NUREG 2124

which is the staff's final safety evaluation report
for Vogtle 3 and 4 of the COLs as crediting Southern's
SASSI analysis. And that section of the safety
analysis report, the SAR I'm sorry SER for
Vogtle references 2D and 3D SASSI analysis for both
the units. And I'm wondering, are any of these
documents the documents that are referenced in the LAR
that talk about either generic or site-specific SASSI?
MR. BLANTON: It is my belief that they
are. I need to check with my technical expert
probably to confirm that to see if there'd been any
changes. But yes, I mean, it's the same SASSI
analysis that confirmed that the acceptability of a
Vogtle site for the construction of an AP1000 or the
SASSI analyses being used to evaluate this license
amendment, particularly the 2D one. I don't think the
3D one came into play.
(Simultaneous speaking.)
JUDGE BOLLWERK: All right. And you had
mentioned
MR. BLANTON: also used the if I
may, we used both the generic and the site-specific
SASSI model.
JUDGE BOLLWERK: Right. But you thought
the generic ones were proprietary. But I guess the

1	site-specific ones would be available publicly?
2	MR. BLANTON: No, I think they're both
3	proprietary Westinghouse document.
4	JUDGE BOLLWERK: Okay. One last question.
5	In the SAR I'm sorry the LAR analysis mentioned
6	settlement survey documents. That's basically all it
7	said. It didn't say exactly what they were. Do you
8	know if those documents are publicly available?
9	MR. BLANTON: They are not at this time.
LO	No, sir.
L1	JUDGE BOLLWERK: Okay. All right. Thank
L2	you very much. At this point, I don't have any more
L3	questions for Mr. Blanton. Let me see if either Judge
L4	Abreu or Judge Arnold has anything.
L5	JUDGE ARNOLD: This is Judge Arnold. I'm
L6	going to wait until the end of the parties and then
L7	ask my questions.
L8	JUDGE BOLLWERK: Okay. That's fine.
L9	Judge Abreu?
20	JUDGE ABREU: This is Judge Abreu. I just
21	have a couple little things. Just so I have a full
22	picture of the wall, basically the picture I have is
23	there's just a bulge in the wall on the auxiliary
24	building wall. And I understand it's about 13 feet
25	vertically with it starting a few feet below the top
ı	I and the second

of the 50-foot wall. I don't have a sense of how far 1 east-west it goes. Is it a real long bulge, or is it 2 just a little bit of a bulge? 3 4 MR. BLANTON: It probably varies, Judge. I'm not sure I can answer that with a great deal of 5 If you look at the diagram in the license 6 precision. 7 amendment, it shows it starting about halfway down, 8 maybe the annex building and continuing to that 9 corner. So it runs about half the width of the annex 10 building in a horizontal direction that way out. I can certainly find the more precise 11 And I'd also just note that the 12 dimensions of it. relief requested in the LAR is actually more than the 13 14 actual nonconformance because they tried to bound that 15 So the actual bowing out, if you nonconformance. 16 would, or bulge, it's probably more, like, 11 feet than 13 feet. 17 JUDGE ABREU: Okay. And from what you 18 19 told us and from what we've seen in the documents, it appears that this is basically just a bulge, that 20 there is no component of wall tilt that is causing the 21 22 need to request the change in the gap. Is that correct? 23 24 MR. BLANTON: Yes, that's correct, Your And just sort of to embellish on that point, 25 Honor.

the 3-inch gap is maintained both below and above the bulging area so that logic would tell you if the wall was tilting, the area above the bulge would be closer than where the bulge it or at least closer than the wall is at grade. And right now, they're not.

JUDGE ABREU: All right. Thank you. That's all I have at this time.

MR. BLANTON: Thank you.

JUDGE BOLLWERK: All right. This is Judge Bollwerk. I should mention we've been going about an hour and 20, 25 minutes right now. I believe that's right, about an hour, 20 minutes. Probably we will take a break at some point. I'd like to go ahead and let the staff give its response before we take that break. Would that be acceptable to the staff?

MS. EZELL: Yes.

JUDGE BOLLWERK: All right. Why don't we go ahead and do that. And maybe what we'll do then is take a break between when the staff give their presentation and when Mr. Zeller has his rebuttal. So people can sort of plan on that coming up, we'll probably take about a 10-minute break. Let people step away and do whatever they might need to do, and then we'll come back. So let me then turn to the NRC staff. Thank you.

MS. EZELL: Thank you. Good morning, and may it please the Board. My name is Julie Ezell, and I, along with my colleague, Michael Spencer, are counsel for the NRC staff. For the reasons outlined in our pleading, the NRC staff position is that while the Petitioner BREDL has demonstrated standing, BREDL has not proffered an admissible contention and therefore the Board should deny the hearing request.

I will not repeat the arguments made in our answer but will address the statement in the Petitioner's reply claiming that the staff answer did not provide supporting references showing that dishing was previously analyzed. Contrary to the Petitioner's assertion, the staff has explained that the Vogtle Unit 3 basemat was analyzed for total and differential settlement, which includes the particular settlement scenario the Petitioner refers to as dishing or cupping. The differential settlement can occur when the middle of a foundation settles more relative to the edges of that structure.

As described in our pleading and in Section 3.8.5.4.2 of the Vogtle Unit 3 updated final safety analysis report, construction sequence scenarios were analyzed as part of the design of the nuclear island basemat. One of the bounding scenarios

analyzed is a case for the auxiliary building construction is delayed while the shell building construction continues. This bounding case maximizes tension stresses in the bottom of the basemat which would result in the type of differential settlement the Petitioner refers to as dishing.

As discussed in the license amendment request, this type of settlement would tend to cause the auxiliary building wall to slightly lean away from the annex building wall. That settlement to date to would tend, if anything, to increase the seismic gap, not decrease it, which shows that the Petitioner's settlement concerns do not raise a genuine dispute with the licensee on a material issue of fact and instead relates already analyzed to matters previous proceedings rather than a license amendment request at issue in this proceeding.

To address BREDL's opening statements about differential settlement, differential settlement is the term used for a condition in which a building support foundation settles in an uneven including nonlinear fashion. As described earlier in our opening, dishing is a particular type of differential settlement that can occur where the middle of the foundation settles more relative to the edges of the

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structure. BREDL does not offer any documentary support for its claim that the updated final safety analysis report only analyzed linear settlement and not dishing. This concludes my opening statement, and we are happy to answer any questions the Board may have at this time.

pretty short. All right. I did have a couple questions. The first one is a standing question. And I think the staff -- they did cite one of the previous licensing board cases, the Vogtle cases that found standing in a footnote but really have any discussion of them. Given the discussion I've had today with Mr. Blanton about standing, you want to say anything about those cases or about staff's position on standing?

MS. EZELL: As described in our answer on page 15, the -- outside the standing discussion, the Petitioner cites concerns with information that it claims is being ignored. And the LAR, the license amendment request, that would increase the likelihood of failure of the basemat and potentially result in release during a seismic event. And these claims are based on the mistaken assumption that the Vogtle Unit 3 basemat was not designed and analyzed for total and differential settlement. But for the purposes of

determining standing, we take the Petitioner's claims as true and believe that this position is consistent with the Board's previous cases that you sited earlier.

mentioned -- let's talk a little bit about document access which I sort of explored a little bit with Southern. And let me pull the right page of paper here. Okay. So I think I heard what Mr. Blanton say was that the documents that are cited in the LAR, and there's reference to a generic SASSI, a site-specific SASSI, and some settlement survey data. At least it was his recollection that that information was not publicly available.

And again, the LAR analysis also has a section called references. It doesn't reference anything. So basically what the staff had in front of it as I understand it in their acceptance review was the Vogtle analysis that was presented in that document.

And let me take a step back, however, and talk for a second about the audit report. In May 2020, the staff issued the audit report regarding whether the documentation and calculations made available by Southern concerning its LAR were

sufficient to provide technical support for the LAR. And if you look at the staff's audit review instruction dated October 2019 -- and again, this is a staff document, I guess an Office of Nuclear Reactor Regulation document. It's LIC-111, revision 9, page 9.

It indicates documentary material that is part of an audit review should be disclosed in the audit report. And if you look at the audit report, page 8, it indicates that it's acceptable for the staff -- I'm sorry. Also, that current audit review quidance at page 9, I'm referring back to instructions at page 8, also indicates it's acceptable for the staff to access and review Applicant information via the Applicant portal that does not involve taking possession of the Applicant review documents. Again, that's the staff guidance instructions that are in LIC-111.

The audit report that was done for this particular LAR lists six documents that were reviewed via the Southern portal. Mr. Blanton seemed to think that some of those SASSI and settlement data documents that are referenced in the LAR are part of what the -- are part of the six documents that the staff looked at and then references in its audit report. Do you know

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1	if that is or isn't the case?
2	MS. EZELL: If you'll allow me one moment
3	to just consult
4	JUDGE BOLLWERK: Sure.
5	MS. EZELL: with my technical staff.
6	JUDGE BOLLWERK: Just for the record, we
7	probably will go ahead and take a break when the Board
8	is done with questions for the staff.
9	MS. EZELL: Your Honor, it's my
10	understanding that the staff the licensee did not
11	make available for audit in the electronic reading
12	room the full analysis, the SASSI analysis. But the
13	staff did audit results of those analyses and did
14	audit settlement data.
15	JUDGE BOLLWERK: And are those among the
16	so you're saying you looked at documents, but those
17	are not among the six documents that are listed?
18	MS. EZELL: Those are the six documents
19	that are listed.
20	JUDGE BOLLWERK: Those are among the six
21	documents that are listed?
22	MS. EZELL: Yes. I apologize for the
23	confusion.
24	JUDGE BOLLWERK: All right. So if you
25	look and again, it was a separate set of staff

instructions in January 2017 -- in the January 2017 staff instructions dealing with whether to accept a license application for a docketing decision. That's LIC-109, revision 2, appendix B at page 9 indicates that the application must be complete in scope such that there is no significant analyses or evaluations missing from the application and the information and analyses provided in support of the application must not evidence any significant or obvious problems.

It also indicates that if the scope of the application is incomplete or the information insufficient, the application must be considered unacceptable such that it should be returned to the Applicant or an additional opportunity provided to supplement the application for docketing. If on the other hand the application is not acceptable for docketing, the instructions indicate that determination should be documented in an email letter that indicates that the staff found application provides, quote, technical information and sufficient detail to enable the staff to complete a detailed technical review and make an independent assessment regarding the acceptability of the proposed amendment in terms of regulatory requirements and the protection of public health and safety and

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1 environment. 2 And that is, again, from LIC-109 and seen at page C-9. And this is essentially the findings the 3 4 staff made in its February 21st, 2020 acceptance 5 review email to Southern at page 2. So my question, 6 given that background, so in making the staff's 7 acceptance review finding, did the staff review any Southern documentation via a portal or otherwise other 8 than the analysis in the February 7, 2020 LAR itself? 9 10

MS. EZELL: And just to clarify, Your Honor, as part of the acceptance review for --

(Simultaneous speaking.)

JUDGE BOLLWERK: It's part of the acceptance review, right. Clearly in an acceptance review, you had the license application in front of you. Is there any other Southern documentation via portal or otherwise that the staff used to review the Southern application?

MS. EZELL: No, Your Honor. There was not.

JUDGE BOLLWERK: Okay.

MS. EZELL: The NRC staff based its determination of acceptance for docketing on the information contained in the license amendment request that's publicly available.

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JUDGE BOLLWERK: Okay, good. Thank you. I appreciate that information. All right. I'll just note for the record that in contrast to the license review instructions that dealt with the audit, nothing in the acceptance review instructions -- which are the LIC-109 as opposed to LIC-111 which are the audit instructions. Nothing in the acceptance review instructions authorizes the staff to consider nonpublic information not in the possession of the agency in making its acceptance review.

Indeed, the acceptance instructions of page 6 indicate that any information deficiency is to be cured by contacting the licensee or Applicant to communicate the information needed to understand their of action, establishing a date-specific deadline by which the licensee or applicant must submit the information and issuing a letter licensee or Applicant, identify the information needed and the verbally established deadline. And what you just told me is you did not do any of that because you application found license audit space be sufficient.

MS. EZELL: That is correct, Your Honor.

JUDGE BOLLWERK: All right. Thank you.

That's all the questions I have for the staff at this

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1 point. Is there anything that either Board members have? 2 3 JUDGE ARNOLD: No, Judge Arnold. JUDGE ABREU: And this is Judge Abreu. 4 5 have nothing else at this time. JUDGE BOLLWERK: All right. Right now, I 6 7 have 35 after the hour. Why don't we go ahead and 8 take a 10-minute break so that we'll reconvene at a 9 quarter to 12:00, 11:45. And if anybody is having any 10 connectivity questions or problems, now would be the time to talk with our staff while we are taking the 11 break. 12 Be aware that this will remain an open 13 14 So if you're on a speaking line and you say line. anything or make any noise, it will be heard by those 15 16 who are on the listen-only lines as well as those 17 folks that are on the call. So my suggestion would be to obviously mute yourself, and we'll be back in 10 18 19 Thank you. minutes. (Whereupon, the above-entitled matter went 20 off the record at 11:37 p.m. and resumed at 11:46 21 22 a.m.) JUDGE BOLLWERK: This is Judge Bollwerk. 23 24 We've taken a short break, and we're going to continue now with the oral argument. I did have one other 25

1	question for the staff. Let me just briefly say it.
2	Mr. Zeller described the status of the BREDL FOIA
3	request. I take it that was accurate from your
4	perspective. Anything else you want to say about
5	that?
6	(No audible response.)
7	JUDGE BOLLWERK: Staff there?
8	MS. EZELL: I apologize. Could you repeat
9	the question?
LO	JUDGE BOLLWERK: Sure. Mr. Zeller talked
L1	about the status of the FOIA request that BREDL has
L2	pending. Was that accurate from your perspective?
L3	Anything further you want to say about that?
L4	MS. EZELL: Yes, Your Honor. That is
L5	accurate as far as I understand. That is being
L6	handled via separate agency process, and I understand
L7	that the FOIA coordinator has been communicating with
L8	Mr. Zeller on that matter.
L9	JUDGE BOLLWERK: All right. Okay. Well,
20	then we're ready for Mr. Zeller's rebuttal argument,
21	and I think that then we will have some additional
22	questions for all the participants from the Board
23	members. So Mr. Zeller?
24	MR. ZELLER: Yes. Thank you, Judge
25	Bollwerk. This is Lou Zeller. How long do I have

10 minutes, or how long --

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JUDGE BOLLWERK: Approximately. I think you're certainly in that -- yeah, I think that's correct, yes. It's what you reserved. I don't think you took more than 20 minutes to begin with, so you're good.

MR. ZELLER: Thank you, sir. All right. Regarding Southern Nuclear, Mr. Blanton, his interpretation of the license amendment request seeking a reduction of 3 inches to 2 inches and 16 inches -- 2-and-1/16th and the 1 inch not being accurate, I believe we're getting into the weeds. I believe that with the very good information to have the experts arguing directly about that, I'm not sidestepping the issue. I'm just saying that we're talking about depth and inches and prose interpretations of those engineering questions which are difficult to deal with in this kind of format for sure.

I do think that we have reasonable doubt about this procedure. That's Mr. Gundersen, I believe, reading into this. Okay. Sorry, Judge. But we have raised reasonable doubt, and the burden of proof is upon the license requestor. The standing and the consequences raised by Mr. Blanton, consequences

	Tor individuals, I think we have provided additional
2	information today which goes to the direct impact on
3	residents of the Shell Bluff community. So I think we
4	have dealt with that in today's oral argument.
5	MS. MAYHALL: Excuse me. I'm sorry to
6	interrupt. This is Taylor. I just wanted to let you
7	know that Arnold Gundersen's line has dropped. He's
8	no longer on the call.
9	JUDGE BOLLWERK: All right. This is Judge
10	Bollwerk. Why don't we take a brief break and
11	everyone should stay on the line obviously. But we'll
12	go off the record. And maybe, Mr. Zeller, do you want
13	to contact Mr. Gundersen and see if you can get him
14	back on or we'll wait a second and see if he
15	reappears?
16	MR. ZELLER: Yes, sir.
17	JUDGE BOLLWERK: I don't want to unless
18	you want to go ahead without him on. But my
19	assumption is you prefer to have him there.
20	MR. ZELLER: I need a question answered
21	from him directly. Yes, sir.
22	JUDGE BOLLWERK: Okay. Well, we'll go off
23	the record then, and perhaps you can attempt to
24	contact him or hopefully he'll show up again.
25	MR. ZELLER: Yes.

1	JUDGE BOLLWERK: All right. So let's take
2	a break. And Taylor, please let us know if Mr.
3	Gundersen appears again.
4	MS. MAYHALL: Will do.
5	JUDGE BOLLWERK: Thank you. All right.
6	Let's go off the record.
7	(Whereupon, the above-entitled matter went
8	off the record at 11:51 a.m. and resumed at 11:54
9	a.m.)
10	JUDGE BOLLWERK: So Mr. Gundersen has
11	rejoined the conference call, and we're going to go
12	ahead and proceed with Mr. Zeller's argument. Mr.
13	Zeller?
14	MR. ZELLER: Yes. Sorry, Judge Bollwerk.
15	I had us muted.
16	JUDGE BOLLWERK: Mr. Zeller?
17	MR. ZELLER: Yes, Judge.
18	JUDGE BOLLWERK: Whenever you're ready to
19	proceed.
20	MR. ZELLER: I'm not quite ready.
21	JUDGE BOLLWERK: Okay.
22	(Pause.)
23	JUDGE BOLLWERK: While we're waiting for
24	Mr. Zeller, Mr. Blanton, you indicated that there
25	might be a couple of things you wanted to provide

1	Board some initial confirmation about?
2	MR. BLANTON: I did, before we started,
3	Judge. But I think between the argument and the
4	question and answer, I told you about all I know.
5	JUDGE BOLLWERK: Okay. That's fine.
6	Appreciate the information then. All right. Okay.
7	Mr. Zeller, are you ready?
8	MR. ZELLER: Yeah, this is Lou Zeller.
9	Judge Bollwerk, I'll do the best I can without Mr.
10	Gundersen.
11	JUDGE BOLLWERK: He's connected on the
12	line, but I guess he's not connected directly to you
13	I take it. That's your concern?
14	MR. ZELLER: He's not responding, and
15	there's no meaningful response coming from Gundersen
16	at this point. I've tried
17	JUDGE BOLLWERK: Okay.
18	MR. ZELLER: everything I can
19	JUDGE BOLLWERK: Okay.
20	MR. ZELLER: through backchannel and
21	others. I apologize for this.
22	JUDGE BOLLWERK: It's not a problem.
23	MR. GUNDERSEN: Your Honor, I am on. Lou,
24	I am on. I will go back on mute.
25	MR. ZELLER: Arnie, if you can hear me,

1 raise your hand. 2 JUDGE BOLLWERK: Check the chat. I take it, Mr. Zeller, you all are trying to make your 3 4 backchannel connection. Is that the problem? 5 MR. ZELLER: That's correct, Judge Bollwerk. 6

(Pause.)

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MR. ZELLER: Aha.

JUDGE BOLLWERK: Sounds like good news.

MR. ZELLER: Yes, I think so. Okay. response -- well, okay, let me pick up where I left This is Lou Zeller. Regarding Mr. Blanton's off. about dishing, questions we did bring up references in our petition and on our replies regarding structural problems associated with dishing. And so I think we've done our diligence there to show that there's a unanalyzed safety condition brought about by the dishing which is, at this point, I think everyone agrees is happening there. At least it's admitted into the docket.

What we have with the Applicant is a theory. They say that theoretically, this suggests that the nuclear island tends to tilt away from the annex building. To me, that nails -- that lands in the -- is that a theory from the other side is the

analysis calling for. The analysis we're calling for is actual reevaluation of the structural integrity of the entire nuclear island, a complete root cause analysis of the new stress design basemat nuclear island in Vogtle Unit 3, to present the complete analyses and root cause analysis information to the public in hearings and an entirely new license review and full analysis of the new stress conditions placed on the components, the site, systems, structures of components on the site that are no longer level as a result of disproportionate sinking that has been — that we have — that has occurred with the basemat.

Regarding Ms. Ezell's question from the Nuclear Regulatory Commission, she says the difference of settlement and bounding scenarios cover nonlinear changes. I hear from our expert that it's impossible to monitor conditions ahead of time. Dishing can't be bounded. Dishing needs to be modeled based on site-specific conditions, not generic assumptions from 2012 which are provided by the other side. Okay.

Again, Southern Nuclear relies on a generic bounding analysis and linear interpolation. And according to the information in our hands, this assumes a level foundation, a flat foundation, if not level, and not a curved situation which is Vogtle Unit

Southern has a theory that suggests the nuclear island 2 3 tilts away from the annex building. 4 I would conclude with this, that the 5 Petitioner would place before this Board the safety 6 culture policy statement which states that problem 7 identification and resolution issues potentially 8 impacting safety are properly identified, fully 9 addressed, evaluated, promptly and corrected 10 commensurate with their significance and 11 questioning attitude, avoid complacency, and 12 continuously challenge existing conditions and activities in order to identify discrepancies that 13 14 might result in error or inappropriate action. Judge 15 Bollwerk, I believe that's all I have for today. 16 Thank you very much. 17 JUDGE BOLLWERK: All right. Thank you, Mr. Zeller. Well, just before we finish the argument 18 19 portion, I don't have any questions at this point. But I believe perhaps the other two Board members may, 20 so let me turn to Judge Arnold or Judge Abreu. 21 like to start? 22 JUDGE ABREU: I'll defer to --23 24 JUDGE BOLLWERK: Judge Arnold, I know you 25 said you had some questions.

3 in the basemat as referred to as dishing for which

JUDGE ARNOLD: Yes, I'll start then. And this is -- my first question is for BREDL. page 7 of your petition, you state, quote, the NRC has no intention of providing the public and BREDL with additional information about the dangers dishing that is occurring in the Vogtle Unit foundation, unquote. Now since the discussion of settlement dishing and contained in the LAR demonstrates that dishing does not contribute to the reduction and because your petition has referenced, addressed, nor challenged that discussion, additional information concerning dishing how is within the scope of this proceeding?

MR. ZELLER: This is Lou Zeller. We asked -- from the beginning before filing the petition even, we were requesting information which apparently could not be provided. And we've gone into that in terms of the Westinghouse reading room. And so we did move to another means for getting information which was from a Freedom of Information Act request.

But we are seeking further information, information which was used to make the decisions by the Nuclear Regulatory Commission about the situation with the license amendment request based on information which we could not view. So that, I

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1 believe, is where some of the problem lies in terms of defining what's happened, what has been done, what has 2 3 not been done, and who did it. 4 JUDGE ARNOLD: Essentially, the discussion 5 LAR showing that the dishing does contribute to the gap reduction is basically 6 7 argument saying that the nuclear island settling is 8 not within the scope of this license amendment. 9 you have not challenged that argument. 10 confused as to how you can request in this proceeding something that is not related to this proceeding. 11 This is Lou Zeller. 12 MR. ZELLER: The 13 license amendment request brought up the dishing. 14 JUDGE ARNOLD: Yes, and it demonstrated 15 that dishing is outside the scope of this proceeding. This is the crux of the 16 MR. ZELLER: 17 dispute, Judge Arnold. JUDGE ARNOLD: But you didn't dispute it, 18 19 You did not challenge the license amendment though. discussion of dishing, neither in 20 request petition nor in Mr. Gundersen's statement. So how now 21 22 do you decide that is within the scope? MR. ZELLER: Through the -- again, this is 23 24 Lou Zeller. This comes from the statement in the 25 license amendment request that theoretically

1 suggesting that the nuclear island tends to tilt away from the annex building. So that, again, goes back to 2 license amendment request and the very thin 3 4 covering of the dishing question with a theory. 5 JUDGE ARNOLD: It is a theory that you 6 didn't challenge in your petition. 7 MR. ZELLER: Well, I apologize, 8 I believe that in our exposition of the facts 9 that we were. If I fell short in some way, I did not 10 We are talking about what is on the record in terms of the license amendment request and the 11 statements of the Applicant --12 13 JUDGE ARNOLD: I'm going to move on. 14 MR. ZELLER: -- which we dispute. 15 here to tell you. JUDGE ARNOLD: On page 8 of your petition, 16 17 you say, quote, SNC notified the NRC on February 7th, 2020 that it was seeking a license amendment due to 18 19 the discovery that walls and the entire foundation of the auxiliary building had inexplicably moved, sunk, 20 and become distorted. Now this sentence effective 21 attributes the conclusion that the walls have moved, 22 sunk, and become distorted to Southern Nuclear. 23 24 you don't cite where they say that. So can you tell

me where do you get that information from?

1 MR. ZELLER: That was provided by Arnold Gundersen in his declaration supporting the petition 2 3 for intervention and the hearing. 4 JUDGE ARNOLD: Well, he also doesn't cite 5 to this source of that information. So I'm at a 6 quandary. Okay. Let me go on. In paragraph 29 on 7 page 12 of Arnold Gundersen's declaration, he states, 8 quote, Southern Nuclear Operating Company has alleged 9 that a single concrete wall that is a critical part of 10 the structural integrity of the entire reactor unit has moved of its own accord. Can you tell me where 11 Southern Nuclear states this? 12 MR. ZELLER: Pardon me. Judge Arnold, the 13 14 declaration discuss dishing extensively. 15 JUDGE ARNOLD: So we're going back to the 16 previous question. Can you tell me where in that 17 dishing discussion it addresses Southern Nuclear's evaluation? 18 19 ZELLER: It's, I believe, based on 20 reading the license amendment request based on a poorly worded license amendment request about the 21 bulging discussed today. 22 JUDGE ARNOLD: I read his discussion, and 23 24 I haven't seen where he clearly addressed the Southern Nuclear discussion of dishing and it would move the 25

walls apart.

MR. ZELLER: Sorry, Judge Arnold. I'm trying to reflect what Mr. Gundersen is telling me, and it's been very difficult. I believe that question would be properly put in terms of citations and sources of information for the walls that have settled and sunk and are sinking to Mr. Gundersen as part of — if not in this proceeding, then part of an evidentiary proceeding during which we could air some of these questions and provide the information that you are asking me for which I'm scuttling to find answers for.

JUDGE ARNOLD: I'm just pointing out you haven't challenged -- you have not directly challenged the Southern Nuclear's evaluation that dishing would cause the walls to move apart. But let me go on with my next question. In Mr. Gundersen's declaration, paragraph 29.1 states, quote, Southern Nuclear claims this solid concrete wall is leaning because the foundation under it is sinking. Now I also cannot find that in the LAR. So what is the source of that information that Southern Nuclear that it's leaning because the foundation is sinking?

MR. ZELLER: Paragraph 29.1 is where Gundersen discusses the wall, one side of which is

1 under compression and one side is under tension, Concrete can be shaped and molded. 2 not an effective structural member when it's placed 3 4 under tension. 5 JUDGE ARNOLD: Well, I'm just saying in there, he states that Southern Nuclear claims that the 6 7 wall is leaning because the foundation is sinking. 8 What is the basis of that statement? Where does 9 Southern Nuclear claim that the foundation is sinking? MR. ZELLER: SNC claims the solid concrete 10 wall is leaning because the foundation under it is 11 sinking. 12 13 JUDGE ARNOLD: That is what your expert 14 says, but he doesn't cite to where Southern Nuclear 15 has said that the foundation under it is sinking. 16 MR. ZELLER: I think the question goes to 17 the admission by Southern that there is more settling at one part of the basemat than another part of the 18 19 basemat which is the definition of dishing or sinking. 20 JUDGE ARNOLD: But you see, there's a 21 difference between you as the Petitioner saying that this is caused by sinking and Southern Nuclear saying 22 the wall is leaning because the foundation is sinking. 23 24 In your statement, you keep saying repeatedly that Southern Nuclear has taken the position that the wall 25

1	is leaning because the foundation is sinking, and I
2	have not found that anywhere in the license amendment.
3	So whose information is this? Did it come from
4	Southern Nuclear, or is it something that came from
5	Arnold Gundersen's evaluation?
6	MR. ZELLER: I'm checking. Arnie, are you
7	there?
8	JUDGE ARNOLD: While we're waiting, let me
9	ask Mr. Blanton, Southern Nuclear. Are you aware of
10	any place where Southern Nuclear claims that the solid
11	concrete is leaning because the foundation under it is
12	sinking?
13	MR. BLANTON: Stan Blanton for Southern
14	Nuclear. No, I'm not aware of that. I think the LAR
15	takes exactly the opposite position on that.
16	JUDGE ARNOLD: I have cited to several
17	places where the petition or Mr. Gundersen's
18	declaration have said that Southern Nuclear has taken
19	the position the wall has moved. Would you say all of
20	those statements are really not attributable to
21	Southern Nuclear?
22	MR. BLANTON: Yes, sir. I would.
23	JUDGE ARNOLD: Okay. Let me go back to
24	Mr. Zeller. Is there any answer yet?
25	MR. ZELLER: I'm working on it, Judge.

(Pause.)

JUDGE ARNOLD: Let me ask you my next question because that may clear up some of this. On page 11 of your petition, you contradict Mr. Gundersen and say, quote, the position taken by SNC throughout the license amendment request is that there is an asbuilt reduction in the distance between the walls. Now would I be correct in assuming that I should believe your petition rather than your expert?

MR. ZELLER: I'm sure there's no dispute between us and our expert, Judge. The license amendment request discusses sinking foundation and out-of-tolerance wall.

JUDGE ARNOLD: Well, certainly it does mention the settling of the foundation, but he doesn't attribute the movement of the wall to the settling of the foundation. Let me just assume that you don't have an immediate answer to that.

MR. ZELLER: I don't have a page number here, but we're working as best we can with this system. But the LAR discussed sinking foundation and an out-of-tolerance wall. And what page that -- or the cite for that, I can provide to you. But I don't have it right here.

JUDGE ARNOLD: Okay. In paragraph 30 on

1	page 13 of his declaration, Mr. Gundersen states,
2	quote, Southern Nuclear Operating Company knows that
3	the nuclear island has departed from its design
4	conditions and is no longer level. Now how does Mr.
5	Gundersen know exactly what Southern Nuclear knows?
6	Does he have a citation to that somewhere?
7	MR. ZELLER: He went on to say that using
8	the generic SASSI bounding analysis and linear
9	interpolation are complete inappropriate.
10	JUDGE ARNOLD: Well, in his statement,
11	he's attributing some knowledge to Southern Nuclear.
12	And I'm just wondering how he knows what Southern
13	Nuclear is thinking if they haven't stated it in the
14	LAR. Well, my last few questions are for Southern
15	Nuclear, Mr. Blanton. Is the Vogtle 3 site currently
16	considered to be a construction site?
17	MR. BLANTON: Stan Blanton for Southern
18	Nuclear. Yes, Your Honor. I would say so, yes.
19	JUDGE ARNOLD: Are most of the activities
20	going on there construction activities as opposed to
21	operating activities?
22	MR. BLANTON: The way I would characterize
23	it, Judge, is that construction is ongoing and there
24	are preparations ongoing for operation. But the plant
25	is not operating.

1	JUDGE ARNOLD: Okay. And is reconciling
2	as-built configurations with ITAAC criteria considered
3	to be a construction-related activity?
4	MR. BLANTON: I believe so. Yes, sir.
5	JUDGE ARNOLD: At what time in the future?
6	Is there some event at which time Vogtle 3 site will
7	no longer be considered a construction site and would
8	be considered an operating plant?
9	MR. BLANTON: I would say when the NRC
10	makes its 52.103(g) determination that all ITAAC had
11	been met and authorizes loading of fuel, we'll at that
12	point convert from a construction site to an operating
13	site.
14	JUDGE ARNOLD: Okay. Thank you. I have
15	no more questions.
16	JUDGE BOLLWERK: Judge Abreu?
17	JUDGE ABREU: My questions have been
18	answered. Thank you.
19	JUDGE BOLLWERK: All right. I did have
20	one question for Mr. Blanton. If I misunderstood Mr.
21	Zeller, he should correct me or Mr. Blanton can
22	correct me. But Mr. Zeller made a statement during
23	his rebuttal that this really can't be bounded, that
24	the bounding analysis you're using is not appropriate.
25	Do you want to respond to that?

1 MR. BLANTON: I'm not sure Ι even understand the point, Your Honor. 2 Are you talking about the bounding analysis we use to take 3 4 stiffness of the turbine building first bay wall and compare it to the analysis used to determine the 5 stiffness of the annex building wall? 6 7 JUDGE BOLLWERK: Let me go back to Mr. 8 Zeller, maybe get him to clarify what he meant if I'm 9 misunderstanding. 10 MR. ZELLER: Yes, this is Lou Zeller. what I've been told by Mr. Gundersen is that the 11 bounding analysis cannot be done in this kind of 12 situation. And I would leave it to the mathematicians 13 14 to go further about that. 15 Your Honor, Stan Blanton. MR. BLANTON: 16 There's not enough in that for me to respond to. 17 just don't know what he's referring to. I mean --JUDGE BOLLWERK: All right. 18 19 MR. BLANTON: -- the LAR is based on an evaluation of the stiffness of the opposing walls. 20 includes the settlement evaluation to basically 21 exclude it as a factor in the safety evaluation of the 22 license amendment request. So those two things are 23 24 what the LAR is based on. I'm not sure what bounding

analysis Mr. Zeller or Mr. Gundersen are referring to.

1	JUDGE BOLLWERK: All right. Thank you.
2	Is there anything the staff wants to say in that
3	regard?
4	MS. EZELL: If I may have just a moment to
5	consult with my technical staff.
6	JUDGE BOLLWERK: Yes.
7	MS. EZELL: Thank you.
8	(Pause.)
9	MS. EZELL: Thank you for your indulgence
10	for the time. We're not exactly sure to what the
11	Petitioner refers, but the bounding case is discussed
12	in Section 3.8.5.2 4.2 of the UFSAR are intended to
13	maximize the tension stresses in the basemat. And the
14	licensee settlement monitoring program continuously
15	monitors settlement data to ensure that the basemat
16	the settlement experienced by the basemat remains
17	bounded by the Tier 1 values described in Table 5.0-1
18	for total and differential settlement.
19	JUDGE BOLLWERK: All right. Thank you.
20	At this point, I think, unless any of the parties have
21	something they want to let the Board know, I think,
22	Judge Arnold, you had no further questions?
23	JUDGE ARNOLD: That is correct.
24	JUDGE BOLLWERK: All right. Judge Abreu?
25	JUDGE ABREU: I have no more questions.

JUDGE BOLLWERK: All right. Well, under the agency's regulations, Section 2.309(j)(1) with the holding of this oral argument pre-hearing conference, we now have 45 days to issue a decision. That would be, if I'm counting right, approximately the 14th of August. So that would be our goal.

Potentially, we can do better than that, but we'll have to see. But that would be obviously the outside date by which we would need to issue something or to advise the parties that we need additional time. So we will be working towards that goal.

On behalf of the Board, I want to thank both BREDL and the staff and Southern for the presentations today. I know this is a difficult time. Not only do you have to deal with the pandemic. But getting ready to present an argument in this case, I think the information you provided us was useful. And again, I want to thank you for making yourselves available. I probably should've asked at the beginning. I'm assuming everyone is healthy and hope you will remain so, safe and healthy.

It would normally not be my intention to do transcript corrections unless we read the transcript and find something inordinately wrong.

1 This is not an evidentiary hearing. It's an oral But I would urge the parties when the 2 3 transcript is available hopefully next week, that you 4 take a look at it quickly. 5 If there's something you see that think definitely needs to be corrected, please contact 6 7 the Board to file a motion with us and let us know 8 that you think transcript corrections would 9 appropriate. We'll do the same thing, and we may be 10 getting back to you obviously if we see some issues. But we'll probably -- we'll see how the transcript 11 reads and what the situation is after we've reviewed 12 it. At this point, Judge Arnold, anything further you 13 14 have to offer for the parties? JUDGE ARNOLD: No, I have nothing further. 15 JUDGE BOLLWERK: All right. Judge Abreu? 16 17 JUDGE ABREU: I have nothing further. JUDGE BOLLWERK: All right then. Well, 18 19 again, on behalf of the Board, we very much appreciate you making yourselves available to us. Let me just 20 Anything from BREDL's perspective at this 21 point you need to tell the Board? 22 MR. ZELLER: This is Lou Zeller. Thank 23 24 you, Judge Arnold. Thank you, Dr. Abreu. All right. 25 JUDGE BOLLWERK:

1	MR. ZELLER: I'm just checking.
2	MR. BLANTON: Anything from Southern?
3	MR. ZELLER: I'm just checking. I
4	appreciate your allowing us to make this presentation
5	today.
6	JUDGE BOLLWERK: And we very much
7	appreciate you making yourselves available. I know
8	it's not easy. Anything from Southern's perspective
9	we need to know?
10	MR. BLANTON: Stan Blanton, Judge. No,
11	sir. Thank you for your time.
12	JUDGE BOLLWERK: All right. And NRC
13	staff?
14	MS. EZELL: This is Julie Ezell. I have
15	nothing further to add. Thank you very much for your
16	time.
17	JUDGE BOLLWERK: All right. Well, again,
18	everyone please stay safe and healthy. And if there's
19	nothing further, then we will consider this pre-
20	hearing conference and all argument to be adjourned.
21	Thank you.
22	(Whereupon, the above-entitled matter went
23	off the record at 12:33 p.m.)
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