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NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

September 23, 2008 (3:00pm)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

Title: Oyster Creek License Renewal

Docket Number: 50-0219-LR; ASLBP No. 06-844-01-LR

Location: Toms River, New Jersey

Date: Thursday, September 18, 2008

Work Order No.: NRC-2434

Pages 907-1048

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UNITED STATES OF AMERICA

U.S. NUCLEAR REGULATORY COMMISSION

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BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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In the Matter of : Docket No. 50-0219-LR
 AmerGen Energy Company, : ASLBP No. 06-844-01-LR
 LLC :
 (License Renewal for :
 Oyster Creek Nuclear :
 Generating Station) :

Thursday, September 18, 2008

Ocean County Administration Building
Room 119
101 Hooper Avenue
Toms River, New Jersey

The above-entitled matter came on for
hearing, pursuant to notice, at 9:00 a.m.

BEFORE:

E. ROY HAWKENS, Chairman
DR. ANTHONY J. BARATTA, Administrative Judge
DR. PAUL B. ABRAMSON, Administrative Judge

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On Behalf of Citizens:

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

(9:01 a.m.)

JUDGE HAWKENS: We're ready to proceed. My name is Roy Hawkens. On my right is Dr. Anthony Baratta, on my left is Dr. Paul Abramson. We're Administrative Judges on the Atomic Safety and Licensing Board panel, which is the administrative adjudicative arm of the U.S. Nuclear Regulatory Commission, and we have been assigned to the Board that's adjudicating the case today.

I'd like to welcome the members of the public who are in the audience, and we appreciate your interest in this proceeding.

We are here today to hear oral arguments in the case of AmerGen Energy Company. The case has a lengthy history, and I'll take a few moments to summarize part of that history, the salient portion of that history so the audience can place today's argument in context.

AmerGen owns and operates the Oyster Creek Nuclear Plant, and their operating license expires April of 2009. Three years ago, in July of 2005, AmerGen applied to the Nuclear Regulatory Commission renew its license for a 20-year period. Citizens opposed AmerGen's renewal request. They argued that

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1 AmerGen's Aging Management Plan for the drywell shell
2 would not insure that the shell would maintain an
3 adequate safety margin during the renewal period.

4 Almost exactly a year ago, this Board held
5 a two-day evidentiary hearing in this facility, and
6 several months later in December we issued a written
7 decision rejecting Citizens challenge.

8 Citizens immediately appealed the Board's
9 decision to the Commissioners, the Nuclear Regulatory
10 Commission Commissioners, and they are the
11 Presidentially appointed individuals who provide the
12 first layer of review of Board decisions. That appeal
13 remains pending before the Commissioners.

14 In the meantime, in May of this year, the
15 Commissioners asked the parties to file a written
16 brief on a new issue, and that issue is paraphrased,
17 whether the structural analysis of the drywell shell
18 that AmerGen is committed to perform will result in a
19 3D model of the shell that's conservative, and will,
20 therefore, adequately reflect the shell's actual
21 condition.

22 In June, the parties filed their briefs
23 consistent with the Commissioners' request, and last
24 month, on August 21st, the Commissioners issued an
25 order referring that newly briefed issue to this Board

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1 for resolution. And that's why we are here today. We
2 are going to hear oral arguments to allow the parties
3 to advocate the positions they've taken in their
4 brief, to respond to several written questions that
5 the Board gave them last week, and, as well, to answer
6 any questions that the Board may have for them today.

7 For those of you who were here for last
8 year's evidentiary hearing, I'd like to emphasize
9 there is a significant difference between an
10 evidentiary hearing and what you'll hear today at an
11 oral argument. An evidentiary hearing is akin to a
12 trial, where the parties put witnesses forward, the
13 witnesses provide factual testimony, expert witness
14 testimony which becomes part of the record of the
15 case.

16 Today you will not hear from witnesses.
17 You'll hear simply from the parties' attorneys who
18 will be advocating their client's position based on
19 the established facts in light of the governing law.
20 You'll hear from three parties today, AmerGen, the NRC
21 Staff, and Citizens.

22 Each counsel has been allotted one hour to
23 make their arguments. However, if the Board feels
24 that additional time is necessary for the Board to
25 understand a point that counsel is endeavoring to

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1 present, we will allow that party to exceed that time.

2 On the other hand, the oral argument is the
3 opportunity for the Board to insure it understands the
4 position, and once counsel feels they have made their
5 point, and the Board is likewise satisfied we
6 understand their point, they need not feel compelled
7 to take the entire time.

8 NRC Staff and AmerGen will be given the
9 opportunity to present rebuttal argument. If they
10 avail themselves of that opportunity, it will be taken -
11 - they'll have to reserve time from their allotted
12 hour. So, as I indicate, although they will have
13 rebuttal time, their time will not exceed an hour
14 total, unless the Board wants to hear further from
15 them.

16 I believe if we adhere to the schedule, we
17 should be done by noon. There's, in my mind, a
18 substantial likelihood we will finish up before noon,
19 but as I say, if we have to exceed the hour allotment,
20 we will continue. We'll continue through lunch. The
21 audience can be assured we will not go beyond 2:00
22 because there's another event that will be going on in
23 here at 3:00, so we will finish up no later than two,
24 and hopefully earlier than that.

25 The Board's law clerk, Mr. Rotman, for the

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1 benefit of counsel, when they have five minutes left
2 of their allotted time, if they, in fact, go that long
3 into oral argument, Mr. Rotman will be raising the
4 amber light, or the amber five minute sign, so if you
5 see that, please take that into account.

6 If I could ask members of the audience if
7 they do have cell phones, if they would put them on
8 vibrate or turn them off, and I will also ask if
9 anybody on the bench has cell phones, I'd ask them to
10 do likewise.

11 We have a motion that we need to address.

12 Before we do that, I'd like to ask counsel if they
13 would just from where they're seated introduce
14 themselves and their associates. And let's start with
15 AmerGen, please.

16 MR. POLONSKY: Good morning. Thank you,
17 Your Honor. Alex Polonsky of Morgan Lewis on behalf
18 of AmerGen. To my left is Kathryn Sutton, Raphael
19 Kuyler, and Brad Fewell.

20 JUDGE HAWKENS: Thank you. NRC Staff.

21 MS. BATY: My name is Mary Baty, and with
22 me are my co-counsel, Marcia Simon, and also seated at
23 counsel table is Louise Lund from the NRC Staff.

24 JUDGE HAWKENS: Good morning, Mr. Webster.

25 MR. WEBSTER: Good morning, Your Honor.

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1 I'm Richard Webster from Eastern Environmental Law
2 Center, with my colleague, Julia LeMense.

3 JUDGE HAWKENS: All right. Thank you, and
4 welcome.

5 At the outset, we have a motion which the
6 Board received yesterday morning from Citizens. I want
7 to confirm, we were not aware of any response filed by
8 either AmerGen or the NRC Staff. Am I correct in
9 assuming that none was filed?

10 MR. POLONSKY: Correct, Your Honor.

11 MS. BATY: Also, NRC Staff has not filed
12 anything. We assumed that we were going to address
13 the issue at the hearing, oral argument.

14 JUDGE HAWKENS: All right. Thank you for
15 offering to address it. I'm going to rule upon it.
16 We are going to rule upon it, the Board will rule upon
17 it. They've made three requests. First, they
18 requested to submit a supplemental brief following the
19 argument for reasons embedded in the motion. The
20 Board is going to give each party the opportunity to
21 file a supplemental brief, and I'll discuss that in
22 more detail after the arguments have been presented.

23 The second request was that Citizens
24 requested they be afforded the same time as the other
25 parties, and I believe that was based on the

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1 misapprehension that rebuttal time would be in
2 addition to the hour of allotted time. However, they
3 will be, if they're going to present rebuttal, they'll
4 be reserving a portion of that one hour allotted time,
5 so it will not exceed one hour.

6 MR. WEBSTER: Thank you. Judge, can I
7 just ask, could we also reserve some time for
8 rebuttal, as well?

9 JUDGE HAWKENS: If the Board feels that
10 rebuttal is warranted, we will give you that
11 opportunity.

12 MR. WEBSTER: Thank you very much.

13 JUDGE HAWKENS: The third request was that
14 they felt that because the NRC Staff and AmerGen may
15 be presenting arguments, consistent arguments, that
16 the fact that each of them has one hour for a total of
17 two hours, they felt that they were deprived of an
18 adequate amount of time to respond, or it was an
19 inequitable allocation of time; and, therefore,
20 requested that that be redressed by the Board. The
21 Board is not going to reduce the time allotted to any
22 of the parties here. I think it's unlikely, to the
23 extent that the NRC Staff and AmerGen have duplicative
24 arguments, I'm sure they will not advance them. And,
25 as I indicated earlier, to the extent that we feel

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1 that any position or argument you are going to make
2 requires extended time, we will allow that.

3 MR. WEBSTER: Thank you very much.

4 JUDGE HAWKENS: Before launching into oral
5 argument, as we indicated in our scheduling order, the
6 Board wished each of the parties to take a few moments
7 and explain what they understand the boundaries of the
8 issue, the boundaries of the Commissioners' request,
9 what those boundaries are. And if we could start with
10 AmerGen, go to the NRC Staff, and then to Citizens,
11 and you can do this from your tables.

12 MR. POLONSKY: Thank you, Your Honor. We
13 would like to reserve 15 minutes for rebuttal, just so
14 the Board knows, from our one hour.

15 JUDGE HAWKENS: You'll just be sitting at
16 your table talking about the boundaries. We'll then
17 ask you to come to the podium, but thank you.

18 MR. POLONSKY: In its August 21 order, the
19 Secretary did not request that the Board revisit the
20 question settled in the Board's initial decision, LBD
21 0717, or reconsider its prior holding. As the Board
22 has already recognized, the record remains closed, and
23 the Commissioners did not mandate this issue for
24 consideration.

25 The Commissioners merely requested that

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1 the Board provide its opinion on the limited, and
2 that's language from the August order, the limited
3 question asked of the parties in CLI Order 10. And
4 that question is whether the structural analysis that
5 AmerGen is committed to perform matches or bounds the
6 sensitivity studies that Judge Baratta would impose.
7 And, in any event, explain whether additional analysis
8 is necessary. AmerGen believes, therefore, that
9 resolution on the referred question does not impact
10 the validity of the Board's initial decision.

11 Even if the Commission had remanded this
12 narrow issue to the Board, which it did not, the
13 finality doctrine would foreclose a broadening of its
14 scope to the many issues that Citizens raise in their
15 initial and reply briefs to CLI Order 10.

16 As for how AmerGen recommends that the
17 Board consider responding, and in what form the Board
18 should consider responding, we recommend a memorandum,
19 and not an order. Boards have issued memoranda in
20 other situations to convey similar information when
21 the Commission has requested it. Most recently, Judge
22 Hawken issued a memorandum on behalf of the entire
23 panel responding to a request in the high-level waste
24 Yucca Mountain proceeding as to the reasonableness of
25 certain deadlines. The Board in the Claiborne

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1 Enrichment Center licensing proceeding issued a
2 memorandum when it responded to a Commission order
3 that -- in that case I think it remanded one issue,
4 but it remanded it for further explanation, which is
5 very similar to the situation here. And there are
6 other examples that we could provide.

7 As for factual arguments, we need to put
8 the 3D analysis in perspective, and that ought to be
9 taken into account in whatever the Board provides to
10 the Commission. AmerGen's Aging Management program
11 for the drywell shell, with all its many facets,
12 provides reasonable assurance without the 3D analysis.

13 The Board's initial decision did not rely
14 upon any features of the 3D analysis to support its
15 finding, and certain specifics about the methodology
16 of the 3D analysis are not on the record, when the
17 analysis is not required to be completed under
18 AmerGen's commitment to the NRC until April 2009.

19 The goal of the 3D model is to merely
20 better quantify the margin that exists above the code
21 required minimum. To meet this goal, AmerGen is
22 modeling the drywell thickness realistically with some
23 conservatism versus an overly conservative model in
24 the basics. And this is where Citizens and AmerGen
25 diverge.

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1 Citizens suggest, as they did last fall,
2 that AmerGen must focus its analyses on the external
3 UT data, those single individual points. It is from
4 these data that Citizens arrive at their inbound
5 general area thickness of the drywell shell. However,
6 the Board found in its initial decision these
7 individual external UT points provide a very localized
8 and conservative representation of shell thickness,
9 because they were selected as the thinnest points, and
10 metal was removed to prepare the surface for UT
11 measurement.

12 The area between the measured points is,
13 therefore, thicker; therefore, quote, and this is from
14 Footnote 30 of the initial decision, "They are not
15 representative of the overall shell thickness, and do
16 not provide a basis for determining available buffer
17 or margin."

18 The drywell Aging Management program has
19 many facets.

20 MR. WEBSTER: Judge, are we still in the
21 scope?

22 JUDGE HAWKENS: I'd ask counsel not to
23 interrupt while another counsel is talking.

24 MR. POLONSKY: So the 3D analysis itself
25 is independent of the Aging Management program that

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1 AmerGen has in place, which includes then finding
2 surface water and mitigating that water, checking sand
3 bed trains for water, and taking UT measurements.
4 Thank you.

5 JUDGE HAWKENS: Thank you. Ms. Baty.

6 MS. BATY: Yes. I do note at the outset
7 of this oral argument, last year we were here to
8 litigate a contention on the frequency of UT
9 measurements that AmerGen plans to perform on the
10 drywell shell at Oyster Creek, and whether the
11 frequency was adequate to insure that the margins were
12 not exceeded.

13 The Commission's August 21st order referred
14 a single specified issue to this Board for expeditious
15 resolution. That issue is whether the discretionary
16 analysis that AmerGen has committed to perform, and
17 that is reflected in the Staff's proposed license
18 condition, matches the bounds of sensitivity analyses
19 that Judge Baratta would impose. And, in any event,
20 explain whether additional analysis is needed.

21 In referring this issue to the Board, the
22 Commission asked the Board to answer the question, and
23 report its answer to the Commission. Once Citizens
24 appealed this decision - excuse me. The Board's
25 jurisdiction at this point is, therefore, limited to

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1 the single specified issue referred by the Commission
2 to the Board.

3 Once Citizens appealed the Board's initial
4 decision in this proceeding on their admitted
5 contentions, and the interlocutory decisions back in
6 January, jurisdiction over this proceeding passed the
7 Commission, and those appeals, as noted at the
8 beginning of this argument, still are pending with the
9 Commission.

10 The Commission's August 21st order did not
11 remand this case to the Board for further proceedings,
12 did not reopen the record, or did not request further
13 evidentiary hearings be held. The Commission merely
14 referred a single specified issue.

15 The form of the Board's response to the
16 Commission is most likely to be a memo. Because the
17 Commission did not remand this proceeding, the Board
18 arguably lacks jurisdiction to issue an order. There
19 is precedent for the Board, as is noted by AmerGen,
20 there is precedent for Boards to provide information
21 to the Commission in the form of a memo.

22 It is important to keep in mind today what
23 the Commission has not asked this Board to do. The
24 Commission has not asked this Board to reconsider its
25 initial decision. The initial decision is still - the

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1 appeal of the Board's initial decision is still
2 pending with the Commission.

3 The Commission has not asked this Board to
4 reconsider its findings, including the finding that
5 AmerGen has demonstrated frequency of UT measurements
6 in combination with other elements of their Aging
7 Management program provides reasonable assurance. They
8 have not asked this Board to re-examine that
9 reasonable assurance is linked to the assessment of
10 the adequacy of the amp. They have not asked this
11 Board to reconsider whether the thickness acceptance
12 criteria are part of the CLB. They have not asked
13 this Board to reconsider whether the compliance with
14 the acceptance criteria assures the adequate margin of
15 safety. They did not ask this Board to reconsider its
16 decision to not admit certain contentions that were
17 proposed by AmerGen, and appeals of those decisions
18 are still pending.

19 Finally, as this oral argument proceeds,
20 the Staff respectfully requests that this Board insure
21 the integrity of this proceeding by being mindful that
22 only a single specified issue has been referred to
23 this Board by the Commission, and be vigilant against
24 attempts to distort, mischaracterize, or supplement
25 the record of this proceeding.

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1 As this Board noted in its September 10th
2 order, this is not an evidentiary hearing, and the
3 record of this proceeding is closed. Today this Board
4 will hear arguments of counsel, not testimony.
5 Counsel is not qualified to testify. An argument of
6 counsel on technical matters, no matter how eloquent,
7 does not substitute for evidence.

8 JUDGE HAWKENS: Thank you.

9 Mr. Webster.

10 MR. WEBSTER: Thank you. Broadly, I think
11 it's pretty clear from the Commission's order that it
12 has referred a single question, a double part question
13 to the Board. The first part of the question is
14 whether the structural analysis that AmerGen has
15 committed to perform, and that is reflected in Staff's
16 proposed license condition matches or bounds the
17 sensitivity analysis that Judge Baratta would impose.

18 And I think to understand that question fully, one
19 has to look at Judge Baratta's statement.

20 Judge Baratta's statement, and I hesitate
21 to paraphrase it, so I'll actually quote directly
22 says, "Although I join my colleagues in the previous
23 decision in the main, I differ on one point regarding
24 whether the licensee has fully shown there is
25 reasonable assurance that the factors of safety

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1 required by the regulations will be met throughout the
2 period of extended operation, assuming a four-year
3 every other refueling inspection cycle."

4 After giving some background, Judge
5 Baratta then concludes, "It is essential to have a
6 conservative best estimate of the drywell shell before
7 entering the period of extended operation."

8 With regards to how that analysis should
9 be carried out, Judge Baratta states, and I'm going to
10 pick up in mid-sentence here, "I do concur with
11 Citizens that there is a lack of knowledge about the
12 actual thickness of the drywell, and that this
13 knowledge must be taken into account in any analysis."

14 And then Judge Baratta wraps up by
15 stating, "To account for the very limited data set of
16 thickness measurements, I would impose an additional
17 requirement on the 3D analysis to be performed by the
18 applicant; specifically, the applicant should be
19 required to perform a series of sensitivity analyses,
20 at least one of which includes an extrapolation scheme
21 to determine the thicknesses between the measured
22 points. The technique might be similar to the one
23 suggested by Citizens' expert, Dr. Hamilton, that uses
24 contour plots generated from known thicknesses, both
25 interior and exterior." So I think that pretty

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1 comprehensively explains the first part of the
2 question.

3 The second part of the question is a
4 little more open-ended, I think, which says, in any
5 event, explain whether additional analysis is
6 necessary. And so I think we're engaged here in a
7 two-step process. First of all, there's a lot of
8 differing interpretation about what Judge Baratta's
9 requirements actually are. I guess we all think that
10 we know what they are, but we all think they're
11 something different, so I guess that will be the first
12 part of the argument. And I think once it becomes
13 clear what Judge Baratta's requirements are, then -- I
14 mean, I think I have to make some assumptions about
15 that. But let's clarify that first.

16 JUDGE HAWKENS: Judge Baratta will make
17 them clear in this proceeding. Continue.

18 MR. WEBSTER: And so then we need to
19 address the second part of the question, which is
20 whether additional analysis is necessary.

21 Now, it may well be that to fully address
22 this question, some issues that were not addressed in
23 the first adjudicatory hearing may need to be
24 considered within this hearing. And we believe that
25 the Board has the power to do that.

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1 In Vermont Yankee, it's 5 NRC 717, the
2 Commission referred the question to the Appeal Board,
3 and stated, "The Appeal Board involved in each case
4 should take appropriate action to secure the
5 information necessary for it to act. In particular
6 cases, the Board may choose to request the parties to
7 address themselves to this issue."

8 So, in other words, yes, we agree that the
9 Commission has not either affirmed or reversed this
10 Board's initial decision. Yes, we agree that the
11 scope of the proceeding, this proceeding, is to
12 address the Commission's question; that is the
13 jurisdiction that this Board has. But the Board has
14 the power to take appropriate action to fully address
15 that question. If the appropriate action involves
16 taking additional testimony, or revisiting some
17 issues, then we believe that the Board has the
18 jurisdiction to accomplish that. Thank you.

19 JUDGE HAWKENS: Thank you very much.
20 We'll now hear from counsel presenting their
21 arguments, starting with AmerGen.

22 Mr. Polonsky.

23 MR. POLONSKY: Thank you. Before I start,
24 Your Honor, we have compiled some of the exhibits that
25 have already been circulated, exhibits that are in the

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1 record that I will be talking to. So instead of you
2 thumbing through volumes of exhibits, we'll be passing
3 out to the various counsel tables those exhibits for
4 ease of reference, and we'll project them up on the
5 board for the members of the Board, as well.

6 JUDGE HAWKENS: Thank you, Mr. Polonsky.
7 Also, you indicated you wish to reserve a certain
8 amount of time for rebuttal?

9 MR. POLONSKY: Yes, 15 minutes for
10 rebuttal, Your Honor. Thank you.

11 MR. WEBSTER: Judge, before Mr. Polonsky
12 starts, could I just request, could we get electronic
13 copies so that we all get mailed the exhibits on the
14 overhead projection, as well?

15 JUDGE HAWKENS: I'm sorry?

16 MR. WEBSTER: Could we request an
17 electronic copy from AmerGen so we can also project
18 these same slides onto the Board?

19 MR. POLONSKY: An electronic copy now?

20 MR. WEBSTER: If possible, that would be
21 --

22 MR. POLONSKY: I'll have to defer until
23 we're done with this, and see how procedurally we can
24 accommodate that request.

25 I think the procedure we anticipated, we

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1 would like to have happen here is us to walk through
2 the questions one by one, unless you have a different
3 protocol you'd like us to proceed on.

4 Okay. The first question was how did
5 AmerGen choose the thicknesses and mesh for the 3D
6 model? We had circulated on Tuesday the diagram
7 that's now posted. It shows a bottom view of the
8 drywell. It shows each of the ten odd-numbered bays,
9 their orientation with respect to each other, and it
10 shows that each bay is split with two areas of general
11 thickness, one above 11 foot, which goes from 11 foot
12 to 12 foot 3, and one from 11 foot down to the sand
13 bed floor, which is at elevation 8 foot 11 inches.

14 It also shows five locally thinned areas
15 that are part of the base case, and these bays here,
16 Bays 1, 19, 17, 15, and 13, and the thicknesses that
17 were assigned to those locally thinned areas. Those
18 locally thinned areas, as Mr. O'Rourke describes, are
19 either an 18-inch diameter circle, and those are the
20 smaller circles, or a 51-inch diameter circle, those
21 are the larger circles.

22 JUDGE ABRAMSON: Counselor, are these the
23 - is this information in the briefs you filed before
24 the Commission? Is this a characterization of what's
25 in Table One, or is there something new here?

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1 MR. POLONSKY: Your Honor, we don't
2 believe there's anything new on this diagram. The
3 information that's on this diagram is all in the
4 record, and I'll walk you through where we think it
5 is. Mr. O'Rourke's affidavit in Paragraph 15
6 describes how individual external UT thickness
7 measurement points were used. He describes, "Five
8 locally thinned areas were modeled in the sand bed
9 region as circular shaped ranging from 18 to 51 inches
10 diameter, and thickness of 658 to 850 mils. These
11 modeled areas are conservative, since this amount of
12 thinning does not actually exist."

13 I know in Citizens' motion, they raised
14 the concern that they didn't interpret that as being
15 part of the base case, but I think if you look at the
16 affidavit as a whole, I don't know how you can come to
17 that conclusion. In Paragraph 23 of Mr. O'Rourke's
18 affidavit, he states that, "The sensitivity analysis
19 also models a locally thinned area of 51 inches in
20 diameter, which a conservative average of 720 mils
21 which had been modeled into the base case and remains
22 unchanged for the sensitivity analysis."

23 There is similar language about the
24 locally thinned areas in Paragraphs 18 and 19. The
25 locally thinned areas are also clearly present in

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1 Citizens' own exhibit, number 45, which is part of the
2 packet of materials I handed out. The last five pages
3 of that exhibit shows each of these locally thinned
4 areas, page 8 of 12 shows Bay 1, and Bay 13, Bay 15,
5 Bay 19, and Bay 17 in order, and the second paragraph
6 of that exhibit explains that this technical
7 evaluation, which is Citizens' Exhibit 45, says that
8 this is going to be provided to Structural Integrity
9 Associates as input to the finite element model.

10 JUDGE ABRAMSON: And this, Citizens'
11 Exhibit 45, was presented when, was it in the original
12 hearing?

13 MR. POLONSKY: Yes, it was. Yes, all of
14 the exhibits are in the original hearing. But if you
15 match up the statement in Mr. O'Rourke's Paragraph 15,
16 it matches up exactly with Citizens' Exhibit 45.

17 The general thicknesses are provided -

18 JUDGE BARATTA: Let me interrupt you for a
19 second.

20 MR. POLONSKY: Yes.

21 JUDGE BARATTA: Looking at what was
22 Applicant's Exhibit 5, that's a picture of the drywell
23 showing the sand bed region, which extends from 8 feet
24 11 to 12 feet 3 inches according to the exhibit.

25 MR. POLONSKY: Yes.

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1 JUDGE BARATTA: Why did you choose to
2 divide the model up at, what was it, 11 feet?

3 MR. POLONSKY: Above and below 11 foot,
4 Your Honor.

5 JUDGE BARATTA: Why was that particular
6 choice made?

7 MR. POLONSKY: The rationale was
8 engineering judgment. There are some bays where above
9 11 foot, which is the elevation at which the internal
10 grid measurements are taken - if you recall from the
11 inside of the drywell, you cannot access, at the time
12 when the sand was there, anything below 11 foot unless
13 you dig a trench and remove concrete.

14 JUDGE BARATTA: That's the level, the
15 internal level of the concrete on the inside of the
16 drywell that we discussed previously at the original
17 hearing.

18 MR. POLONSKY: Right. The lowest level of
19 existing concrete, yes.

20 JUDGE BARATTA: And then you have -- there
21 are two troughs, as I recall, that were excavated in
22 two of the bays below that level.

23 MR. POLONSKY: Correct. Not until the
24 sand was removed could you then go on the outside and
25 look and see what the condition of the shell is from

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1 the outside. So some of the internal grid data
2 AmerGen recognized were not representative of that
3 bay, overall, because the outside of the drywell shell
4 in the sand bed region had a sand bed, and that sand -
5 -the top of the sand bed was not even. It,
6 essentially, and undulating surface, and the highest
7 level of corrosion, as was discussed at the
8 evidentiary hearing last fall, was at that sand-air
9 interface. If a grid was slightly above that, or
10 right at that interface, it would, if you used that
11 data, suggest a unconservative number for the whole
12 bay. So using engineering judgment, AmerGen decided
13 to split the bays in a horizontal way by modeling in
14 the 3D model a different elevation in some cases for
15 above the 11 foot, versus below the 11 foot.

16 JUDGE BARATTA: All right. When we're
17 talking about these regions, these are regions of
18 constant material property? That is, thickness,
19 unless you have another region defined, such as, I
20 guess in Bay 19, where you have a circular region of
21 720 mils versus 826, I think is -

22 MR. POLONSKY: Correct. A general
23 thickness was assigned to each of the bays of 11 foot,
24 and below 11 foot. And a separate single thickness
25 was assigned for these locally thinned areas. The

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1 exception is in Bay 17, where there's essentially a
2 donut with a locally thinned area within a locally
3 thinned area.

4 JUDGE BARATTA: What we're talking about
5 here is not actually the finite element mesh that was
6 used, because that's even smaller, I would presume,
7 than what these regions are.

8 MR. POLONSKY: Correct. Your Honor, the
9 mesh size, and I would look to you for guidance on how
10 to address this, is not in the record currently. I'm
11 prepared to respond to your question on mesh size, but
12 how would you like me to proceed, considering that
13 this is not an evidentiary hearing?

14 JUDGE ABRAMSON: Let me see if I can pick
15 this up. If I recall the record, you were asking Dr.
16 Mehta how he did the calculations, and I think the
17 record transcript, and I can give you some, roughly
18 some pages from the transcript.

19 JUDGE BARATTA: Actually, if you go to the
20 exhibit that shows from the ACRS hearing, it actually
21 shows the mesh that was used for the sector model that
22 was originally done. You could refer to that exhibit,
23 I think.

24 JUDGE ABRAMSON: I think -- I don't have
25 that in front of me, but I have the transcript of a

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1 prior hearing, and on page 477 of the transcript, Dr.
2 Mehta described the mesh as three inch by three inch,
3 I think. So we can just confirm whether that's, in
4 fact, the mesh that's being used for this, or if it's
5 something different. And if it's something different,
6 we'll deal with that some other way.

7 MR. POLONSKY: The mesh size is different,
8 Your Honor.

9 JUDGE ABRAMSON: Okay. See if I can come
10 at this another way, then. In your affidavit, in your
11 brief to the Commission, and in the affidavit, there
12 are statements, I guess I can call them assertions,
13 but there are statements to the effect that this new
14 model is conservative. In making that statement, do
15 you know, counselor, whether to be conservative
16 involved considerations of mesh size?

17 MR. POLONSKY: Yes, Your Honor. And the
18 goal of the 3D model, as was discussed at the
19 evidentiary hearing, was to use modern techniques that
20 have the ability with greater computing power to see
21 things at a much finer level than had been done by GE
22 years ago.

23 JUDGE ABRAMSON: I'm not comfortable going
24 farther than that.

25 JUDGE BARATTA: I actually, don't think

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1 that's -- modern methods automatically generate by the
2 mesh, is not the question. What is of importance is
3 how physically the thicknesses were input, not
4 necessarily the mesh size, because I presume it's much
5 smaller than the regions that you've applied here,
6 which are feet by feet, as opposed to inch by inch.
7 So I think -- I just wanted to confirm that we're not
8 talking about mesh here, we're actually talking about
9 large regions, which are then made up of smaller mesh,
10 portions of mesh at some points.

11 MR. POLONSKY: That's correct, Your Honor.

12 For the general thicknesses, Table One describes
13 bay -

14 JUDGE HAWKENS: In the evidentiary
15 hearing, Mr. Gallagher indicated the model will employ
16 a finer mesh than the previous GE model. There is no
17 reason for us to question that representation, is
18 there?

19 MR. POLONSKY: There is no reason for you
20 to question that, Your Honor.

21 JUDGE ABRAMSON: And we are correct in
22 assuming that Dr. Mehta's testimony at the original
23 hearing, that the mesh they used was three inch by
24 three inch is correct?

25 MR. POLONSKY: I believe that's correct,

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1 Your Honor. Table One, that is part of Mr. O'Rourke's
2 affidavit, sets forth the general thicknesses that
3 were assigned to each bay. You've asked for us to
4 explain how we came upon those thicknesses, but did
5 the Board have any specific questions, because,
6 frankly, all the detail about how those thicknesses
7 were selected is presented in that table, and I am not
8 sure I have anything further to add on the general
9 thicknesses.

10 JUDGE BARATTA: Yes, we have a few more
11 questions, but if you want to just kind of just
12 summarize what's in that table briefly.

13 MR. POLONSKY: Yes, Your Honor.

14 JUDGE BARATTA: Then we'll proceed from
15 there.

16 MR. POLONSKY: For the general area
17 thicknesses, AmerGen used the internal UT data grids
18 as representative numbers in most cases. In some
19 cases -- well, let me back up. For those bays which
20 have different numbers above and below 11 foot, the
21 internal grid data is sometimes itself split, and the
22 data from that grid was used to inform the 3D model
23 for above and below 11 foot.

24 For certain bays, it's very clear, and I'd
25 like to go to one of the pictures in Applicant's

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1 Exhibit 40, which is a picture of Bay 13. Here, and
2 let me just orient you, this is the vent header up
3 here, and this is the support for the vent header.
4 This is a vertical weld, so this is the top of the
5 sand bed region, and down here is the bottom. But on
6 the inside, you can see how you could take a grid
7 reading over here and get essentially nominal
8 thickness. And then take a grid reading on the other
9 side of the weld and get a very different thickness
10 average in your grid. And for Bay 13, for this
11 particular bay, there were three grids, one of which
12 showed nominal thickness. And that grid was ignored,
13 and the other two grids were used as a result, so that
14 is how the general thickness was selected for certain
15 bays. That's an example I gave you for Bay 13.

16 JUDGE BARATTA: Right. So looking at Bay
17 13, then, we had two corroded regions that were
18 depicted in the photograph, and a third which looked
19 essentially the original thickness. And then you
20 chose to ignore that, and use a thickness that was
21 more representative of the corroded region, which
22 would have been in that photograph to the left of the
23 region that was not corroded. Is that what -

24 MR. POLONSKY: Yes. That's how
25 engineering judgment was used in assigning general --

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1 one example of how engineering judgment was used in
2 assigning general thicknesses.

3 JUDGE BARATTA: All right. Now, looking
4 - I don't have all of the photographs that you've
5 presented. There's some others in that Exhibit 40,
6 was that done in each of the bays then?

7 MR. POLONSKY: Each bay was handled
8 uniquely and independently based on the data that was
9 available for that bay.

10 JUDGE BARATTA: Okay. You're saying the
11 data included these photographs, not just strictly the
12 UT measurements. In other words, you used that as a
13 guide?

14 MR. POLONSKY: It wasn't the photographs,
15 themselves. It was knowing what the condition of the
16 drywell shell was below 11 foot, because they had
17 visually observed it.

18 JUDGE BARATTA: Included the photographs,
19 and observations, et cetera, that we discussed.

20 MR. POLONSKY: Yes.

21 JUDGE BARATTA: And if you recall from the
22 hearing, we had personal observations, people who went
23 into the sand bed region and actually saw that, so
24 that was all factored in then to developing the model?

25 MR. POLONSKY: Yes. And if I could give

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1 you a good example from Bay 1, because one of the
2 later questions asks about Bay 1. Bay 1, the internal
3 data, suggests nominal thickness, and once they had
4 access to the outside of Bay 1, the external surface,
5 they understood that that was not representative.

6 So for purposes of modeling, they have
7 selected, and as explained in Mr. O'Rourke's affidavit
8 again in Table One, they selected the adjacent bay,
9 Bay 19, and assigned the thicknesses for Bay 19 into
10 Bay 1, which is why Bay 1 has identical parameters.
11 And that was done to be conservative, to be
12 representative, acknowledging, using engineering
13 judgment that the internal grid data was not
14 representative.

15 Now, one of the questions that's been
16 raised is well, why didn't you take into account the
17 external points? And AmerGen did do that. There are
18 23 external UT data points in Bay 1.

19 JUDGE BARATTA: All right. Could we --
20 Exhibit 44, Applicant's Exhibit 44, shows a diagram
21 of Bay 1. It says, "Spatial relationships of internal
22 grids and externally local thin areas". And what this
23 shows are a series of square and triangles that
24 represent points where UT measurements were made, not
25 clear which ones are internal versus external. I

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1 don't think that's identified, at least not in the
2 Exhibit 44.

3 MR. POLONSKY: Your Honor, a better
4 picture of that is in the 24 calc, which is the calc
5 of record, and that's provided behind Applicant's
6 Exhibit 16.

7 JUDGE BARATTA: Okay.

8 MR. POLONSKY: And it's the first figure
9 there, Figure 1-2.

10 JUDGE ABRAMSON: This is all that we -
11 sorry, counselor. This is all was -- these are
12 exhibits that were discussed at length during the
13 original hearing. Is that correct?

14 MR. POLONSKY: Yes.

15 JUDGE ABRAMSON: So there's no new
16 information here.

17 MR. POLONSKY: Absolutely none, Your
18 Honor.

19 If I could draw your attention to this 36
20 by 36-inch area, there are 15 UT data points. All of
21 these are external points.

22 JUDGE BARATTA: So all the triangles and
23 squares represent external points.

24 MR. POLONSKY: Correct. Yes. The squares
25 are less than 736 as the bottom indicates, and the

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1 triangles are greater than 736.

2 For Bay 1, there are 23 points here, 15 of
3 them are within this 36 by 36-inch square. This 36-
4 inch square area became the 51-inch diameter circle
5 that is the locally thinned area in Bay 1.

6 JUDGE BARATTA: That's what I was trying
7 to get at.

8 MR. POLONSKY: Yes.

9 JUDGE BARATTA: Actually, what did you do
10 with that, and is that -- because the orientation of
11 this, you're looking up in one case, and down the
12 other case.

13 MR. POLONSKY: So all of these points are
14 encompassed in the locally thinned area that's
15 included in the base case.

16 JUDGE ABRAMSON: And how do we get from
17 the affidavit that Mr. O'Rourke submitted to the
18 Commission, which says he's got a 51-inch diameter
19 circle, to how you just characterized that circle as
20 originating from this? Can you show us that train of
21 logic, or are we introducing something new here?

22 MR. POLONSKY: I don't believe we're
23 introducing anything new, Your Honor. In Mr.
24 O'Rourke's affidavit, in Paragraph 15, he describes
25 that there are five areas that were modeled. He says,

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1 "They're modeled in the sand bed as circular shaped
2 ranging from 18 to 51 inches in diameter, and
3 thickness of 658 to 850 mils." That information is in
4 Applicant's - I'm sorry - Citizens' Exhibit 45. And,
5 as I mentioned previously, the beginning of that
6 Citizens' Exhibit 45, which is a technical evaluation,
7 says that it's being prepared for Structural Integrity
8 Associates, for the finite element model. It's
9 signed. It's the final version. And in the back, the
10 very first locally thinned area for input, page 8 of
11 12, is for Bay 1. And it says, "Area C from Figure 1-
12 7 from the 24 calc." It says, "51 diameter circular
13 area that is 696 mils thick", and you can then go to
14 the 24 calc, which is Applicant's Exhibit 16, and
15 Figures 1-2 through Figures 1-7 are all Bay 1.

16 So the way we assigned in this case for
17 this bay, we have 15 points which are included in the
18 51-inch diameter locally thinned area. The average of
19 all the other external points, assuming that they are
20 representative of the exterior, of the shell
21 thickness, which they're not, but assuming that they
22 were, the average would be somewhere in the range of
23 860 mils. And the assigned value for this bay is 826
24 mils, so we believe that's a conservative thickness to
25 use for the general thickness area for this bay.

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1 JUDGE ABRAMSON: I don't recall, but was
2 there an exhibit that showed a picture of Bay 1?
3 There's quite a few pictures, I just couldn't find
4 one.

5 MR. POLONSKY: We'd have to look through
6 the ACRS presentation, which is AmerGen's Exhibit 40
7 and 41, to look for that. And we'll do that while
8 we're talking.

9 JUDGE HAWKENS: So you accounted -- took
10 the external measurements into account for Bay 1.
11 Were they taken into account for any of the other
12 bays?

13 MR. POLONSKY: Yes, Your Honor.

14 JUDGE HAWKENS: And in what way?

15 MR. POLONSKY: If we can go back to the
16 diagram, any of the five bays that have locally
17 thinned areas. Those were areas that had been
18 evaluated in the 24 calc as -- evaluated against a
19 local buckling criterion. If you recall, there was a
20 tray that we talked about a year ago, it was
21 Applicant's Exhibit 11. And the 24 calc, its purpose,
22 one of its purposes was to insure that none of the
23 areas of local thinning, as determined by the external
24 points, would be outside of that local, or exceed that
25 local acceptance criteria. And so, the 24 calc

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1 identified these areas, those 36 by 36-inch areas, or
2 12 by 12-inch areas, for evaluation.

3 The model input was then taken from the 24
4 calc, and essentially given to Structural Integrity
5 Associates, and that's described in Citizens' Exhibit
6 45. And those 36 by 36-inch areas that were square
7 simply became circles, 51-inch diameter, and the 12 by
8 12-inch areas became 18-inch circles. And that's how
9 the external points, those thin points, were
10 accommodated from the 24 calc, and translated into
11 input for Structural Integrity for the 3D model.

12 External points were also used in another
13 way. For those bays where we used data from adjacent
14 bays, and let me discuss those briefly. For Bays 1,
15 3, 7, and 15, AmerGen used data, internal grid data,
16 from adjacent bays, because as I previously discussed,
17 AmerGen did not believe that the internal data was
18 representative for the thickness below the 11 foot
19 level. So for those bays, at least for Bays 3, 7, and
20 15 below the 11 foot level, the general thickness area
21 was assigned using the average of the adjacent bays.
22 So if we can take Bay 3, for example, this was taken
23 from data from adjacent bays, Bay 7, frankly, which
24 has no external or internal data below 11 foot. It
25 was taken using data from adjacent bays.

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1 JUDGE BARATTA: Could you just reiterate
2 why you used the data from the adjacent bays, what
3 data you were using there?

4 MR. POLONSKY: Yes. The internal grid
5 averages for those bays suggested that the drywell
6 shell was near nominal thickness; yet, visual
7 inspections from the exterior suggested that some
8 corrosion had occurred in those bays.

9 JUDGE BARATTA: Again, you're using
10 additional -- the additional information that we
11 discussed previously.

12 MR. POLONSKY: Yes.

13 JUDGE BARATTA: In addition to the UT
14 measurements -

15 MR. POLONSKY: Correct.

16 JUDGE BARATTA: -- to better define it.

17 MR. POLONSKY: That's right. And just to
18 check ourselves to make sure that we weren't just
19 picking an average number, we looked at what the
20 normal distribution would have been for points,
21 external points for that average. And we compared the
22 external UT thickness measurements to the distribution
23 curve that would have been expected from average
24 thickness based on the internal UT grids from the
25 adjacent bays. And the external measurements were

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1 bounded by that distribution, demonstrating to us that
2 the average thickness selected in the bay was
3 reasonable.

4 JUDGE BARATTA: And these distribution
5 curves, as I recall, were in the -- one of the calcs.
6 I think the points were plotted to test for normality
7 and such.

8 MR. POLONSKY: Correct. And I believe
9 they were all normal, except for Bay 1.

10 JUDGE BARATTA: And was it -- when you say
11 it was bounded, do you know whether it was one, two,
12 or three standard deviations?

13 MR. POLONSKY: I'm afraid I don't, Your
14 Honor.

15 If there are no further questions on how
16 the general thicknesses were selected, or how the
17 local area thicknesses were selected, I can move on to
18 question two.

19 JUDGE BARATTA: Were there any other areas
20 -- I noticed at least looking at -- this was Applicant
21 Exhibit 16, your figure that you had up there a moment
22 ago, if you could bring that back up. That outside of
23 the 51-inch circle which is shown as that large
24 rectangle approximately in the center of the screen
25 there, there's also another region to the left there

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1 under minus 48 inches, I think, where you have two
2 squares represented there. How as that type of
3 information factored in?

4 MR. POLONSKY: That type of information,
5 which did not implicate the local buckling criterion
6 in the 24 calc was just treated as part of the general
7 thickness for the bay. The general thickness for this
8 bay was selected at 826 mils. And as I tried to
9 explain, there are eight external UT data points that
10 fall outside of this box. All eight of those, if you
11 average them, would come out to somewhere greater than
12 826, so the thought was that 826 was a bounding
13 number. There's only one locally thinned area in Bay
14 1.

15 JUDGE ABRAMSON: Sorry. Counselor, do I
16 correctly understand then that the general -- the
17 thickness used for the balance of the area in that bay
18 was below nominal?

19 MR. POLONSKY: Yes, very much below
20 nominal. Nominal is greater than 1,000 mils and the
21 number that was used was 826 mils. And that was based
22 on some averaging of these eight data points that were
23 taken outside of the big box. Well, the eight data
24 points were used as a check. The average of the eight
25 data points is greater than 826 mils. 826 mils was

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1 taken from the average for the general thickness from
2 the adjacent bay, which is Bay 19, which had a similar
3 pattern of corrosion.

4 JUDGE BARATTA: So in terms of an
5 extrapolation scheme, that would be how you are
6 extrapolating thicknesses for those regions where you
7 do not have data, or you question the data. Is that
8 correct?

9 MR. POLONSKY: That is correct, Your
10 Honor. Extrapolation was used we believe in a number
11 of ways, both of which we believe are conservative or
12 bounding. The first is for general thicknesses for
13 the base case, we used or extrapolated information
14 from adjacent bays where we did not have data in a bay
15 that would be representative of the corrosion below 11
16 foot. We also used an extrapolation technique in
17 looking at the locally thinned areas that are part of
18 the base case. I mean, the locally thinned area in
19 Bay 1 is 696 mils, as inputted into the model. We
20 know it's not 696 mils, and we know that area is not
21 51 inches in diameter. Those were based on 15
22 individual UT data points that we know were selected
23 because they were some of the thinnest locations.

24 What we've done is essentially averaged
25 and extrapolated between those points, and out to a

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1 51-inch diameter, and said well, let's be
2 conservative, and assume that that entire 51-inch area
3 is the average of all of those points, or is 696,
4 which I think is even a lower average than all of
5 those points. So that's an extremely conservative
6 bounding way, but we believe that uses extrapolation.

7 We then have sensitivity analyses, which
8 we haven't even gotten to. So far, I've just been
9 discussing what the base case is, but the sensitivity
10 analysis, we have one that looks at the uncertainty in
11 locally thinned areas, and one that looks at the
12 uncertainty in general thickness areas. The locally
13 thinned area sensitivity case takes that same locally
14 thinned area, the 51-inch diameter at 696 mils in Bay
15 1, and then it thins it by 100 mils, which is bounding
16 and conservative. So we are going to be running the
17 model at 596 mils for that locally thinned area, to
18 see what the sensitivity of the model is for that kind
19 of high-level change.

20 JUDGE ABRAMSON: Was that information
21 available to the Commission, that you were taking
22 another 100 mils off in the sensitivity study?

23 MR. POLONSKY: Yes, Your Honor. It's
24 described in Mr. O'Rourke's affidavit, and the
25 sensitivity analyses I believe are first discussed in

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1 Paragraph 18, where it says, "The first analysis
2 assesses the sensitivity of the base case to
3 uncertainties in the thickness of locally thinned
4 areas. The sensitivity analysis uses a hypothetical
5 locally thinned area in Bay 1, i.e., a 51-inch
6 diameter circle with an average thickness of 696 mils,
7 and reduces the thickness of that area by 100 mils to
8 596 mils." That is the simplest way to describe what
9 the first sensitivity analysis is.

10 JUDGE BARATTA: Okay. And there were no
11 measurements to suggest that, in fact, the thickness
12 was 596 in any of that region.

13 MR. POLONSKY: That's correct.

14 JUDGE BARATTA: And that there were no
15 visual observations to suggest that the thickness in
16 that area was 596.

17 MR. POLONSKY: That's correct. If you
18 took a gross conservative approach, you would look at
19 those external measurements and average them, and come
20 up with a number. And in Bay 1, I believe 696 is even
21 lower than that average, so the starting point for the
22 base case is conservative. Then you take another 100
23 mils off of that, again, just to see how the model
24 reacts to that level of uncertainty. But in no way do
25 we believe that that reflects reality, or the real

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1 uncertainty in the data.

2 For the second sensitivity case, we are
3 going to be looking at the reduction of general area
4 thickness. And in this case I believe it's Bay 19,
5 and we are reducing the general thickness area in Bay
6 19 from 826 mils down to 756 mils - I'm sorry - 776
7 mils. And that's described in Paragraph 22. It says,
8 "The sensitivity analysis models the general area of
9 the bay with a 50 mil reduction, i.e., 776 mils. The
10 general area", and it goes on to describe that it
11 affects the entire bay. And, again, the thought was
12 let's look and see if the uncertainty in the model
13 would be -- how it would be affected by a reduction in
14 50 mils over the entire area of the bay, excluding the
15 locally thinned area, and what would that do? Again,
16 we don't believe that reflects reality. We believe
17 that's a bounding conservative assumption, and that's
18 why that was selected.

19 Any questions on the sensitivity analyses,
20 the two sensitivity analyses that were done?

21 JUDGE BARATTA: Is there any reason that
22 similar sensitivities should have been applied to,
23 say, Bay 17, where you have that region 660 versus 850
24 spread over probably something about 50 some odd
25 inches? Your drawing isn't all up to scale.

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1 MR. POLONSKY: The sensitivity analysis
2 was not conducted in Bay 13, because we don't believe
3 it would have been bounding. Bay 13's locally thinned
4 area is only 18 inches in diameter. It's a small
5 area, and so the sensitivity analysis that we wanted
6 to do for locally thinned, on locally thinned areas,
7 we selected the largest area, which is 51 inches in
8 diameter. And we selected the thinnest of those 51-
9 inch areas, which is 696 in Bay 1. We believed it was
10 bounding, again, responding to the Commission's
11 directive that it be consistent or bounding with what
12 you had requested. That's how we've interpreted that
13 language.

14 JUDGE BARATTA: And when you -- unlike the
15 previous analysis where it was not possible to do a
16 - factor those actual areas into the actual model
17 itself, when you talk about a sensitivity analysis
18 using a locally thinned area in Bay 1, we're talking
19 about doing that as part of an entire 3D model, or are
20 you going back to a scheme where you represent just
21 the plate, as was done in the earlier analysis?

22 MR. POLONSKY: The sensitivity analyses,
23 both the local and the general area cases, were both
24 done in a 3D model using the base case thicknesses.
25 The only changes were as I described, 100 mils for the

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1 local area, 50 mils for the general area.

2 JUDGE BARATTA: You want to clarify that.

3 MR. POLONSKY: Yes.

4 JUDGE BARATTA: That's different than the
5 original that was used, one of the reasons why you did
6 it.

7 MR. POLONSKY: Right. Any additional
8 questions on the sensitivity studies? I think we've
9 covered engineering judgment, which was question two.
10 We could move on to question three, about the finite
11 element, how it was chosen, how it overlays the
12 measurements.

13 JUDGE HAWKENS: I don't want to go any
14 farther than we've gone on -

15 MR. POLONSKY: Moving on to question four
16 then. I think we've also addressed question four. We
17 described how we assigned general thicknesses. We
18 discussed how we assigned the local area thickness,
19 and how the sensitivity studies were done, and how we
20 believe those are conservative and bounding.

21 JUDGE BARATTA: Let me just interrupt you
22 for a second, just to clarify one point. We talk
23 about physical properties. The original model had
24 physical properties that were assumed for the strength
25 of the material. I think it's -- again, I assume

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1 those were the same properties that were used here.
2 There's no reason that they should be different. Is
3 that -

4 MR. POLONSKY: When you mean "properties",
5 Your Honor, do you mean the inputs to it, or do you
6 mean the ASME code assigned tensile strength -

7 JUDGE BARATTA: Whatever was used in the
8 original model, which was probably the code values, or
9 as-built values that were obtained from the vendor.

10 MR. POLONSKY: Yes, I believe they were
11 the same, Your Honor, based on the ASME code.

12 JUDGE BARATTA: Thank you.

13 MR. POLONSKY: I believe we've also
14 covered question four and five, unless the Board has
15 additional questions.

16 JUDGE HAWKENS: Let's proceed to six.

17 MR. POLONSKY: Okay. I believe that many
18 of the following questions go to a misinterpretation
19 that the Citizens had about whether AmerGen used a
20 locally or locally thinned areas in the base case. As
21 I've just explained, we did. This assertion,
22 essentially, we read it as assuming that we didn't use
23 any of the external data to create locally thinned
24 areas, and we did, so the answer to this question is
25 we don't know what they're referring to, because we

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1 did use the external data taken from the 24 calc and
2 converted those into circular areas, and assigned them
3 into these five bays as locally thinned areas.

4 Question seven, they state that again we
5 were overly optimistic using the average thicknesses
6 in Bays 1, 3, and 7. I described how we selected the
7 thicknesses for Bay 1 in detail, and how we checked it
8 against the external points. I've also described in
9 3, 7, and 15 how we used the external data. Again,
10 for Bay 7, there is no external data below 11 foot, or
11 internal data below 11 foot, so we're not sure what
12 Citizens are talking about with respect to Bay 7. But
13 Bays 3 and 15, I described how we used the average
14 general thickness of the adjacent bays, and then used
15 a normal distribution check of the external points
16 against that general thickness value.

17 For question eight, as to whether or not
18 the NRC believes that the 106 external measurements
19 should form the base case from which sensitivity
20 studies would be conducted, we didn't read the Staff's
21 affidavit as requiring that, and will defer to the
22 Staff to answer that question.

23 As for question nine, we've already
24 covered this issue about Bay 1. It was conservative
25 and acceptable to use the external UT data points and

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1 get a value greater than 826 mils. As I described, it
2 would be higher than that if you used the ones outside
3 of the locally thinned area.

4 Question ten, again is the same thing.
5 The only way you arrive at 0.788 inches is if you
6 average all of the external points, and just use
7 external points, which we know are bias thin.

8 Question eleven, we have already discussed
9 the extrapolation that we did, and we think that
10 that's bounding, so we don't think there ought to have
11 been a different technique.

12 For question twelve, seeing as my five-
13 minute bell has already rung, I will move quickly.
14 Question twelve, the fact that the internal
15 measurements, which cover less than 1 percent produce
16 non-conservative and uncertain estimates, first of
17 all, 1 percent is misleading. The internal grids were
18 selected after interrogating the entire, or a lot of
19 the internal diameter surface of the drywell shell to
20 select those grids. So to say that oh, they're only
21 in one area, we looked at a lot of the circumference
22 and selected those areas, particularly, so in some
23 ways they, themselves, the internal grids are
24 conservative themselves.

25 And, as I explained, the internal grids

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1 tend to coincide with the former sand-air interface
2 where the level of highest corrosion was. And for
3 those bays where it looks like once we got access to
4 the outside, that there was not nominal thickness
5 below 11 foot, and we adjusted the values for the 3D
6 model accordingly. So we believe we've been
7 reasonable in our interpretation, and bounding in most
8 cases.

9 Question thirteen, the issue about 1.81,
10 if all of the local and generalized acceptance
11 criteria have been met. This question challenges the
12 current licensing basis. It's outside the scope of
13 the proceeding, and most certainly is outside the
14 scope of what the Commission delegated in its August
15 21 order. And we're not going to be addressing it for
16 that reason.

17 Question fourteen, discuss the assertion
18 that the Staff's reliance on the Sandia study to
19 support conclusions about the drywell shell is
20 misplaced. Sandia's analysis is overly conservative.

21 In the first instance, they did not use the modified
22 capacity reduction factor, which was addressed at the
23 ACRS, and they came up, even without using that, with
24 a safety factor of 2.15, which satisfies the AMSE
25 code. And if they had used that modified capacity

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1 reduction factor, we believe they would have come up
2 with a higher number, in the range of 2.83, which is
3 previously entered as an exhibit, Applicant's Exhibit
4 41, slide 27, where at the bottom it shows Sandia
5 without modified capacity reduction factor 2.15, and
6 with it 2.83.

7 Citizens also attempt to undermine the
8 Sandia study with citations to Dr. Hausler's contour
9 plots, which the Board has found not reliable. So I
10 believe I've addressed the Board's fourteen questions.

11 Happy to answer other questions, if there are, or
12 retire.

13 JUDGE HAWKENS: Thank you. We'll now hear
14 from the NRC Staff.

15 MR. POLONSKY: Thank you, Your Honors.

16 MS. BATY: Good morning, Your Honors. I'd
17 just like to begin by briefly summarizing the Staff's
18 position.

19 JUDGE HAWKENS: Before you do, Ms. Baty,
20 would you like to reserve any time for rebuttal?

21 MS. BATY: Oh, yes. Thank you for
22 reminding me. The Staff would like to reserve 15
23 minutes of our allotted time for rebuttal. And I
24 highly doubt we will use all of our allotted time,
25 anyway.

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1 I'd like to begin by briefly summarizing
2 the Staff's position. As we stated in our June 11
3 submission to the Commission's order of CLI08-10, the
4 Staff's understanding -- based on our understanding of
5 what AmerGen plans to do, our position is that their
6 analysis will address and bound Judge Baratta's
7 concerns. And, in any event, no additional analysis,
8 including the 3D analysis that AmerGen has committed
9 to perform, is needed to support a finding of
10 reasonable assurance of the structural integrity of
11 the drywell shell during the period of extended
12 operation.

13 The Staff's finding of reasonable
14 assurance was based not on this commitment and license
15 condition, but rather the analyses that have already
16 been performed, including the confirmatory analysis
17 performed by Sandia, and the extremely conservative
18 analysis performed by GE.

19 The finding is also based on the results
20 of the 2006 inspections, and AmerGen's Aging
21 Management program, as enhanced by commitments,
22 including the commitment to perform full-scope UT
23 measurements every other outage.

24 It's also important to have a little
25 background about how this license condition and

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1 commitment came into being. AmerGen, who proposed
2 this, volunteered to do this during an ACRS
3 Subcommittee meeting. Then AmerGen submitted this as
4 a formal commitment based on the response received
5 from the ACRS Subcommittee, that the ACRS Subcommittee
6 thought it was a good idea. Then the ACRS suggested
7 that the Staff make it a license condition in order to
8 better quantify the existing margin.

9 It is not -- another important point to
10 understand, is that it is not the Staff's practice to
11 specify precisely how a licensee performs an analysis.

12 The Staff does not intend to -- unless the results of
13 this analysis show that the drywell shell does not
14 meet the code specified acceptance criteria, the Staff
15 will not be performing an in-depth review. Rather,
16 the Staff will be reviewing the summary report that we
17 received in considering whether the analysis looks
18 rigorous, whether it was consistent with good
19 engineering practice, and whether it's compliant with
20 various codes and standards.

21 JUDGE BARATTA: Could you explain, though,
22 how you would do that if you're not going to look at
23 the detailed report?

24 MS. BATY: Your Honor, we did not -- this
25 is not required for our finding of reasonable

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1 assurance. We are not requiring AmerGen to even
2 submit this analysis for review and approval. Rather,
3 they have agreed to provide us with a summary, and if
4 we review it, and we find that it lacks rigor, or that
5 it doesn't comply with accepted engineering practice,
6 or it doesn't have compliance -- it doesn't comply
7 with various applicable codes and standards, we will
8 be asking questions, and we may perform an audit. But
9 unless the analysis shows that the shell does not meet
10 code-specified acceptance criteria, or AmerGen decides
11 to request a change to its current licensing basis,
12 the Staff is not going to be performing a detailed
13 review of the analysis.

14 JUDGE ABRAMSON: All right. Counselor,
15 let's pick this up right here, because it seems to me
16 this is the crux of this whole matter, is what's the
17 Staff going to do to get comfortable that AmerGen
18 meets its commitment. And what you're telling me is
19 you're going to rely on the honor system. And we
20 appreciate that that's generally been the approach of
21 the Agency where things are not critical. But I
22 personally was involved right after the Three Mile
23 Island accident in assisting the Staff with a review
24 of all safety analyses by all licensees, and the Staff
25 did in-depth review of safety analyses, mandatory

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1 transient analyses to make sure that those analyses
2 were, in fact, reasonably representative, and
3 reasonably conservative.

4 Is it your view that this particular
5 confirmatory analysis that's being done under this
6 commitment, or that will be done under this commitment
7 does not rise to the level that needs Staff detailed
8 scrutiny and review? Is that what you're telling us?

9 MS. BATY: Yes, Your Honor, because, as we
10 stated in our briefs and the affidavit that Mr. Ashar
11 provided, the Staff's finding of reasonable assurance
12 is not conditioned upon, and relies in no way on the
13 outcome of this analysis.

14 JUDGE ABRAMSON: So what is the Staff's
15 view then of the value of trying to quantify this
16 margin?

17 MS. BATY: This was, as I explained, the
18 origin of this commitment and this condition is not
19 something that the Staff required. It's something
20 that the ACRS suggested, and that the applicant
21 volunteered to do.

22 JUDGE ABRAMSON: And you don't think that
23 the reason the ACRS suggested that this be done raises
24 the level of importance of this?

25 MS. BATY: Your Honor, I don't believe

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1 that I'm prepared to -- that I have a good answer for
2 that.

3 JUDGE ABRAMSON: That's okay. You can
4 stop there.

5 MS. BATY: My understanding is how this
6 came about, and that the GE analysis was done in the
7 early '90s, and that the ability to quantify -- there
8 were limitations to what computers, the mesh that
9 could be -- the finite element analysis that could be
10 performed at that time based on what computers could
11 accomplish. And now that is much greater, and so this
12 analysis will just provide a better way to quantify.
13 Right now, we have a worst case scenario. With GE it
14 was an extremely conservative analysis.

15 JUDGE ABRAMSON: So will the Staff be
16 looking at the assumptions and model that's used in
17 the to be submitted 3D analysis, and comparing those
18 to the assumptions that were used in the original GE
19 analysis to see whether, in fact, the GE analysis was
20 hyperconservative?

21 MS. BATY: Your Honor, my understanding is
22 that we will be reviewing -- we will review what we
23 get to look to see whether it was a rigorous analysis,
24 whether it was consistent with -

25 JUDGE ABRAMSON: Yes, you don't need to

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1 repeat that.

2 MS. BATY: Yes, don't repeat. That's what
3 we will be doing. And I don't know -- I would have to
4 check -- if you would permit me, I can check with the
5 Staff member here, but I can't give you that detail.

6 JUDGE ABRAMSON: Let me ask counsel for
7 AmerGen, is there any reason that you would not be
8 willing to submit more than a summary report, submit
9 enough detail that the Staff could look at it in more
10 depth?

11 MR. POLONSKY: I'd have to get back to you
12 with that, if I could answer it -

13 JUDGE ABRAMSON: Later? That's fine.

14 JUDGE HAWKENS: That's fine.

15 MS. BATY: But, Your Honor, realizing that
16 this would be a change in the Staff's position, if we
17 were to -- because our position is that we have
18 reasonable assurance based on what has been done.

19 JUDGE ABRAMSON: I understand your legal
20 position, counselor, but let's take a close look at
21 what's going on here. One of my colleagues has said
22 that he thought that it might be useful to do a little
23 more with the commitment, with the analysis and the
24 commitment. The Applicant has now said what we're
25 doing is better than what Judge Baratta had suggested.

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1 The Commission has referred it to us for resolution,
2 which in my mind means they're asking us to suggest
3 how this might be resolved, and how it might best be
4 handled.

5 The norm for dealing with commitments is
6 that the Staff reviews the commitment, that's not for
7 a Board to deal with. Norm is when there's a
8 condition on a license, the Staff looks at that
9 condition on the license to see whether it's met. And
10 what's happening here, at least in my mind, is the
11 Commission has asked us, is that condition sufficient
12 to satisfy Judge Baratta's concern? And, to me, that
13 means are we comfortable that the Staff is going to
14 assure that that condition is satisfied? And if
15 you're telling me the Staff is going to give it a
16 cursory review, that does not give me a very warm
17 feeling.

18 I understand the trust me philosophy, but
19 the Commission in particular asked us to looked at
20 this issue, and to suggest to them what's an
21 appropriate resolution. And I'm not very happy with
22 what I'm hearing about the Staff's business as usual
23 on this one.

24 JUDGE BARATTA: Yes. I share Judge
25 Abramson's concern. I mean, this resulted from an

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1 attempt by me to address the uncertainty that we have
2 with respect to the number of data points, and such,
3 that we take. And while I do feel that your
4 commitment to get the analysis done is a good one, I
5 didn't think you went far enough. And what I'm
6 hearing now is that it's almost like when this thing
7 comes in, it's going to get filed, and I think it's
8 going to get filed in something other than a square
9 file. That bothers me.

10 MS. BATY: Well, Your Honor, I don't think
11 the Staff's -- at the risk of incurring the ire of
12 this Board, I would have to state that you are going
13 to be sending a memo to the -- or referring some kind
14 of -- preparing some kind of paper for the Commission,
15 but I do have to say that - and I understand that this
16 Board is looking at how -- and Judge Abramson,
17 especially, you're looking at a way to resolve this
18 and looking at a solution, or a compromise, or some
19 sort of -- developing a way of approach to this issue.

20 And I understand that, but I also -- realizing that
21 it would be the Commission's position -- and the
22 Commission is the only one who has the authority to
23 direct the Staff in how it reviews applications.

24 JUDGE ABRAMSON: We don't doubt that.
25 We're going to give an advisory opinion, or a

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1 memorandum, or however that comes out. What I'm
2 suggesting is that, from my perspective, my advice to
3 the Commission would be to have the Staff check this.

4 MS. BATY: And that's very well and good,
5 but I am not, of course, in a position to commit the
6 Staff to performing an in-depth review, given that our
7 position throughout this proceeding, and the position
8 that we took in our SER, our analysis tells us that we
9 have reasonable assurance, and that there is a margin.

10 And that the only purpose of performing this analysis
11 is to be better quantify that margin, using modern
12 techniques that are now available to us, that were not
13 available in the early '90s, and that's the sole
14 purpose of doing this.

15 JUDGE ABRAMSON: And, by the way, the
16 Board's original ruling was to that effect.

17 MS. BATY: That is correct.

18 JUDGE ABRAMSON: We don't doubt that there
19 are reasonable assurances. That was the majority
20 opinion. And, in fact, in that, I believe Dr. Baratta
21 concurred. His concern was simply, let's get a little
22 more careful with this 3D analysis that's going to be
23 done to quantify things, and I think the Applicant
24 sounds like they have addressed that quite thoroughly,
25 and so the missing link here is what's the Staff going

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1 to do?

2 JUDGE BARATTA: And you're correct. I
3 mean, we don't have the authority to direct you to do
4 it, but we have been asked by your boss, our boss, to
5 advise them on what should be done.

6 MS. BATY: I really cannot go beyond that
7 at this point. If that's what this Board -- I can't
8 commit the Staff to perform any kind of review,
9 because our current position is what I have stated, so
10 I don't think we can get much further with this
11 without direction from -

12 JUDGE ABRAMSON: That's fine. We don't
13 need any more. We understand.

14 MS. BATY: Okay. Turning to the specific
15 questions that this Board has posed, the Staff notes -
16 - we note that this analysis has not yet been
17 performed, and as duly noted here, the Staff has not
18 had an opportunity to review it, any type of review of
19 what AmerGen is going to do. And, therefore, we're
20 not prepared at this point to answer detailed
21 questions about the assumptions that were made in the
22 analysis that has yet to occur.

23 Therefore, with regard to Questions One
24 through Five, AmerGen has addressed those questions
25 quite thoroughly. And the only question among those

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1 that seems to be relevant to the Staff was part of
2 Question Three, reviewing the mesh -- how we would
3 review for convergence and conservatism. And, once
4 again, assuming that the Staff was under some -- had
5 some reason to be performing a detailed analysis,
6 either because we are ordered to by the Commission, as
7 you suggest, or AmerGen requests a change of its CLB,
8 or the analysis doesn't show that the shell meets the
9 code specified acceptance criteria, we would review
10 for -- we would examine the approach used for
11 optimizing the mesh, finite element size mesh, and we
12 would see what -- we would review whether the chosen
13 mesh size is consistent with good engineering
14 practice. But not having seen it, not having had a
15 chance to review it, we can't provide any more
16 detailed answer.

17 With regard to Question Six -

18 JUDGE HAWKENS: Ms. Baty, in the event
19 that this analysis were to reveal that it was less
20 than 2.0, less than the CLB, can you walk me through
21 what the process would be, and what impact that would
22 have on the renewal?

23 MS. BATY: Well, Your Honor, I -- it's
24 hard to speculate what impact that would have on the
25 renewal, because I believe there's a good likelihood

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1 that this analysis will be completed before a renewed
2 license is even issued, given I understand AmerGen's
3 plans to submit it before -

4 JUDGE HAWKENS: I believe that was part of
5 the commitment, it was before the -

6 MS. BATY: Right. But it will be -- and
7 I'm guessing based on the way this proceeding has
8 progressed, that they will not be in possession of a
9 renewed license by the time this is submitted.

10 If it would show -- in the highly unlikely
11 event that it would show that they do not meet the
12 required code acceptance criteria, the Staff would,
13 indeed, be performing an in-depth review, and would
14 probably be requiring additional analysis on the part
15 of the Applicant to provide justification. And if
16 that justification was not provided, the Staff would
17 have to take appropriate action, including possibly --

18 I mean, the Commission certainly has the power to
19 shut the plant down and order decommissioning,
20 commencing decommissioning.

21 So, in short, there would be a lot of
22 action taken, including very detailed analysis of --
23 review by the Staff of this analysis in the highly
24 unlikely event that the analysis doesn't provide an
25 acceptable result.

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1 Turning to Question Six, again, AmerGen, I
2 believe, has addressed Citizens' assertion that --
3 Citizens seem to be under the impression that AmerGen
4 should use just the external points. And AmerGen has
5 cleared up that they are not, in fact, relying solely
6 on the internal points. They are also considering the
7 external data points.

8 With respect to Question Seven, once again
9 it appears that Citizens have misinterpreted what
10 AmerGen plans to do. And AmerGen has clearly stated
11 that they are considering the external points.

12 With regard to Question Eight, which is a
13 question directed more to the Staff, about whether
14 AmerGen must use the 106 external data points and its
15 base case. Citizens have misread Paragraph 8 of Mr.
16 Ashar's affidavit. Mr. Ashar did not state that the
17 106 external UT measurements must form, and
18 exclusively form the base case. If that's how his
19 paragraph was interpreted, it's simply been misread.
20 The Staff's position is that all available data should
21 be considered, and the Staff's position is further
22 that the 106 external UT measurements represent the
23 extent of local corrosion, they represent the locally
24 thinned areas.

25 Turning to Question Ten, I believe that

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1 AmerGen has explained, has responded to this concern
2 of Citizens, and the Staff's review of what -- of the
3 documents submitted by AmerGen, including the diagram.

4 It appears to be reasonable, but, of course, the
5 Staff has not had an opportunity to review the
6 assumptions that were made in this analysis at this
7 point, but it appears reasonable at first blush. And,
8 once again, it appears that Citizens are pushing for
9 an analysis relying exclusively on the external
10 measurements, which would be unduly conservative.

11 Question Eleven, I believe AmerGen has
12 addressed that. And based on the Staff's
13 understanding of what AmerGen intends to do, we
14 believe that they are using an extrapolation technique
15 in considering both the internal and external.

16 With regard to Question Twelve and the 1
17 percent argument made by Citizens, just to echo. This
18 question relates to a contention that was challenging
19 the spatial scope of UT measurements. And that
20 contention was not admitted by this Board, and the
21 appeal of that decision is still pending with the
22 Commission.

23 Furthermore, the record reflects that the
24 severe corrosion of the drywell shell is localized, is
25 not a generalized corrosion, and the bathtub ring that

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1 we all spoke about last September. And, so, the
2 Staff's position is that AmerGen has adequately
3 characterized the extent of the corrosion of this
4 drywell shell. And the record reflects the number of
5 UT measurements that were taken in order to select the
6 locations for the UT measurements that they have
7 repeatedly taken.

8 With regard to Question Thirteen, as this
9 Board found in its initial decision, AmerGen's
10 acceptance criteria is part of the CLB, and issues
11 related to the adequacy of the CLB are outside the
12 scope of this proceeding. The single issue that the
13 Commission referred to this Board is whether the 3D
14 - is about the 3D analysis that they plan to perform.

15 And they simply did not ask this Board to revisit the
16 acceptance criteria that's in the CLB.

17 However, in any event, the conditions that
18 would give rise to a safety factor of 1.81 do not
19 exist, because generalized corrosion of the drywell
20 shell has not occurred. It has not been degraded
21 throughout to a uniform thickness of .736. And
22 there's no evidence that that's going to occur in the
23 future.

24 Finally, with regard to Question Fourteen,
25 the assertion that the Staff's reliance on Sandia is

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1 misplaced. First of all, the Sandia analysis was a
2 confirmatory analysis, and it was not the sole basis
3 of the Staff's reasonable assurance finding.

4 The Sandia study used the average external
5 UT measurements from 1992, in addition to, they used
6 the external measurements for the general thickness
7 criteria from 1992, no internal points. Plus, they
8 used a couple of -- two locally thinned areas.

9 The difference between the 1992 and the
10 2006 measurements really is negligible. The record
11 reflects -- furthermore, the record reflects that the
12 UT measurements, the external UT measurements were
13 taken at areas selected, at thin areas, and they're
14 biased. And that is what this Board found in its
15 initial decision.

16 Finally, Citizens' argument relies on Dr.
17 Hausler's contour plots, which this Board found in its
18 initial decision to be unreliable.

19 To repeat the Staff's position, I'm sure
20 it's very clear that the Staff's finding of reasonable
21 assurance was not based on this promise to perform
22 condition, commitment to perform this 3D analysis, and
23 that our finding of reasonable assurance is based on
24 the analyses that have been performed, the results of
25 the 2006 inspection, and AmerGen's Aging Management

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1 program, which includes full scope UT measurements
2 every other outage, and inspections to insure the
3 integrity of the coating.

4 I have nothing more unless the Board has
5 further questions for the Staff.

6 JUDGE HAWKENS: Thank you.

7 Mr. Webster, are you prepared to proceed?

8 MR. WEBSTER: Could we just spend five
9 minutes setting up our projection here?

10 JUDGE HAWKENS: Let's take a 10-minute
11 break. We'll return at 10:43. Thank you.

12 (Whereupon, the proceedings went off the
13 record at 10:34 a.m., and resumed at 10:47 a.m.)

14 JUDGE HAWKENS: Please be seated.

15 Mr. Webster, you may proceed.

16 MR. WEBSTER: Thank you, Judge. If I may,
17 I would like to reserve 10 minutes for rebuttal.

18 JUDGE HAWKENS: We will take that request
19 into consideration.

20 MR. WEBSTER: Thank you, Judge. First of
21 all, I'm afraid I'm forced to object to testimony by
22 AmerGen regarding the distribution, the normal
23 distribution of the external points. While my
24 recollection is somewhat hazy, and I haven't quite
25 been able to find it in the record, I do believe there

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1 was some argument about what was the appropriate
2 statistical distribution, and we'll address this point
3 in a briefing afterwards. With regard to the
4 averages, we'll address that point in the
5 presentation. The physical properties in the model,
6 again, we don't believe that has been stated
7 previously in the record.

8 With regard to the NRC Staff, I have an
9 interesting presentation. I think the thing that
10 really sticks out is the Staff's assertion there is no
11 generalized corrosion of this drywell. I mean, it's
12 very, very clear that there is a -- in the sand bed
13 region there is generalized corrosion. AmerGen's own
14 estimates very clearly show that.

15 JUDGE ABRAMSON: Okay. Let's not belabor
16 it. Let's get on to what we've got to look at.

17 MR. WEBSTER: Well, I think it's
18 troubling, Judge Abramson, that the Staff doesn't even
19 appear to understand that, even at this juncture. So
20 the big picture here is that the limiting margin is
21 probably the margin above the safety factor of two,
22 which is a CLB requirement. The problem is, we don't
23 know what that margin is, so it's rather difficult, as
24 we've all maintained all along, to decide what the
25 appropriate margin frequency is, when we don't know

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1 what the margin is, you don't know what the limiting
2 margin is, and you don't know what the uncertainty of
3 the limiting margin is.

4 AmerGen's modeling is supposed to quantify
5 this margin, but we've heard nothing about how they're
6 going to do that. We need to know more than whether
7 it's just above the safety factor. We need to know
8 something you can relate to the measurements, unless
9 AmerGen's proposal is to continuously remodel each
10 time they take some more measurements. AmerGen had an
11 original proposal to actually evaluate the margin in
12 terms of thickness. They now seem to have dropped
13 that proposal.

14 There's an open question about what the
15 required limit of uncertainty is. I realize the
16 Commission has not referred this issue to the Board,
17 but we believe that Judge Baratta's requirements make
18 it necessary to provide an estimate of the
19 uncertainty, initially a best estimate, and then some
20 bounding estimates of the uncertainty.

21 Finally, we believe that they must do the
22 analysis before a license is granted, not as a
23 condition, and I refer you to Indian Point decision
24 which again will pick up the briefing.

25 In terms of presentation today, I'd like

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1 to pick it up factually first, and then address the
2 Board's questions all at the end, if I may. I may
3 pick up some along the way, as well. Obviously if you
4 would like it any different, I'd be more than happy to
5 change it.

6 JUDGE HAWKENS: That's fine. Thank you.

7 MR. WEBSTER: So, first of all, I think
8 it's clear, this is Citizens Exhibit 6118. I think
9 it's clear that there are three data sets here. We've
10 had lots of different argument about what the
11 appropriate data sets are. There's the external data,
12 that's the red line there. There's the trench data in
13 two bays, and then there's the grid data, which is the
14 larger dots in the middle there. And, broadly, this
15 data doesn't disagree that much.

16 Obviously, it's taken from different
17 areas, so one wouldn't expect perfect correlation.
18 The internal data is, by necessity, by physical
19 necessity, always taken at around the 11 foot 3 level,
20 and that's because there's concrete on the inside
21 apart from where these trenches exist. The external
22 data is sometimes taken above the 11 foot 3 level,
23 sometimes below the 11 foot 3 level, but it's the only
24 data that we have that deals with the area below 11
25 feet. So we basically submit that what should be done

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1 here, contrary to AmerGen's suggestion, we're not
2 saying you should use only the external data. We're
3 saying you should use all the data. And we're saying
4 we have some known data points. Those known data
5 points are where you actually did the measurements, so
6 it makes sense to assign in this fine mesh model, it
7 makes sense to assign the meshes where the points are
8 actually taken to be the values that you've measured
9 there.

10 JUDGE HAWKENS: When you look at the
11 external data points, and we discussed this quite a
12 bit during the original hearing, how would you propose
13 those measurements be adjusted for the fact that there
14 was grinding down? Would you propose they take off
15 100 mils, they add 100 mils back, would they 200 mils
16 back? As I recall, there was that level of
17 uncertainty. What would you suggest would be a
18 reasonable way to deal with that?

19 MR. WEBSTER: Okay. Well, I think this is
20 dealt with actually by AmerGen's Exhibit 27 at 17,
21 which says that some inspected spots are over-ground,
22 not all, but some. So I think the first step is to
23 identify which of those spots were over-ground. And
24 the result of that over-grinding, it says accommodates
25 -- were slightly deeper than originally found by .03

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1 to .1 inches. So, again, I think you need to go back
2 to the original data. I think we need to look at the
3 records that we've got about grinding, and we need to
4 find out which of the points actually were over-
5 ground. And then if correction is appropriate based
6 on those records, then correction should be made.

7 Just as -- while we're on this subject of
8 bias, this is the evidence at the hearing that AmerGen
9 pointed to, to show bias. It actually doesn't show
10 bias, at all. This is purely a measurement,
11 micrometer base measurement of the state of the
12 drywell around the measurement point, nothing to do
13 with bias.

14 Now, this is the trench data. And, again,
15 here we have quite a lot of data. These trench data
16 really provides quite a nice vertical profile. It's
17 limited in terms of the circumferential profile, but
18 it provides a very nice vertical profile, and we don't
19 quite understand why it's not used. Basically, we
20 have all this data. It's hard to understand why the
21 Applicant isn't assigning the meshes to actually have
22 the actual values that have been measured.

23 Judge Baratta's requirement talked about
24 analysis of the actual condition of the drywell.
25 AmerGen's proposal is not the actual condition of the

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1 drywell, at all. It is some sort of bizarrely smooth,
2 dimpled shape, that has nothing to do with reality, or
3 at least has a tangential connection to reality. It's
4 not as close to reality as it could be.

5 So just on the 1 percent point, obviously,
6 the internal measurements, this is AmerGen email.
7 Seven hundred square feet is the drywell, the measured
8 area is 3.9 square feet, so that's a little more than
9 half a percent. And Mr. Polonsky talks about scanning
10 around the drywell, obviously, because they couldn't
11 go below 11 feet. Actually, the area that's subject
12 to the most corrosion, AmerGen simply could not check.

13 Like, for instance, in Bay 1, as we'll see a little
14 bit later, the higher level measurements didn't show
15 any corrosion, but Bay 1 is one of the most corroded
16 bays. So that circumferential scan is of very limited
17 use. And what's more, no data has ever been produced
18 from that circumferential scan, no records whatsoever,
19 actually.

20 Now, moving on, these are the measurements
21 in Bay 1. What we see is that the measurements range,
22 the lowest 1.3 is 665 mils, .665 inches; .7 is 669
23 mils, .669 inches. And, in fact, when we plot these
24 out, Dr. Hausler's plots, much maligned, I might add.

25 I don't quite understand how these contour plots

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1 could be incorrect. They're simply a result of
2 applying a mathematical algorithm. It's not really a
3 question of correct or not correct. These are a
4 visualization of the data. They show you -- they
5 present a visualization. That's what they do.

6 Obviously, the very limited data we have,
7 we're not clairvoyant here. We can't find out what is
8 in between these points. We can only look at what
9 data we've got. So the question here is, well, this
10 is what Mr. Tamburro, and AmerGen showed a slide from
11 AmerGen Exhibit 16, which represents these areas in
12 Bay 1. So there's Area 3, which AmerGen has in some
13 way included in its area, it's thin are, that's
14 putting in Bay 1.

15 The problem is that the visual
16 observations actually show that there's a bathtub
17 ring. All the visual observations are that there's a
18 bathtub ring running around the outside. That bathtub
19 ring is represented by Area 2. Now, Area 2 is not
20 included in AmerGen's model at all, not even
21 mentioned. And then we have Area 3, which lays off to
22 the left. And here, I think there's some very
23 misleading issues.

24 If we look up the top there, there's two
25 points up at the top, Point 15 and Point 14. Those

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1 points were actually taken by AmerGen to check - well,
2 actually, they were taken by GPU, but to check whether
3 the meter was working. When they were taking this
4 data, they couldn't believe how thin this bay was, so
5 they went up to the nominal area where they knew it
6 was uncorroded, to see whether the meter would give
7 them an uncorroded reading, and indeed it did, so that
8 showed that the results were right.

9 Now, the only way that you can come up
10 with an estimate of -- that's larger than 826 for that
11 area, which is Area 1 on this chart, which is over to
12 the left slightly towards the bottom, is if you
13 include .15, which is the nominal 1160. If you
14 exclude the nominal, and then average those other
15 points, I just did it at the table over there, the
16 average is actually 751 mils, which is way below the
17 826, which AmerGen has assigned to this area.

18 So, yes, that's just showing -- that's the
19 same diagram that Mr. Polonsky showed. It just
20 corresponds, just want to illustrate it does
21 correspond to Dr. Hausler's representation. And, of
22 course, the other point to pick up is that the problem
23 with a lot of these measurements is they're very
24 narrowly focused around the vent lines. There are big
25 areas between the vent lines where we just don't have

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1 measurements, and in certain places across those areas
2 it's going to create a huge amount of uncertainty,
3 admittedly, but that's what we're stuck with because
4 of the limited amount of data that we have.

5 So picking up, just to confirm that for
6 Bay 1 then the proposal is nothing like the reality.
7 AmerGen has repeatedly suggested that Bay 1, a
8 conservative estimate for Bay 1 is around .8 inches.
9 Now, they're assigning it 826, and the thin area in
10 Bay 1 does not encompass anything like the thin area
11 that's actually been observed.

12 JUDGE BARATTA: In what respect, counsel?

13 MR. WEBSTER: In the respect that the
14 bathtub ring is not present in the model, and the area
15 to the left, which is an average of 751 is also not
16 present in the model. So when you actually
17 extrapolate, as well as interpolate, beyond, we see
18 this area to the left, towards the middle, which is
19 extremely thin. And it's extremely thin because this
20 is driven by a point, the thinnest point measured, I
21 think, which is .5, which is the one on -- it's a
22 minus 44, minus 24, and that's a thickness of 685, I
23 think.

24 JUDGE ABRAMSON: Counselor, we had a lot
25 of discussion of extrapolation and interpolation in

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1 Dr. Hausler's model, so I don't see a need to spend a
2 lot of time on it now, unless my colleagues would like
3 to.

4 MR. WEBSTER: Yes. Okay. Moving forward,
5 Bay 13, a couple of problems here. One big problem is
6 that the measurements in 2006 missed out many of the
7 thin points that were measured in '92. We see here in
8 the right column, the measurements that are in bold
9 and to the right, and a right justified, in the
10 remaining wall thickness, 2006 column, which is the
11 second from the right, were not measured in 2006. So
12 we know those areas are thin. We just don't know how
13 thin they are right now. In general, the 2006
14 measurements came out to around .2 inches thinner than
15 the previous set of measurements, so Dr. Hausler
16 suggested that the only thing we can really do is
17 apply a correction of .2, and then put them in there.

18 That's certainly better than missing them out
19 completely. But, obviously, it's far less than ideal.

20 It would be much better to actually have a
21 measurement.

22 Again, here what we see, two things. Dr.
23 Hausler's plot, we see the measurements plotted out,
24 and we see AmerGen's assessment of what these thin
25 areas are. Again, what AmerGen has included in its

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1 model is actually Area 3, at a thickness of 758 mils.

2 I'm sorry, I think this is 658 mils. I'm not quite
3 sure why that's done, but, anyway -- but the problem
4 is there's a big area here, again, the bathtub ring
5 area, which is totally omitted from the model. And,
6 so, we don't think the model is anything like a
7 realistic representation of what's going on. It's,
8 admittedly -- we agree that it's difficult to produce
9 a realistic representation, but we think we should do
10 the best we can.

11 This is going back to the original
12 estimate by AmerGen, which clearly shows that there's
13 an area there, 12 by 12. That's where the 658 comes
14 from. Right. There's an area there, 12 by 12, which
15 is 658 mils, but then there's a much bigger area, the
16 bathtub ring area is assigned as Area B, which is a
17 thickness of .751. Now, AmerGen is proposing to use a
18 thickness of .907 for Bay 13. So it's kind of hard to
19 understand how that thickness has been assessed by
20 AmerGen as 751, and morphs into being 907.

21 Again, if we look at the extrapolated
22 plot, what we have here potentially is a huge area
23 which is less than 725 mils. A very large area. The
24 sensitivity analysis that AmerGen is doing just
25 doesn't encompass this area, at all. That's really

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1 the problem with the sensitivity analysis, is that it
2 should bound the potential solutions for the thickness
3 of this drywell shell, and it simply doesn't do that.

4 Now, here I just wanted to illustrate,
5 this is -- I just picked a random from Dr. Hausler's
6 affidavit, contour plot. What this really shows is
7 that the little blue area at the top in the middle is
8 the area of the internal measurements. So you can see
9 just how little area is covered by the internal
10 measurements. And what a leap of faith it is to go
11 from a few of those internal measurements, miss out
12 all the external data, and then project forward from
13 those.

14 This is the actual three, we see how few
15 measurements there actually are. Now, looking at the
16 averages, I mean, we don't think averages, to be very
17 clear on this, we think averages -- we're going to
18 have to do some averaging. The contour plots is a way
19 of averaging. That's straightforward, so we think
20 averaging is going to have to be used, but we think we
21 should make the model as realistic as possible by
22 fixing the points at which we have measurements to be
23 the thickness measured. And then using averaging
24 through contour plotting, or another kind of
25 extrapolation routine. I mean, we can work on the

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1 interpolation routine, but we're going to have to do
2 some averaging between the points. We need to come up
3 with the best estimate between the points. And if
4 there's a correction needed, Judge Abramson, we
5 believe that we should find the records and actually
6 try and figure out what it's needed to be.

7 I don't want to belabor this one. I think
8 it's pretty clear. The right-hand column here, this
9 is from AmerGen Exhibit 16 at page 5. It's the right-
10 hand set of tables. It shows in the second column the
11 average of the external points. And then on the left,
12 I've put the diagram that AmerGen is using here. So,
13 for instance, in -- let's pick a bay, in Bay 13,
14 AmerGen is using an average of 907, but the average of
15 the external points is .986, or .786, sorry. So
16 there's a difference of .2 inches between -- well, .12
17 inches between the Bay 13 measurements, and the actual
18 was proposed. And in every case, I think that what's
19 proposed is actually quite a bit -

20 JUDGE BARATTA: Let me interrupt you at
21 this point. I hear what you're saying about using
22 actual data, but there's a -- in the original
23 discussions we had here last September, it was pointed
24 out that there is a region over which you'd have to
25 have something in order for it to impact on the total

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1 capacity of the drywell shell. And I believe, and
2 it's in that same section that Judge Abramson referred
3 to before, where we were told that it's on the order
4 of about 18 inches. I can find in the transcript
5 where that was said. Yes, I think it was Dr. Mehta,
6 if I recall, said that. So you get to a point where
7 this type of detail on such a very local basis just
8 gets washed out, because the material is averaging.

9 MR. WEBSTER: Well, that's -

10 JUDGE BARATTA: I don't understand.

11 MR. WEBSTER: Can I just -

12 JUDGE BARATTA: Yes.

13 MR. WEBSTER: If I can pick that up. I
14 mean, if you look at the size of this area, this
15 bathtub ring on this diagram, it's about 12 inches by
16 -- well, it's not very clear from that diagram. This
17 is to scale. The size of the ring there is about 16
18 inches by about 54 inches, so these are sizeable
19 areas.

20 JUDGE BARATTA: I'm not taking issue with
21 that. What I'm saying, you were saying that we should
22 use the actual measurements, which are only over a
23 fairly small area. I don't remember what that was,
24 but I go to page 477 at 18, that's where Dr. Mehta
25 says that the square root of R over T, referring to

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1 the radius and thickness of the material, the
2 extensive 18 inches, you know, this is my judgment
3 call, but shouldn't affect materially the buckling
4 margin, referring to if you've got things smaller than
5 18 inches variations, it's not going to really affect
6 that. Okay? And so, in essence, the material itself
7 is averaging a lot of this out, which is what you'd
8 expect, because it's a reasonably stiff material. So
9 I'm trying to get how fine do we have to do this in
10 terms of the model.

11 MR. WEBSTER: I think what's interesting
12 here is this is the -- these are the cutout areas that
13 were put into the GE model, 36 -- they were 12 by 12
14 in the middle, and then 3 feet square around the
15 outside in the transition area. And those -- putting
16 in those areas reduce the buckling capacity by around
17 9.5 percent.

18 JUDGE BARATTA: And that's consistent with
19 what -- if it's more than 18 inches, which clearly
20 that is, it's going to have an effect.

21 MR. WEBSTER: And so I think you're right,
22 that we may not have to go -- I mean, I think it's a
23 question of how do we do this interpolation. We may
24 do it more -- it may not be useful to go down to the
25 mesh size of the model, because we don't really have

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1 the data to support going down to the mesh size of the
2 model.

3 JUDGE BARATTA: Right.

4 MR. WEBSTER: But we need to go down to an
5 area which is smaller than would be -- make a
6 difference structurally.

7 JUDGE ABRAMSON: Counselor, let me see if
8 I can't get you to sort of encapsulize what your view
9 is of the analysis that AmerGen is proposing to do,
10 and their statement that this would be conservative.
11 And I understand all the questions about the data, but
12 I'd like to hear you address maybe in bullet form,
13 give me a few -- give us the bottom lines, if you
14 will, of how you think they err, and how it should be
15 fixed.

16 MR. WEBSTER: Okay. So just let me take
17 it from the top then. The first problem, the
18 commitment isn't all the way around. It should require
19 AmerGen to assure the Staff that the model does not
20 show any problem, rather than waiting for AmerGen to
21 highlight a problem. So that's the first problem.

22 The second problem, they've over-
23 averaging. I mean, the averages, even if you had -- I
24 mean, although some degree of averaging is needed, the
25 areas that they've averaged are too big.

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1 Third problem, the actual averages derived
2 aren't based on the data. I mean, if you think about
3 it, and they've averaged, they only used the internal
4 data from Bays 5, 9, 11, 13, 17, and 19. Bay 13 is
5 actually modeled as the lower -- as the average of the
6 lower part of Bay 19, and the average of Bay 5. So
7 there's some strange -- it's very hard -- we know that
8 bay-by-bay there's -- each bay is very different.
9 It's a very strange approach to then start using bays
10 that aren't even adjacent to try to derive some
11 thickness, when you actually have data in the bay.

12 JUDGE BARATTA: Right. Again, when I read
13 the affidavit, I had the same concern. And that's why
14 we had some questions. Now you've heard that they did
15 take additional information, not just strictly the
16 thickness measurements, but the photographs that they
17 have, and visual inspection and such, which you saw
18 last time, into account, and in an effort to try to
19 capture or get additional information for those areas
20 that they don't have thickness measurements. I may be
21 over-simplifying things, well, they're taking this bay
22 which is not -- because if you look at the
23 photographs, they show they are similar.

24 MR. WEBSTER: Well, actually, the visual
25 inspections, as I said, do backup the assertion about,

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1 for instance, the bathtub ring is a notable feature of
2 all the visual inspections that have taken place since
3 the sand was removed, and that's not present in the
4 model. So I take issue, although that's an assertion
5 of counsel, I don't think that's on the record, and I
6 find it hard to believe, if they did do that, they
7 didn't do a very good job doing it.

8 The fourth problem is that they're using -
9 - the capacity reduction factor they're using is far
10 too high. We know from Sandia that the capacity
11 reduction factor should be much -- the enhancement is
12 not justified. Actually, if you go back and look at
13 the Brookhaven National Lab's report, they also concur
14 that they're double counting this hoop stress. And
15 our experts, Russ Engineering, has said the same
16 thing. They tend to agree that to be conservative,
17 you should take the .206 capacity reduction factor,
18 not the .3 something that AmerGen is proposing to use.

19 And, at minimum, this needs to be included in the
20 sensitivity analysis. It's not very hard to include
21 in the sensitivity analysis, because as AmerGen
22 showed, it's just a linear correction factor at the
23 end, so you derive a -- you can smear out the results
24 with the capacity reduction factor very, very easily.

25 Next problem, no explicit account for

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1 uncertainty. The sensitivity analyses don't bound the
2 results, as we've shown.

3 JUDGE BARATTA: Well, let me quote from
4 your own exhibit with regards to that, and see if they
5 want to rethink that statement. I'm referring to the
6 article that's by George Apostolakis, and Joshua
7 Reinart, and looking at page, I think that was Exhibit
8 C-3. Is that correct?

9 MR. WEBSTER: Yes, I do believe it was,
10 Judge.

11 JUDGE BARATTA: If I go to the Article
12 page 357, Section 3, Model Uncertainty, and then the
13 second paragraph, which reads: "The methods that deal
14 with model uncertainty include prediction expansion
15 and model set expansion. In prediction expansion, a
16 single model is chosen as the best one to represent
17 the system. Recognize that this model has
18 uncertainties, and may model some characteristics of
19 the system better than others. Sensitivity studies
20 are performed on the various assumptions to analyze
21 the effects of the choice of the assumptions on the
22 model output", in other words, the result. "The
23 uncertainty is dealt with by applying an adjustment
24 factor of the model results, the adjustment factor may
25 be multiplication or additive, or both may be

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1 necessary."

2 So I was troubled by a very early
3 statement where you said that well, they haven't taken
4 into account the uncertainty. And yet, by your own
5 exhibit, that is one way of doing that, which appears
6 to be what they have attempted. Now, whether they've
7 done it correctly or not, that's something -

8 MR. WEBSTER: Perhaps I misspoke. We
9 happen to think it would be ideal to actually
10 explicitly deal with the uncertainties in the model,
11 and we put forward that as a way to go. But I think
12 provided that the sensitivity analyses fully bounded
13 the data, then I think that's absolutely an
14 alternative approach, which would work. It's just a
15 question of how do we fully bound the data. And the
16 approach that we've put forward, which is to do a
17 Monte Carlo analysis, and then repeatedly extrapolate
18 and interpolate, would insure automatically that we
19 fully bound the data. AmerGen's proposal just doesn't
20 do that. Okay?

21 May I should run through the Board's
22 questions now, just to make sure. I think I can pick
23 up, actually, on the -- this is about double counting.
24 Pick up on the 181 point. Oh, something very
25 interesting happened. In the modeling, between GE,

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1 and the Staff keeps saying it's relying on the GE
2 model. And one thing that's very interesting is,
3 actually, the GE fixed T analysis, which did the
4 sensitivity analysis, used a different model to the GE
5 model. They actually changed it and used a -- this is
6 from AmerGen Ex. 39, says that now mesh refinement
7 activity on the global pie slice model enabled them to
8 use a pie slice model for everything. And that gave
9 zero percent margin on the base case. And that's why
10 you end up with the sensitivity -- originally, there
11 was a margin of greater than 14 percent. But when
12 they revised the model, the margin dropped to zero,
13 and that's why, then when they did the sensitivity,
14 you can see that the load factor dropped from 6.141
15 down to .562 in the thinnest case. So that's where
16 you get the 9.5 percent reduction. And that's why
17 that ends up being, if the first one is zero margin
18 corresponds to a load factor, a safety factor of 2,
19 then that 9.5 percent then comes to 1.81. And that,
20 indeed, is what Dr. Hartzman has confirmed. And I
21 don't think the Staff is disputing that.

22 Now, why is that important? I think
23 that's important because what it shows is that the
24 limiting margin -- the margin above the safety factor
25 of 2 is much more likely to be the limiting margin,

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1 the margin above the acceptance criteria. And that's
2 why we need to know the margin above the safety factor
3 of 2 before we derive the Aging Management Plan. It's
4 unacceptable to derive it after, because we don't know
5 what this margin is, if there is any margin at all.

6 The Sandia model. The problem here is
7 that the thicknesses assigned in the Sandia model just
8 don't correspond to the data. And we've never quite
9 been able to understand why. Looking at, for
10 instance, Bay -- Sandia ascribed the thicknesses not
11 bay-by-bay, but between bays. So Bay 19-1 was
12 assigned a thickness of .858. By AmerGen's own
13 exhibit and the external data, Bay 19 has an average
14 there of .801. Bay 1 has an average of .802, so it's
15 hard to see how Bay 19-1 comes out to .858.

16 Similarly, Bay 13-15 is .842. Bay 13 is
17 .786, Bay 15 is .788. And, admittedly, Sandia was
18 using the previous data, the Staff has asserted it's
19 not much different. It actually is quite different,
20 so the thicknesses used in the Sandia model, again,
21 thicker than we have measured in this drywell by quite
22 a bit.

23 The second issue with the Sandia model is
24 that the thin points were directly under the vent
25 headers, not very realistic, and minimize the effect

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1 of the thin points. Nonetheless, the thin points
2 still cause the buckling mode shown.

3 I don't wish to belabor it, Judge
4 Abramson, if you don't want to. The Sandia model has
5 a mesh - I knew it didn't have the mesh there, just
6 illustrating the mesh side in model techniques is
7 easily thin enough to pick up, is easily small enough
8 to pick up quite small local variations.

9 JUDGE BARATTA: Again, that's true.
10 There's no doubt about that, but from a material
11 standpoint, it doesn't matter. There's a radius of
12 effectiveness, in other words.

13 MR. WEBSTER: I understand that, Judge.
14 And, indeed, you may not have to go all the way down
15 to the mesh size to -

16 JUDGE BARATTA: I just want to make sure,
17 because it's oftentimes a confusion factor that people
18 have.

19 MR. WEBSTER: Again, the Sandia analysis,
20 the Staff says they're relying on it, or at least part
21 of their -- what they're factoring in. Sandia
22 specifically said that, basically, the focus of the
23 model was to look at the relative reduction in design
24 margin due to the corrosion model, not the absolute
25 stresses or stability limits, which are calculated.

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1 And Sandia calculated a 44 percent
2 reduction caused by this corrosion. So that's what we
3 should focus on with Sandia, is that there's huge
4 reduction from design. The actual absolute amount,
5 Sandia aren't claiming that's accurate. That's why we
6 need the next model. So that's Staff Exhibit 6, the
7 Sandia report at page 12.

8 Didn't Sandia very specifically say that
9 they looked at whether to use an enhanced capacity
10 reduction factor? They can't. After the ACRS
11 meeting, the chief modeler from Sandia wrote in saying
12 that he did not agree with the Staff's approach, which
13 was to correct the Sandia model for the higher
14 capacity reduction factor, which AmerGen has shown a
15 slide of. He said that, "The capacity reduction
16 factor already accounts for the hoop tension which
17 develops in the shell. This is evidenced by the
18 double lobe shape of the buckling mode in the sand bed
19 region. Therefore, we do not think it is appropriate
20 to take additional credit for the presence of the hoop
21 tension." So there's really -- it's pretty clear, NRC
22 Staff's own modelers think that NRC Staff is taking
23 the wrong approach here. Indeed, our expert opinions
24 confirm that.

25 JUDGE HAWKENS: Counsel, I know this is

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1 one of the issues we asked the parties to address, but
2 even assuming you're correct, that doesn't have any
3 direct relevance to the issue that was referred today.

4 Is that correct?

5 MR. WEBSTER: Well, I think it depends on
6 whether the Staff -- I'm really presenting this, first
7 of all, to respond to the Board's question.

8 JUDGE HAWKENS: I understand.

9 MR. WEBSTER: And second of all, to
10 respond to the Staff's -- what in our view is an over-
11 reliance on the absolute numbers in the Sandia report.

12 The Staff keeps saying the Sandia report did not show
13 any problem with the capacity -- with the factor of
14 safety. The reality is the Sandia report wasn't
15 designed to be a compliance or non-compliance -

16 JUDGE ABRAMSON: So let's think about
17 what's been sent down to us for our advice, which is
18 will this analysis bound -- is it conservative, and
19 will it bound the kinds of sensitivities that Judge
20 Baratta was concerned about? And is additional
21 analysis required, generally? Now, the Board
22 initially in its original ruling said we don't need
23 anything more. It's done. We believe we have enough
24 to have reasonable assurances, so I have a hard time
25 understanding what the Commission meant by, "Is

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1 additional analysis required"? Are you suggesting
2 that Staff needs to do additional analysis, Applicant
3 needs to do additional analysis? How do you read that
4 piece? Let's get to the meat.

5 MR. WEBSTER: Okay. Judge Baratta's
6 statement, and I know Judge Baratta is here, so I
7 think it says that it was essential to do this
8 modeling. So I think the Commission read that and
9 said okay, it's essential. Now let's figure out how
10 good it needs to be. Does it meet the requirement?
11 Judge Baratta set certain requirements. He said I
12 would propose certain requirements, certain additional
13 requirements. And the Commission said okay, well, is
14 the Applicant's analysis -- and we're talking about
15 the Applicant's analysis, and what really should
16 happen is the Applicant should do a good analysis.
17 And the Staff should then fully review it.

18 And, moreover, it should be part of the
19 hearing record. And it should be available for
20 Citizens to review, as well, because it's an inherent
21 part, finding this margin is an inherent part of the
22 -- figuring out whether the Aging Management program
23 is adequate, so that is the issue.

24 JUDGE ABRAMSON: You can take the question
25 of whether it's part of the hearing record up with the

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1 Commission. That's not for us.

2 MR. WEBSTER: Right. I mean, the -- I
3 agree. So the question is, is any additional analysis
4 needed? Now, here we need a crystal ball, because,
5 first of all, as I said, there's a lot of argument
6 about what Judge Baratta's requirements are.

7 Now, we believe that if the sensitivity
8 analysis fully bounds the uncertainty, what is very
9 likely to happen is that we will see that the
10 prediction included the uncertainty capacity reduction
11 factor, as well as all the other factors, the
12 prediction will vary from a point that's below two,
13 likely to a point that's above two. We will have a
14 high degree of uncertainty. We will be back sailing
15 in the choppy waters of the sea of uncertainty. So
16 the question is what do we do then? And we believe
17 that you can't get much on -- this model was -- we're
18 really talking -- I think about the model in this way.

19 The model is a Ferrari, the data, unfortunately, is
20 like an old trailer. And what we're really doing here
21 is we're pulling an old trailer with a Ferrari. And
22 what we really need to do is at least get ourselves a
23 decent quality trailer to pull. And that's why we
24 believe the additional analysis is not going to be on
25 the computer side, it's going to be on actually taking

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1 more measurements. And it may be there are techniques
2 actually to go from photographs and try to produce
3 interpolations from the photographs, so it doesn't
4 have to be physical measurements. There are many
5 techniques that can be applied to attempt to get a
6 better idea about what the thicknesses of this shell,
7 the distributive thicknesses of the shell are. And
8 then once we've applied those techniques, we need to
9 redo the model. Hopefully, that will narrow the
10 bounds of uncertainty, and then we'll find out (a) do
11 we have CLB compliance here with a reasonable degree
12 of certainty, which we believe is a relatively high
13 degree of certainty. (B) What is the limiting margin?

14 And (C), is the Aging Management program adequate?

15 And that's really -- that's the additional
16 analysis we believe is required, is those things. And
17 that's totally within your jurisdiction. And that's
18 what the Commission has asked for to do. We believe
19 it might be best, in some ways, if we did the first
20 part of the question first, and then the second part,
21 because the Board is in a good position to clarify
22 exactly what Judge Baratta meant by his statement.

23 JUDGE ABRAMSON: I beg to differ with
24 that. Only Judge Baratta is in a position to clarify
25 what Judge Baratta meant.

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1 JUDGE BARATTA: You have about 11 minutes,
2 with your 10 minutes left if you decide you need them,
3 and if we decide you have them.

4 JUDGE HAWKENS: Let me give some guidance.
5 If you wish to use the full hour, go ahead. This is
6 really your opportunity to rebut what they have said.
7 So if you wish to use your full hour, you should. If
8 you feel you need not use it all, you're welcome to do
9 that, as well.

10 JUDGE ABRAMSON: Where this is going, I
11 think, is -- Judge Hawken, are you suggesting that
12 even if he uses his full hour, after we hear rebuttal
13 from the other two, if he has something important to
14 say we'll let him say it? Or are you saying he needs
15 to reserve time now? I think that's the question that
16 has to be answered.

17 JUDGE HAWKENS: Use your full hour. And
18 if we feel we need to hear from you, we will address
19 that afterward.

20 MR. WEBSTER: Okay. Thank you, Judge.
21 Just to say that there were a number of assertions in
22 the original presentations which were entirely
23 incorrect, and this is to correct, and I hope we can
24 add some service to the Board by pointing out those
25 particular errors.

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1 JUDGE HAWKENS: I assume you did that in
2 the initial stages of your presentation.

3 MR. WEBSTER: Well, that's correct. But I
4 don't know what they're going to say in the next -- in
5 rebuttal.

6 JUDGE HAWKENS: And then are we going to
7 give them the opportunity to rebut your rebuttal?

8 MR. WEBSTER: Well, if they believe there
9 are statements in my -

10 JUDGE HAWKENS: I understand. Continue,
11 please.

12 MR. WEBSTER: That are consistent with the
13 record, absolutely, I think you should get -

14 JUDGE HAWKENS: And a reminder to
15 everybody, you're going to have the opportunity for
16 supplemental briefs where you can address anything, as
17 well.

18 MR. WEBSTER: So this is the -- I think
19 we've already dealt with this point. Let me now try
20 and pick up somewhere in my presentation. Let me pick
21 back up.

22 Very strange about the Sandia model, by
23 the way, sort of explains what we were talking about
24 before, about the thicknesses. Sandia says that the
25 thickness assigned to each region were based on

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1 limited measurement data, since a very small
2 percentage of the shell has been examined. And they
3 say many cases the raw data was not available. This
4 led to the use of averages provided by AmerGen
5 throughout the relevant documentation, so, again, it's
6 strange, but it seems like Sandia didn't actually go
7 through the raw data. It's not quite clear what they
8 really meant by that. But the bottom line is that the
9 data that they used is not reflective of what's
10 present right now.

11 Now, coming back. I think it might be
12 useful here to go all the way back to the start. This
13 is the Brookhaven National Lab's view on the original
14 GE model. First of all, there's a problem with the
15 stress, and Brookhaven Labs are basically saying that
16 you have to limit the high stress to the localized
17 areas. The effect of these -- and that's another
18 reason I think why we need to be careful with modeling
19 these localized areas. It leads to -- local corrosion
20 leads to increased stress, and so we need to get to a
21 level where we can actually figure out what that
22 increased stress is.

23 They were predicting an excess beyond the
24 ASME code, but Brookhaven said provided these areas
25 are localized.

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1 JUDGE BARATTA: Let me ask you, and you
2 may not be able to answer this since you're not a
3 stress analyst, but I -- when you have a relatively
4 thick area adjacent to a relatively thin area, such as
5 we have at Bay 1, do you have any idea, doesn't that
6 produce a stress concentration at that interface?

7 MR. WEBSTER: I think that's what the
8 Sandia model shows, is you do have stress
9 concentration at that interface. So, basically,
10 Brookhaven said provided these areas of severe
11 corrosion are localized, then we're okay. The problem
12 is the data doesn't show it to be localized. The data
13 shows, at least in Bay 13, it could be very extensive.

14 Now, Brookhaven then said that -- this is
15 based, as I'll show on the next slide, on a margin of
16 over 14 percent. They said if the actual thickness in
17 the sand bed region of 14R is close to the predicted
18 thickness of .736, there may not be adequate margin
19 left for further corrosion. And we are close to .736,
20 so we're somewhere around -- I think the thinnest bay
21 is somewhere around .788, so that kind of informs the
22 question of how good the amp has to be, has to be very
23 good, because there's very, very little margin.

24 This is Exhibit 56, Citizens Exhibit 56.
25 This is just confirming that the margin was over 14

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1 percent. It was actually the post-accident condition
2 that gave the 14 percent buckling margin. Now, the
3 critical path has shifted to the refueling condition.

4 And in the GE model, to reiterate, that now the base
5 case is zero, at .736. So in view of these
6 observations, it is essential that the licensee
7 perform UT thickness measurements at refueling
8 outages, and at outages of opportunity for the life of
9 the plant. I think that's been belabored long and
10 hard, but I think what's most interesting, it says the
11 measurements should cover not only the areas
12 previously inspected, but also accessible areas which
13 have never been inspected, so as to confirm that the
14 local -- so the corroded areas are localized.

15 Both of these assumptions are the bases of
16 the Staff's acceptance of these results. Now, that
17 assumption that the corrosion is localized isn't met.

18 Corrosion is very general, in some places very
19 severe, so the original analysis that the conditions
20 that the Staff set for accepting it are no longer met.

21 Picking up the hoop tension point. The
22 licensee may have double-counted the effects of hoop
23 tension. Last, the instability analysis, stress
24 calculated by ANSYS Code may have already taken into
25 account the effects of hoop tensile stress. It then

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1 says, "But it appears that the effect of hoop tension
2 in the ANSYS calculations is small, and there is
3 sufficient margin, there is sufficient margin in the
4 results to compensate for the potential double
5 counting." So that was based on the assumption there
6 was a substantial margin. In fact, that margin
7 dropped to zero. And so because that margin dropped
8 to zero, again, that sufficient margin doesn't exist,
9 didn't exist any more. And this all goes, Judge
10 Abramson, to why we need a good model.

11 JUDGE ABRAMSON: Counsel, let me ask you a
12 question here. You seem to be very comfortable with
13 the analysis done by the two National Labs to support
14 the Staff. Is that right? I mean, you're certainly
15 relying on them. You're taking them to be good expert
16 pieces of work. Is that -

17 MR. WEBSTER: Well, our experts have
18 looked at these, and have found no serious problems
19 with them.

20 JUDGE ABRAMSON: It's not uncommon for the
21 Staff to use these kinds of outside experts to help
22 them do their confirmatory analysis. And would you
23 have discomfort if one of these organizations, or a
24 similar organization were used by the Staff in its
25 examination of the work that's to be submitted?

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1 MR. WEBSTER: Not at all. We'd be more
2 than happy, provided that the Staff then allows the
3 Staff of the National Labs to actually present the
4 results, and does not then take the results and do
5 things that the staff of the National Labs think is
6 inappropriate.

7 JUDGE ABRAMSON: Well, that will,
8 obviously, be a Staff judgment, but the Staff hires
9 consultants to do things. Okay. Thank you.

10 MR. WEBSTER: Let me wrap back now. I
11 think that's most of the slides that I've got, so let
12 me wrap back to the point about Mr. O'Rourke's
13 affidavit. Mr. O'Rourke's affidavit doesn't say that
14 the base case is going to include these at small
15 areas. We've done our best here to try to respond to
16 the small areas, which we only found out about
17 yesterday or the day before.

18 Mr. O'Rourke's affidavit actually
19 specifically says that the base case is contained in
20 Table One. Table One makes no mention whatsoever of
21 these thin areas. Mr. O'Rourke's affidavit refers
22 specifically to Citizens Exhibit 46, which basically
23 just reiterates the same things in the O'Rourke
24 affidavit. Citizens Exhibit 45, which was in the
25 record, and contained a specification of the thinned

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1 areas, was not referred to by AmerGen at all. I would
2 have thought that for purposes of clarity, and for the
3 purpose of fully informing the Commission about what
4 it was actually going to do, AmerGen might have
5 referred directly to Citizens Exhibit 45.

6 Furthermore, the O'Rourke affidavit makes
7 no specification at all for what these areas are. It
8 merely gives you -- it mentions that five thin areas
9 were modeled, note the past tense. Doesn't talk about
10 the future, they will be modeled. It says the past
11 tense, they were modeled. And it gives a range of
12 their thickness. No specification whatsoever. So
13 it's very fortunate the Commission referred this
14 question down to this Board, because, otherwise, we
15 could have had the whole proceeding end up going off
16 on a misapprehension, that AmerGen was not going to do
17 these thin areas, when it is. I mean, we don't think
18 this actually makes a huge degree of difference,
19 because the thin areas that they're proposing aren't -
20 - they aren't reflective of the actual conditions, so
21 the modeling is still inadequate. But, clearly, it's
22 unfortunate that we only found out about this, and you
23 and the Commission only found out about this at this
24 very late stage of the proceeding.

25 A point which I'm now trying to recall.

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1 JUDGE ABRAMSON: That prerogative is left
2 to old people like me.

3 JUDGE BARATTA: Yes, you're too young to
4 have that.

5 MR. WEBSTER: Well, I think it's this. I
6 mean, I hope that the additional briefing that the
7 Board is going to allow will also provide for the
8 submission of expert testimony, because we are in a
9 position where our expert testimony was based on the
10 assumption, and I think it's a perfectly reasonable
11 assumption, that the O'Rourke affidavit and its
12 description of the base case did not include thin
13 areas. And now we discover it did include thin areas,
14 as you see. We're quite prepared to argue about that,
15 as are they adequate or not. But in terms of the
16 appeal record, we have a rather strange record. The
17 record doesn't fully reflect that these thin areas
18 actually are going to be modeled.

19 The diagram AmerGen has put forward is not
20 in the record, and so it's kind of a very strange
21 record at the moment. So we believe that as a matter
22 of cleaning up the record -

23 JUDGE ABRAMSON: Can you give me a 30-
24 second summary of how this particular issue relates to
25 the appeal of our order?

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1 MR. WEBSTER: Well, Judge, obviously, I
2 can't really put myself entirely in the minds of the
3 Commission.

4 JUDGE ABRAMSON: No, but it must relate to
5 your appeal somehow.

6 MR. WEBSTER: But if the Commission were
7 to decide that Judge Baratta was right, and this
8 analysis is essential to fully -- to provide
9 reasonable assurance that the shell meets the CLB,
10 then that would mean that this analysis would be
11 required as part of that reasonable assurance.

12 JUDGE ABRAMSON: And this is a matter that
13 in your appeal you raised, you said to the Commission,
14 Judge Baratta has it right, and everybody else has it
15 wrong, and this needs to be done. Is that the way
16 this went?

17 MR. WEBSTER: Well, we certainly thought
18 Judge Baratta had it right. Yes, that's a
19 straightforward issue we've raised, is that, if you
20 recall, the whole discussion about what the CLB
21 actually was, if it was the safety factor of two in
22 the CLB or not. The Staff made a lot of attempt to
23 kick it out of the CLB in a rather strange set of
24 arguments, which were summarily rejected by the whole
25 Board, which we believe entirely right in that case.

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1 And then the question came well, okay, so it is in the
2 CLB, so how has AmerGen shown that they've met it?
3 And we believe that AmerGen did not show that they met
4 it, and that's part of our appeal to the Commission.
5 And we don't know. We concur with the Staff that the
6 Commission has not decided one way or the other on
7 this appeal, but it's certainly open to the Commission
8 to decide that this model is required, and that this
9 model, therefore, has to be done prior to the close of
10 the proceeding. Or even the Commission may decide, if
11 it has sufficient specificity, it could be done post-
12 hearing. We don't know. I mean, that may be another
13 question.

14 But the Commission obviously thinks this
15 question is important, Judge Abramson. And so we
16 don't think the Commission will be asking you the
17 question if they didn't have some reason to do so.

18 JUDGE ABRAMSON: That much is clear to me.
19 I'm just trying to figure out what chain of logic
20 leads -- how this is incorporated into your appeal,
21 and what -- how this flows into the decision the
22 Commission has to make on your appeal.

23 MR. WEBSTER: I think, as I said, it flows
24 into the -- we've really argued that we can't -- the
25 same thing I argued today, that we can't decide on the

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1 adequacy of the amps until we know the limiting
2 margin. And so the Board, with due respect to the
3 Board, our issue is well, we'd like to know the
4 limiting margin first, then we can talk about the
5 frequency and so forth. And so that's how I think it
6 flows into the appeal.

7 So let me summarize. I seem to be getting
8 ahead. Do you have any more questions? Maybe I
9 should run through the questions that you put forth.
10 Are there any that are an issue? We've covered most
11 of those, so let me just summarize now. And if I
12 don't quite use all of my time, then that will be
13 fine.

14 So, in summary, the Commission, we're here
15 on the shore, very nice. It's a beautiful day on the
16 Jersey shore, and once more in Tom's River. And the
17 Commission had decided to try to rescue us from this
18 sea of uncertainty. The Commission sent the Navy to
19 rescue us from that sea of uncertainty, and so AmerGen
20 and the Staff have now finally slightly diverged. I
21 mean, we saw from the briefs that the Staff was
22 assuming that AmerGen would use the external points.
23 They didn't do that. The Staff is now saying well,
24 AmerGen could basically do what it likes, because
25 there's no need for this model, as far as I can tell.

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1 Obviously, we believe that's inconsistent
2 with the view of the Commission. The Commission would
3 not have referred this question if this was just kind
4 of a sort of cursory tick the boxes type of thing.
5 Indeed, I was at the ACRS meeting, and this issue came
6 up. And the reason -- one of the reasons that the
7 ACRS felt more comfortable is precisely because
8 AmerGen offered this model at the ACRS meeting. So
9 it's part and parcel of the finding of the ACRS that
10 this thing would be done. And specifically discussed
11 at the ACRS meeting, was that if the model showed
12 some problems, then there were mechanisms to come back
13 and deal with that. So this is not a cursory tick the
14 box. This is something that absolutely needs to be
15 done very carefully with much more thought than we've
16 seen so far from AmerGen, I'm sad to say. And it
17 needs to be viewed very carefully by the Staff, not
18 have a quick look at the summary which will say
19 everything is fine.

20 I could write the summary now, everything
21 is fine. That's the summary the Staff's going to get,
22 then they can tick the box. That's totally
23 inadequate. The Staff needs, and I think here the
24 State of New Jersey has joined us in saying that the
25 Staff needs to get hold of a copy of this analysis.

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1 And what's more, with the metal fatigue analysis, kind
2 of interesting. The metal fatigue analysis, the Staff
3 has actually reviewed that at Exelon's site. The
4 reason they've done that is precisely so that Citizens
5 cannot get a copy of that metal fatigue analysis.

6 So, therefore, we believe that it should
7 be specified that not only should the Staff review the
8 analysis carefully, they should review the analysis
9 carefully at the NRC headquarters. And they should be
10 prepared to provide either a proprietary, or a non-
11 proprietary version to Citizens. Citizens have an
12 agreement with AmerGen, which allows AmerGen to
13 provide us with proprietary information. AmerGen has
14 provided us with a number of pieces of proprietary
15 information. There's been no problem with that
16 whatsoever. AmerGen has held up the idea that the
17 proprietary nature of this document could foreclose
18 disclosure. Well, Sandia managed to produce quite a
19 detailed report with no proprietary problem. So we
20 don't quite understand why AmerGen can't produce a
21 non-proprietary report that's highly detailed. And we
22 don't understand why we couldn't have disclosed to us
23 the whole report with all the proprietary information.

24 I sincerely hope that Mr. Polonsky will
25 finally realize, or AmerGen will finally realize that

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1 this is not something you can sweep under the rug. An
2 old saying, "Justice shall be done, and it shall be
3 seen to be done." And that's what should happen here.

4 Time and time again, we've had assertions from
5 AmerGen which have turned out to be incorrect or
6 wrong. And let's not allow those assertions to rest.

7 Let's actually do the work, do the analysis, find out
8 what actually is going on. And that's all we've ever
9 wanted in this proceeding.

10 It's kind of amazing to me that it's taken
11 us around two years to get to the point where we
12 finally get closer to getting to what we want, which
13 is a rigorous, scientific, realistic, and fully
14 considered assessment of the state of the drywell. I
15 would have thought that the NRC's relicensing process
16 would have automatically provided that. Clearly, I
17 would have thought wrong.

18 It is only through the intervention of
19 Citizens that this analysis will be done properly.
20 And we are here relying on you, the Board, to insure,
21 to make a very considered decision about how this
22 analysis shall be done. And to leave room for, in the
23 case of high degree of uncertainty, about compliance
24 for further analysis to be done.

25 We believe the Board, as I said about a

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1 year ago, we believe the Board is fully qualified, is
2 very intelligent, and we've seen is also courageous.
3 So we look forward to a decision from this Board,
4 which finds appropriately that the analysis should be
5 based on all the results taken, that any corrections
6 should be bounded fully in records. It may be
7 necessary here to reopen the record, because at the
8 moment we don't have anything on the record about this
9 grinding, about how it was done. The only place that
10 we have anything about the grinding is where I pointed
11 to, so we don't have any justification which points
12 were over-ground, or by how much. Maybe we would have
13 no objection to reopening the record for AmerGen to
14 put those records forth so we could have a look at
15 them, and we could then take some considered view
16 about corrections, rather than this guesswork, which
17 has been thrown around.

18 We must explicitly evaluate the
19 uncertainty. We can do it a number of ways, as long
20 as we fully bound the data, and fully bound the
21 uncertainties, then we are happy to do it by
22 sensitivity analysis, or by Monte Carlo, which really
23 is just an automated sensitivity analysis. I don't
24 think it's really any different.

25 JUDGE ABRAMSON: It's enormously

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1 different, having done a lot of those things.

2 MR. WEBSTER: Well, it requires a lot more
3 computational power, absolutely.

4 JUDGE ABRAMSON: Not just that. It
5 requires an awful lot of assumptions about the
6 statistical variations, and the distribution functions
7 of the parameters that are being used to sample Monte
8 Carlo. It's a very -

9 MR. WEBSTER: Judge Abramson, we see that
10 AmerGen is already making assumptions about the
11 statistical distributions of the data, and hasn't
12 presented any information, as far as I recall, to
13 justify that. So that's another reason why Monte
14 Carlo would be useful, because it would entail some
15 systematic careful analysis of what statistical
16 variation is present in these input data.

17 And then, finally, I'd like to point out
18 that Stress Engineering has put forward how one would
19 do a state-of-the-art analysis. A state-of-the-art
20 analysis means that we dispense with the capacity
21 reduction factor. We measure the shape of the vessel,
22 and we measure the thickness of the vessel, as far as
23 we can. We can then place both the actual shape, and
24 the actual thicknesses into a 3D model. And then we
25 can find out, that's the most accurate way possible to

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1 do this. And we believe that the time has come for
2 the NRC to require AmerGen to do the most accurate,
3 realistic model that can be done.

4 The Citizens of Tom's River deserve the
5 best. AmerGen has been offering them, at best, last
6 year's technology, in fact, 20 years ago technology.
7 Citizens have fought long and hard. They have been
8 justified at every turn, they deserve the best. We
9 anticipate this Board will give them the best. Thank
10 you.

11 JUDGE HAWKENS: Thank you, Mr. Webster.
12 Are you ready, Mr. Polonsky? You reserved 15 minutes
13 for rebuttal.

14 MR. POLONSKY: I think I'd like to cover
15 five points on rebuttal, Your Honor. The first is
16 that the majority of what we just heard is rehashing
17 of what happened last fall. Using contour plots that
18 are not reliable, using an extrapolation scheme based
19 on extreme value statistics, which was debunked last
20 fall, misinterpreting micrometer readings, and
21 misrepresentation of the facts. Specifically, as an
22 example, Citizens urging that AmerGen use all of the
23 data, but in their reply specifically contained in
24 Question Ten from the Board, clearly demonstrates that
25 they want us to solely rely on the external data as

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1 being representative; for example, the way they came
2 up with 788 mils clearly can only be done with an
3 averaging of the external data. And those data are
4 simply not representative of the general thickness of
5 the shell.

6 Similarly, their comparison of our
7 diagram, and page 5 from AmerGen's Exhibit 16.
8 AmerGen's Exhibit 16 on page 5 is a summary from each
9 bay of all the averages of all the external points.
10 And so to compare that to the average general
11 thicknesses that we used is comparing apples and
12 oranges, and inappropriate.

13 I also would like to point out that Dr.
14 Hausler has provided new contour plots in their reply,
15 and if I could draw your attention to just one of
16 them, Dr. Hausler positions where he believes the
17 internal grid locations are with respect to external
18 locations. So, for example, on Figure 4, which is a
19 contour plot of Bay 3, all the way up at the top is a
20 small square box, and it says, "Approximate", I assume
21 that's position and size of the 1 by 7 grid used for
22 internal UT measurements. Similarly, you could go on
23 to further pages and find where those grids are placed
24 with respect to the external points. They are not
25 correctly placed; and, therefore, the contour plots

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1 themselves are wrong.

2 In AmerGen's Exhibit 40, the last page
3 that we provided in our supporting references is the
4 famous grid with the yellow and green triangles, and
5 green rectangles, which shows the internal points
6 juxtaposed with the external - I'm sorry - the
7 internal grids and trough data juxtaposed against the
8 external individual points. And you will see that
9 there are many points that are above or within these
10 grids. And those simply don't match up with what they
11 have done. There's no information in the record here
12 how Dr. Hausler came up with what he did, but it's
13 incorrect. And so, clearly, even if you were to go
14 these plots, which we don't believe you should, they
15 are not reliable, because the internal data is in the
16 wrong place, and the plots would clearly change.

17 The third item is, I believe, Citizens
18 objection as to how the external data was treated, and
19 whether that was in the record. And suffice to say,
20 I'll just point you to Exhibit 46, and page one, two,
21 the third page, which has an OCLR number of 29744.
22 And the second to last paragraph says, "External point
23 measurements were used in a limited way to confirm the
24 basis for an engineering judgment", and it's the
25 following language that's important, "assuming a

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1 normally statistical distribution regarding an
2 appropriate thickness to use in the re-analysis." So
3 that's where my statement came from. If I said
4 something different, I was relying on this document
5 form the source.

6 As for "is more analysis required",
7 because the scope of UT measurements, that is where UT
8 measurements are taken, is outside the scope of the
9 proceeding, and we don't believe that was part of the
10 issue that was sent down to the Board from the
11 Commission, we do not interpret the "is more analysis
12 required" question to additional UT measurements in
13 new locations. We viewed that, and we urge the Board
14 to adopt a view that that is just asking our
15 additional analyses, sensitivity analyses, et cetera,
16 required, and our answer, AmerGen's answer is no, that
17 they're not, that we have a sufficiently bounding
18 analysis.

19 And, finally, Judge Abramson asked whether
20 AmerGen would be willing to submit more than a
21 summary. And let me clear up the misrepresentation,
22 or misinterpretation, perhaps, of what a summary is.
23 It is not going to be a single page with a sentence
24 that says hey, it's fine. And it won't be a 20-page
25 summary, either. AmerGen expects that it will be

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1 hundreds of pages, that it will have figures, that it
2 will have diagrams, that it will have data, and that
3 it will allow a knowledgeable structural engineer to
4 view it with an independent eye. The entirety of the
5 information, all of the supporting information, will
6 be available to the Staff at AmerGen's facilities, as
7 all other information is. Whether it's proprietary or
8 not, the standard procedure is that the Staff is
9 allowed to come back and look at anything they want
10 with any reasonable notice, and that will include the
11 vendor information, and the validation and
12 verification information, and at times they can even
13 talk to the individual modelers at their request.

14 JUDGE HAWKENS: Mr. Polonsky, do you have
15 an estimated date for when the analysis will be
16 complete, and the invitation to the NRC Staff
17 extended?

18 MR. POLONSKY: I do not, Your Honor. The
19 commitment is merely that it be done, completed by
20 April 2009.

21 JUDGE BARATTA: Would that include the
22 submittal of the summary by then?

23 MR. POLONSKY: My understanding, and my
24 client will correct me, is that before April 2009, we
25 will have submitted the summary and made the

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1 information available to the Staff for review.

2 JUDGE BARATTA: Thank you very much. I'll
3 be honest with you. I was a little troubled with your
4 modeling of some of these bays, and the point that
5 Citizens brought out was along the lines what I was
6 concerned about. I would take a careful look at, if
7 you do have data, which you do in some cases, that
8 suggest that it's not as -- the corrosion is not as
9 extensive or whatever, you may want to include that in
10 your model. Just, I don't understand why you're not.

11 I mean, it could be beneficial, but you do have maybe
12 some stress concentration factor to be considered. I
13 just don't understand -- I kind of understand what
14 you're trying to do in a way, but also it does take
15 away from the realism, I guess. I don't know, that's
16 something I'd like you to respond to in a way is, what
17 you think about that or not. It just bothered me.

18 The other point that I didn't understand,
19 and just go over Bay 15 again. I'd appreciate that.
20 Looking -- I don't have the figure that -- I'm sorry,
21 I take that back. It's Bay 15. I don't have the plot
22 that shows the points that you got other than what you
23 just pointed out, which is this page in Exhibit 40, I
24 guess. How you concluded the 711 region there in
25 size, I just couldn't quite figure that out from the

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1 data that's there.

2 MR. POLONSKY: I'd be happy to address
3 that, Your Honor, if I could just pause and take a
4 look at Applicant's Exhibit 16, which is the 24 calc
5 rev. 2. I'll pull up the page where that original 12
6 by 12 inch area would have come from.

7 JUDGE BARATTA: It may have been covered
8 previously, but that was a while ago. I apologize.

9 MR. POLONSKY: Well, I guess the starting
10 point would be in Citizens Exhibit 45, on page 10 of
11 12. It describes Bay 15 with a locally thin area, 18-
12 inch diameter circular area that is 711 mils thick,
13 and it references the 24 calc. So I'm now going to go
14 to the 24 calc, but that's how we get to the 24 calc.

15 Well, it's page 15 - I'm sorry - it's Figure 15-6 in
16 AmerGen's Exhibit 16, which has Bay 15, which shows a
17 locally thin area of 12 by 12 inches, that is 711 mils
18 thick. It is that area that was then transcribed into
19 an 18-inch diameter circle.

20 JUDGE BARATTA: The same thickness as the
21 12 by 12 in the other model.

22 MR. POLONSKY: Correct. Conservatively
23 expanded out to 18 inches, but also keeping it 711
24 mils thick.

25 JUDGE BARATTA: Unless my brain isn't

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1 working right, that's about two and a quarter times as
2 much surface area that's thinned. Is that right?

3 MR. POLONSKY: If we go to Figure 15-3 of
4 that same exhibit, this shows individual external UT
5 measurement points with two concentric squares or
6 rectangles. The inner square or rectangle has a
7 single point in it, which is 711 mils, that is
8 conservatively extrapolated out to encompass the
9 entire area, assuming that the entire area is 711
10 mils.

11 JUDGE ABRAMSON: That would be -- there is
12 one point that appears I think on that colored exhibit
13 that we mentioned a moment, that that would be that
14 point then?

15 MR. POLONSKY: Yes. There is only one
16 point that is 711. The other ones that are shown on
17 this slide are 777 mils, 791 mils, 793 mils.

18 JUDGE BARATTA: One point that I picked up
19 on was the influence of a single data point on the
20 average. As part of a sensitivity study, not only do
21 we look at the actual model inputs, but sometimes we
22 need to look at the -- how those model inputs were
23 developed. And it was pointed out, if I followed the
24 Citizens argument, that inclusion of the one
25 uncorroded point seemed to have a tremendous influence

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1 on the average that was used in the 3D model. Do you
2 plan to address that, examine that in your report, or
3 as part of your analysis?

4 MR. POLONSKY: I don't know, Your Honor.
5 Mr. Webster made certain assertions, did not cite to
6 the record. I can't even confirm that his assertions
7 are in the record, but we'll, obviously, address those
8 in some form of briefing.

9 JUDGE BARATTA: Well, he raises an
10 interesting question from an analysis point that one
11 has to be careful developing the model input, that you
12 have to look to see if there are any outliers which
13 might cause an undue bias. That's consistent with,
14 like I said, what Apostolakis says in his Article 4.

15 MR. POLONSKY: I think the undue bias that
16 we've introduced is in the bounding conservative way.

17 For example, selecting the locally thinned areas, I
18 mean, it's kind of ironic that Citizens are suggesting
19 we use the external data and average it out for the
20 entire bay. Well, we did use that data, and averaged
21 it out for the entire locally thinned area, and yet, I
22 guess we're hearing that that's not enough. That is a
23 bounding conservative treatment of locally thinned
24 areas. And then to extrapolate that square area into
25 a circular diameter area adds even more surface area

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1 to that conservative thickness.

2 JUDGE ABRAMSON: Let me pick this up for a
3 second. One of the fundamental concerns, it seems to
4 me that I'm hearing from Citizens, is the thought that
5 all the way around the drywell shell at the top of the
6 sand bed region there's some sort of corrosion; and,
7 therefore, there's some sort of ring that might be
8 weakened in the shell. Is that addressed by your use
9 of the general area thinning well below the 1100 mils,
10 or whatever the original thickness was? Tell me how
11 the general thinning -- how you've addressed the
12 question of the bathtub ring, that is.

13 MR. POLONSKY: First, of all, there is -
14 we don't agree that there is a bathtub ring around the
15 entire exterior. That's just not the case. There is,
16 in certain areas, in certain bays where the sand-air
17 interface was, and where water was present for a
18 significant amount of time, significant corrosion.
19 But that does not exist around the entire ring. In
20 fact, there are many bays that have essentially no
21 corrosion in them.

22 For those areas that have some corrosion,
23 the external data points were taken at areas that were
24 believed to have been the thinnest points, or biased
25 to the thin side.

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1 JUDGE ABRAMSON: And in the model that's
2 been prepared, and not yet run, or is being prepared
3 to be run, those areas of actual corrosion are
4 modeled, and generally modeled to be thinner than the
5 average measurements in those areas?

6 MR. POLONSKY: We believe that is the
7 case. Not every single external UT measurement point,
8 those taken from the 24 calc, that the 24 calc said
9 would impact the local buckling criterion. An
10 individual point.

11 Let me back up from last fall. We could
12 have a hole in the shell. You could have a hole, and
13 it wouldn't buckle. Problem with the pressure
14 criterion, okay, but an individual point does not
15 implicate a buckling concern, so you have to keep it
16 in perspective.

17 JUDGE BARATTA: That one we recall.

18 MR. POLONSKY: I'm done with my rebuttal,
19 if there are no further questions.

20 JUDGE HAWKENS: One second. I keep
21 hearing the word "proprietary", and I have trouble
22 understanding when these are classical techniques, why
23 any such report would be proprietary. I think that is
24 a concern I don't quite understand. I know certain
25 organizations will, I found that interesting enough,

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1 would consider my textbook to be proprietary, since it
2 has the same statements that they have in their
3 reports, but I understand in preparation of data,
4 there's certain things that are proprietary, methods
5 and such, but I kept hearing you refer to
6 "proprietary", and I just -- I don't quite understand
7 that.

8 MR. POLONSKY: I believe it was Mr.
9 Webster who referred to it as "proprietary". I don't
10 believe I used that word today. And, in fact, I don't
11 believe the summary report, or the underlying data
12 itself will be deemed proprietary by AmerGen. And my
13 client can correct me if I'm wrong.

14 JUDGE ABRAMSON: Counselor, before you
15 leave the stand, let's talk for a couple of minutes
16 about how the process is designed to work, and how it,
17 at least my view, it should work. You're going to
18 submit -- the record of our proceeding is closed.
19 There's now a proceeding that's still going on because
20 the appeal hasn't been resolved. But, in my view, the
21 record of our proceeding is closed. There's been no
22 motion to reopen, and there's been no remand, there's
23 been no indication from the Commission they want it
24 reopened. They've asked for our advice on this
25 particular point.

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1 Your client has made a commitment to
2 submit an analysis. In the order course of things,
3 the Staff would review that analysis. Is that
4 correct? And decide whether it likes it or not, and
5 iterate with the Applicant on getting to a
6 satisfactory result from that commitment?

7 MR. POLONSKY: I'll dwell on terminology
8 here just for a second.

9 JUDGE ABRAMSON: Please.

10 MR. POLONSKY: You used the word
11 "condition", and I don't believe this is a license
12 condition. This is a commitment.

13 JUDGE ABRAMSON: Well, if I recall
14 correctly, commitments -

15 MR. POLONSKY: I'm sorry.

16 JUDGE ABRAMSON: -- are license
17 conditions.

18 MR. POLONSKY: Yes. I retract that, Your
19 Honor. I'm sorry.

20 JUDGE ABRAMSON: And that, Mr. Webster, by
21 the way, is an important thing for you to be aware of.
22 This commitment is a condition on the license. Okay.
23 Now, let's proceed.

24 MR. POLONSKY: Pretend that I didn't just
25 say that.

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1 JUDGE ABRAMSON: I'll pretend you didn't
2 say it. You were promptly corrected by your
3 colleagues.

4 MR. POLONSKY: My client expects to submit
5 a significantly thick and detailed summary report to
6 the Staff, and the Staff will review that report, is
7 certainly our expectation. And if the Staff has any
8 additional questions on it, then they would get back
9 to my client with those questions. Any deficiencies
10 in that analysis, assuming the license has been
11 granted, would be handled in Part 50 space, as any
12 other deviation or concern that the Staff would have
13 on an operating plant.

14 JUDGE ABRAMSON: This is not a condition
15 precedent to the issuance of the license. Help me for
16 a minute. It is a commitment to submit something
17 before the commencement of the license, extended
18 license term, so the license could be granted today.
19 The license extension could be granted today, it's not
20 a condition precedent on the issuance of the license
21 extension.

22 MR. POLONSKY: That's been AmerGen's
23 understanding, and from what I heard from the Staff,
24 that's -

25 JUDGE ABRAMSON: Is that correct, Ms.

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1 Baty? This is a condition -- it is not a condition
2 precedent to the issuance by the Agency of the
3 license, the requested license. It is simply a
4 condition that has to be fulfilled prior to
5 commencement of the term. Is that right?

6 MS. BATY: Yes, Your Honor. That's
7 correct. And I believe that was also this Board's
8 finding in its initial decision, that it's not a
9 condition precedent to the issuance of a renewed
10 license. In some cases, a renewed license is issued
11 several years before -- more than two years, five, ten
12 years before they go into their period of extended
13 operation, and then having to come before the -- yes,
14 it is a condition that must be completed before April
15 2009.

16 JUDGE ABRAMSON: And from your statement,
17 this is likely to be several hundred pages of -- in
18 this report. Is it inappropriate for me to assume
19 that this report will describe how the data was
20 gathered, treated, assembled, and used as input for
21 the model?

22 MR. POLONSKY: All of those, Your Honor.

23 JUDGE HAWKENS: And it's your
24 understanding it's not -- the summary itself will not
25 be proprietary?

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1 MR. POLONSKY: That's correct.

2 JUDGE HAWKENS: So if Citizens, for
3 example, requested a copy, or requested to look at the
4 summary, they would be able to coordinate with you.

5 MR. POLONSKY: Our understanding is that
6 the summary will be placed on ADAMS, which is the
7 NRC's -

8 JUDGE HAWKENS: Oh, in the public record.

9 MR. POLONSKY: Publicly available for
10 anyone to download.

11 JUDGE BARATTA: You will agree with that?

12 MS. BATY: Yes. Absolutely. It will be a
13 document of correspondence, and will be available for
14 everyone, I mean, anyone with a computer. And it will
15 be available on the public docket, as well.

16 JUDGE BARATTA: I do understand, because
17 of the type nature of the calculation that there's
18 literally thousands and thousands of additional
19 information, basically the numbers that go into this
20 thing, which the only way you can get them is they're
21 in some sort of computer, electronic media, so I
22 understand that you can't really -- there's a
23 practical limit as to what can be made available.

24 MR. POLONSKY: Yes, Your Honor.

25 JUDGE ABRAMSON: Is the calculation being

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1 done with a generally available computer code, or is
2 it a proprietary code of your client's consultant?

3 MR. POLONSKY: It is a generally accepted
4 methodology, and code. I believe it's the ANSYS code.

5 I mean, I think that's even what -- I believe Sandia
6 used ANSYS, as well. No. Okay. Sandia did not use
7 ANSYS, but the GE model was done under the ANSYS code.
8 If what you're getting at is can someone replicate it,
9 then yes, they can if they want.

10 JUDGE ABRAMSON: Yes. And let me just
11 state what I understand of the situation. We have a
12 closed record at our proceeding. In order for an issue
13 that would be raised by -- as a result of whatever
14 information is contained in that report to come back
15 to us would have to be -- the record would have to be
16 reopened. Is that -- do you agree with that,
17 counselor?

18 MS. BATY: Yes. And actually, the motion
19 would have to go to the Commission first, and then
20 perhaps it would be referred. But yes, it would be
21 required to reopen the record.

22 JUDGE ABRAMSON: There's no longer a
23 proceeding before us at this point.

24 JUDGE BARATTA: Mr. Webster, are you
25 satisfied with the fact that you will be able to get

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1 the report? It sounds like -

2 MR. WEBSTER: Well, obviously, it would be
3 very helpful to get the report prior to decisions made
4 on licensing. It would also be helpful if could get
5 hold of the electronic summary before the analysis.
6 If they're using ANSYS Code, I don't quite know what
7 part of the analysis will be proprietary.

8 JUDGE BARATTA: He said none.

9 JUDGE ABRAMSON: He says he didn't use the
10 term "proprietary".

11 MR. WEBSTER: Well, he has asserted in the
12 past that it would be proprietary.

13 JUDGE ABRAMSON: Well, come to that in the
14 road when you reach it. Thank you, Mr. Polonsky.

15 JUDGE HAWKENS: Thank you, Mr. Polonsky.

16 MR. POLONSKY: Thank you very much.

17 JUDGE HAWKENS: Ms. Baty?

18 MS. BATY: I have just a few points of
19 clarification, some of them from the Staff who's with
20 me today. I'd like to say before we leave today, we
21 should set the record straight that we misspoke
22 earlier when the Staff -- we said that we just -- or
23 correct any misapprehension that the Staff is going to
24 be doing some sort of cursory review of this, or
25 simply filing it in the circular filing bin. That's

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1 completely incorrect.

2 The Staff understands the interest of the
3 parties, and the public in this 3D analysis. And the
4 Staff will be conducting an -- first of all, as a
5 general matter, the Staff will be conducting an
6 inspection under 71003 as part of the license renewal
7 process to insure the completion of various
8 commitments, including license conditions.

9 JUDGE HAWKENS: When you say 71003, what
10 are you referring to?

11 MS. BATY: It's an inspection procedure,
12 the license renewal inspection procedure. The intent
13 of that document is to inspect commitments, and we
14 will be looking at the license conditions, as well,
15 including this one. And we will be looking at the
16 details of the analysis. However, in addition, we are
17 going to be receiving the summary report, which, as
18 has been stated here, will be put on the docket, and
19 will be publicly available. And it should provide
20 - the Staff expects to get a beefy, and it has been
21 represented here today that this summary is going to
22 be a rather beefy summary. It's going to be a hundred
23 pages, and the Staff expects that that summary will
24 provide a clear understanding of what was done, the
25 assumptions that were made, and the basis for the

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1 various conclusions. And the Staff is prepared to
2 review that summary.

3 And, as a similar example, recently there
4 was the confirmatory analysis of the metal fatigue
5 calculation. And there, the licensee provided a
6 summary, and the Staff proceeded to conduct an audit
7 of the material. And the Staff is preparing to issue
8 a supplemental SER, in which we detail our review of
9 that analysis.

10 The Staff interests as we review the
11 summary will be in insuring that the current licensing
12 basis is upheld. And, I mean, it's important to keep
13 in mind, the summary -- this 3D analysis that has yet
14 to be performed, is not part -- is not going to change
15 AmerGen's - Oyster Creek's current licensing basis.
16 The purpose of this analysis is to better quantify the
17 margin, but it isn't going to change their acceptance
18 criteria, which is already part of their CLB. And
19 it's not going to change any other aspect of their
20 current licensing basis, unless we get a separate
21 request from AmerGen to make a change to their
22 license. And the current licensing basis, of course,
23 according to the regulations in Part 54 continues into
24 the extended, any extended period of operation.

25 The Staff has heard representations about

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1 proprietary information, and just to be clear, that if
2 a document is represented to us as being proprietary,
3 the Staff cannot disclose it. And we are under the
4 Trade Secrets Act, and, actually, we could be
5 - individuals who are caught disclosing such
6 information could be sent to prison, so we won't be
7 disclosing anything that is duly proprietary, and the
8 proprietary privilege adequately asserted.

9 As a general note, we know -- the Staff
10 understands that we're here to talk about this
11 specific question that's been referred by the
12 Commission to this Board. And the Staff respectfully
13 requests that any material submitted today was an
14 attempt to reargue contentions that were either not
15 admitted, such as contentions challenging the spatial
16 scope of inspections, or the inspection technique,
17 that those matters are all pending before the
18 Commission at this point.

19 We also heard some representations about
20 the Sandia report, and the use of the capacity
21 reduction factor. Capacity reduction factors are
22 calculated based on the compressive and tensile
23 stresses derived from the load combinations from the
24 refueling loading. Credit for tensile stresses has
25 been researched extensively, and was presented to the

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1 ACRS in January of 2007.

2 The ACRS Code case for Section 3, Case
3 757, recognized the methodology for cases --
4 recognized the use of the capacity reduction factor
5 for cases other than internal pressure. And I hope I
6 have accurately represented what my technical advisors
7 have presented. Anyway, the Staff also would note
8 that some of the information presented with regard to
9 Sandia's disagreement with the Staff about the
10 capacity reduction factor is not -- doesn't tell the
11 entire story, and we would refer the Board to a
12 publicly available document, Packages ML070670513,
13 which is a letter to the ACRS Chairman from the
14 Director of License Renewal, explaining that Sandia
15 was not prepared to use capacity reduction factor
16 because they had not had an opportunity to review all
17 of the work that has been done on that, on the use of
18 that by Dr. Clarence Miller.

19 So unless there are further questions from
20 the Board, that's all I needed to -

21 JUDGE BARATTA: I just -- I do want to
22 clarify, I was not suggesting that you would release
23 proprietary information. I hope that we've already
24 had that point clarified I think, and thank Mr.
25 Polonsky for clarifying that he does not expect it to

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1 be proprietary.

2 MS. BATY: One final point, is that with
3 regard to the analysis that will be submitted, it
4 will, obviously, be submitted under oath and
5 affirmation. That's a requirement for their
6 submissions to the Staff. And if anything would prove
7 to be inaccurate, incomplete, that's likewise subject
8 to criminal prosecution, as well.

9 JUDGE HAWKENS: Thank you. Please bear
10 with me one minute while I have a few moments with my
11 colleagues.

12 MR. WEBSTER: Judge, before you go off the
13 record, there are a couple of things I would like to
14 correct.

15 JUDGE HAWKENS: One second, please. Thank
16 you. Mr. Webster, to the extent you have matters that
17 you want to bring to our attention, we're going to
18 allow you to do it in a supplemental brief. The case
19 is submitted. We thank counsel for the their
20 presentations. They were very helpful. They answered
21 our questions, and they clarified a lot of matters for
22 us.

23 Yes. I want to make it clear, each party
24 will have the opportunity to provide the Board with a
25 supplemental brief, not to exceed 10 pages. Mr.

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1 Webster had indicated a week, he would require a week
2 in order to prepare that. Is that what you'd like,
3 Mr. Webster? That would be Thursday, September 25th.

4 MR. WEBSTER: A week after the transcript
5 is available, Judge.

6 JUDGE HAWKENS: All right. It will be a
7 week after the transcript is on ADAMS. There should
8 be a three-day turn-around, so I anticipate they'll be
9 on ADAMS at the latest on Tuesday.

10 MR. POLONSKY: Apologies for the sound
11 from the mic, but I understand that the Board
12 typically gets a copy of the transcript many days
13 before it's on ADAMS. Is it possible once the clerk
14 or the Board receives it, that the clerk can
15 distribute it, and that might speed things up, as
16 well?

17 JUDGE HAWKENS: Regrettably, it's not.
18 But we -- generally, when we get it, if we work
19 closely with SECY, we're able to get it either one
20 day, at most two-day turn-around, so we will make
21 every effort to get it out there as quickly as
22 possible.

23 MS. BATY: Your Honor, if I may request,
24 can we get an email. My only concern is that there
25 will be confusion about when exactly it became

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1 available, so if we could get some sort of notice
2 saying your time starts now.

3 JUDGE HAWKENS: We will have our law clerk
4 provide counsel with an email telling you when the -

5 MS. BATY: That will be appreciated.

6 JUDGE HAWKENS: -- clock is triggered.

7 MS. BATY: Thank you.

8 JUDGE HAWKENS: And you had indicated you
9 would like an opportunity to respond to what you
10 perceived as new information with an affidavit. That
11 is granted, not to exceed five pages.

12 MR. WEBSTER: Thank you, Judge.

13 JUDGE HAWKENS: The Board anticipates for
14 the information of the audience and counsel, as well,
15 we're going to anticipate issuing a decision some time
16 during the month of October.

17 Because we are guests here, I have certain
18 individuals I would like to thank. They've been very
19 gracious to us. Ocean County, first of all, for
20 allowing us to use this facility once again, and
21 several individuals I want to identify, focus on
22 especially, Mary Porcellini, who's receptionist for
23 the Board of Chosen Freeholders, Donna Flynn, Director
24 of Public Information Division. She's been
25 consistently the last three times we've used, is just

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1 exceeding gracious, and a wonderful sense of
2 cooperativeness and humor throughout. And Alan Avery,
3 the Administrator, and the Ocean County Sheriff's
4 Department, as well. They've been out here supporting
5 us, and we're grateful for that.

6 This hearing is adjourned. Thank you very
7 much.

8 (Whereupon, the proceedings went off the
9 record at 12:27 p.m.)

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