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Title: Entergy Nuclear Operations, Inc.
Indian Point Nuclear Generating Station
Unit 2

Docket Number: 50-0247-LA

ASLBP Number: 15-942-06-LA-BD01

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1 UNITED STATES OF AMERICA

2 U.S. NUCLEAR REGULATORY COMMISSION

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4 BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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7 In the Matter of: : Docket No.

8 ENTERGY NUCLEAR OPERATIONS, INC. : 50-0247-LA

9 (Indian Point Nuclear Generating : ASLBP No.

10 Station, Unit 2) : 15-942-06-LA-BD01

11 _____ :

12 Thursday, July 30, 2015

13

14 Nuclear Regulatory Commission

15 Hearing Room T-3 B45

16 11545 Rockville Pike

17 Rockville, Maryland

18

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20

21 BEFORE:

22 E. ROY HAWKENS, Chairman

23 GARY S. ARNOLD, Administrative Judge

24 SUE H. ABREU, Administrative Judge

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TABLE OF CONTENTS

1		
2		
3	Oral Argument by the State of New York	11
4	Oral Argument by Entergy	63
5	Oral Argument by NRC Staff	101
6	State of New York Rebuttal	121
7	Adjourn	132
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

P R O C E E D I N G S

1:03 p.m.

JUDGE HAWKENS: Good afternoon. We're here for oral argument in a proceeding entitled Entergy Nuclear Operations, Incorporated, Indian Point Nuclear Generating Station Unit 2, Docket No. 50-247-LA.

My name is Roy Hawkens, I'm Chairman of this Licensing Board. I'm joined on the Board by Dr. Gary Arnold, whose technical expertise is nuclear engineering; by Dr. Sue Abreu, whose technical expertise is nuclear medicine and who also has her law degree.

The Board is assisted by our law clerk, Alana Wase, by the Board's IT expert, Andy Welkie and by the Board's Administrative Assistant, Twana Ellis.

We'll be hearing oral argument from three parties this afternoon, the Petitioner, State of New York, the licensee, Entergy and the NRC staff.

Counsel for the parties, please introduce yourselves, starting off with New York?

MR. LUSIGNAN: Good afternoon, Brian Lusignan for the State of New York.

JUDGE HAWKENS: And would you pronounce your last name for me, please? I want to make sure I

1 don't mispronounce it.

2 MR. LUSIGNAN: Lusignan.

3 JUDGE HAWKENS: Lusignan, thank you, sir.
4 Entergy?

5 MR. BESSETTE: Good afternoon, Paul
6 Bessette. At the table is Martin O'Neill also from
7 Morgan Lewis. And we have William Glew, an attorney
8 for Entergy.

9 And behind us are the employees of Indian
10 Point, Nelson Acevedo (phonetic), should we need to
11 defer to him any questions.

12 JUDGE HAWKENS: All right, thank you.

13 MR. TURK: Good afternoon, Your Honor.

14 JUDGE HAWKENS: Good afternoon.

15 MR. TURK: My name is Sherwin Turk and I'm
16 with the NRC Office of the General Counsel
17 representing the NRC staff.

18 With me at the counsel table are Anita
19 Ghosh and Brian Harris.

20 To my left are two members of the Office
21 of Nuclear Reactor Regulation who I may turn to during
22 the course of my argument.

23 Immediately to my left is Mr. Jerome
24 Bettel. He is with the Office of Nuclear Reactor
25 Regulation Division of Safety Systems Containment

1 Ventilation Branch.

2 And, to his left is Mr. Richard Guzman who
3 is with the NRR Division of Operating Reactor
4 Licensing.

5 Also, in the audience are other members of
6 the Office of Nuclear Reactor Regulation from the
7 Containment Ventilation Branch as well as the Division
8 of Engineering Mechanical and Civil Engineering Branch
9 and the Division of Risk Assessment, Probabilistic
10 Risk Assessment Licensing Branch.

11 It may be that during the course of
12 argument I need to turn to those individuals for
13 assistance, I hope you'll forgive me if I do that.

14 JUDGE HAWKENS: Thank you.

15 This proceeding involves a License
16 Amendment Request by Entergy for Indian Point Unit 2.
17 Entergy seeks permission to extend the frequency of a
18 containment leak rate test from once every ten years
19 to once every 15 years on a permanent basis.

20 New York filed a challenge to this license
21 amendment request raising two contentions.

22 First, New York claims the proposed
23 amendment poses a significant hazard to public health
24 and safety.

25 And second, New York claims the proposed

1 amendment is not categorically exempt from
2 environmental review.

3 Entergy and the NRC staff oppose New
4 York's hearing request. This Board has read the
5 parties' pleadings. We determined that oral argument
6 would assist us in resolving the admissibility of New
7 York's contentions.

8 And, on July 6, we issued an Order that
9 scheduled today's argument, identified the topics we
10 wish the parties to address and established the order
11 and allotment of time for counsel to present argument.

12 We'll hear first this afternoon from the
13 State of New York which will have up to one hour of
14 presentation time in which may reserve a portion of
15 that time for rebuttal.

16 We'll next hear from Entergy and finally
17 from the NRC staff, each of which will have up to 45
18 minutes of presentation time.

19 Counsel may remain in their seats at their
20 tables during the presentation of argument and
21 answering of questions from the bench.

22 During the parties' presentation, a Judge
23 may elect to pose a question to another party. And,
24 if that does occur, we'll endeavor to keep track of
25 the time of that question and of the other parties'

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1 response so as not to detract from the presentation
2 time of the counsel who's time we're encroaching on.

3 Our Board's law clerk, Alana, will be
4 keeping track of presentation time. When five minutes
5 remain of presentation time, Alana will notify counsel
6 and the Board with the amber sign and when time has
7 elapsed, she will raise the red stop.

8 Arguments should take about a little over
9 two hours. We anticipate taking a short break about
10 midway through the presentation and that may coincide
11 with the completion of the initial presentation by the
12 State of New York.

13 Principally, for the benefit of counsel,
14 I want to alert you that this proceeding is being
15 televised on the internal NRC broadband channel 50 for
16 the benefit of NRC staff members who cannot be with us
17 in the hearing room today.

18 So, you are on notice that, certainly,
19 when giving your presentation and answering questions,
20 you'll be televised and at any other given time
21 pursuant to the whim of our IT expert, you may be
22 televised as well. So, heads up.

23 For the benefit of the public, and
24 especially for the stakeholders in the New York area
25 who could not be with us today, we have a listen only

1 telephone line so that they may hear the argument
2 live.

3 For individuals who cannot take advantage
4 of that listen only telephone line, we do have a Court
5 Reporter who will be completing an electronic
6 transcript. It will be included, accessible to the
7 public on the NRC website and that should be posted
8 within a matter of days.

9 For the benefit of the Court Reporter, as
10 well as for our several audiences here on the
11 telephone line and on the broadband television, we
12 would ask when making their presentations to speak
13 directly into the microphone.

14 With that, let me ask if counsel have any
15 questions or matters they want to raise before
16 proceeding with presentation.

17 New York?

18 MR. LUSIGNAN: Your Honor, I had one
19 preliminary question. I had submitted a couple PDFs
20 of charts for reference by the Board and I was
21 wondering if Mr. Welkie had those ready to display.

22 And I just want to confirm that there are
23 no objections from the parties. I had circulated them
24 yesterday and had not heard any.

25 JUDGE HAWKENS: Hearing no objection, the

1 Board has no objection either to Andy Welkie putting
2 them on the screen and he'll put them on pursuant to
3 your instructions.

4 MR. LUSIGNAN: Thank you.

5 JUDGE HAWKENS: Anything else?

6 MR. LUSIGNAN: That's all from the State.

7 JUDGE HAWKENS: Entergy?

8 MR. BESSETTE: No, Your Honor, we're ready
9 to go.

10 JUDGE HAWKENS: Thank you.

11 MR. TURK: Nothing further, Your Honor.

12 JUDGE HAWKENS: Thank you.

13 Mr. Lusignan, we'll hear first from you.
14 Do you wish to reserve any time for rebuttal? And, if
15 so, how much time?

16 MR. LUSIGNAN: Yes, Your Honor, I'd like
17 to reserve 15 minutes for rebuttal, please?

18 JUDGE HAWKENS: Thank you.

19 You may proceed.

20 MR. LUSIGNAN: Good afternoon, Your
21 Honors. My name is Brian Lusignan representing the
22 State of New York, the proposed intervener in this
23 proceeding.

24 In this proceeding, Entergy seeks to
25 reduce the frequency with which it must conduct the

1 only comprehensive tests of the Indian Point Unit 2
2 containment.

3 In the event of an accident, the
4 containment is the last line of defense preventing the
5 exposure of more than 17 million people living within
6 50 miles of Indian Point from exposure to the
7 uncontrolled release of radiation.

8 The State has proffered two contentions
9 supported by specific facts and legal arguments that
10 directly challenge the propriety of granting Entergy's
11 License Amendment Request.

12 It's first contention alleges that Entergy
13 has failed to consider plant-specific information that
14 makes Indian Point Unit 2 particularly ill suited for
15 reduced containment inspections.

16 And that NRC can, therefore not make the
17 required statutory and regulatory findings to grant
18 the amendment.

19 The second contention alleges that Entergy
20 has utterly failed to consider the environmental
21 impacts of the proposed License Amendment and that no
22 categorical exclusion to the National Environmental
23 Protection Act applies.

24 Because the State has met its initial
25 burden to show the existence of a genuine issue of

1 material fact, the Board should permit the State to
2 intervene and set this matter down for a hearing.

3 In my argument this afternoon, I am going
4 to first clarify some of the applicable legal
5 standards at the contention admissibility phase.

6 I will then describe briefly the nature of
7 the License Amendment Request.

8 And, finally, I will go through each of
9 the State's contentions, describe the supporting
10 evidence and attempt to address the issues raised by
11 the Board in its Order scheduling this oral argument.

12 At this stage in the proceeding, the State
13 is required to set forth reasonably specific factual
14 and legal allegations to ensure that matters admitted
15 for hearing have at least some minimal foundation, are
16 material to the proceeding and provide notice to the
17 opposing parties of the issues that they will need to
18 defend against.

19 The intent of the of contention
20 admissibility requirements is to ensure the
21 identification of bonafide litigative issues. The
22 State is not required to prove the merits of its
23 contention and factual support need not be in formal
24 evidentiary form or as strong as the support that
25 would be needed to survive a Motion for Summary

1 Disposition.

2 The State may support its contention
3 through reference to the Application itself as well as
4 expert opinion, a document or documents or a fact
5 based argument or a combination of all three.

6 In fact, when the NRC amended the
7 contention admissibility standards, it made clear the
8 proposed intervenor is not required to set forth its
9 entire case in its contention. But rather, it must
10 indicate what facts or expert opinions, be it one fact
11 or opinion or many, of which it is aware at that point
12 in time which provide the basis for its contention.

13 The State has met these standards for both
14 of its contentions.

15 The integrated -- in the event of an
16 accidental release of radiation from the containment
17 -- from the IP-2 reactor, the containment is the last
18 line of defense for the environment and members of the
19 public.

20 The containment is required to be
21 essentially leak tight in order to prevent the release
22 of radiation.

23 The containment and liner at Indian Point
24 Unit 2 were designed to operate for 40 years and have
25 already exceeded that design life.

1 The Integrated Lead Rate Tests is the only
2 inspection that measures the overall integrity of the
3 containment including all inaccessible locations and
4 during accident conditions.

5 In fact, in 1995 when the NRC adopted the
6 performance-based standard for Integrated Leak Rate
7 Tests, it noted that there's no alternative to ILRTs
8 has been identified to provide assurance that the
9 containment structure would meet allowable leakage
10 rates during design basis accidents.

11 In particular, the integrity of the Indian
12 Point Unit 2 steel containment liner can only be
13 tested through these Type A or Integrated Leak Rate
14 Tests.

15 The License Amendment Request details
16 various components that tested by Type B or Type C,
17 local leak rate tests, but these are various
18 penetrations in the containment, piping, valves. They
19 do not test the overall integrity of the containment
20 liner.

21 The Integrated Leak Rate Tests can be
22 completed in about a day, if successful. And is
23 conducted when the plant is offline for refueling
24 anyway.

25 Entergy is currently required to conduct

1 a Type A test every ten years and would be due to
2 conduct the next test in 2016. Assuming it passes,
3 the test after that would be conduction in 2026.

4 The License Amendment Request seeks to
5 extend the time between tests to 15 years. This would
6 mean that the next test will occur in 2021 and then
7 not again during the expected 60-year operating life
8 of Indian Point Unit 2 which assumes that the license
9 renewal is granted which is the subject of a separate
10 proceeding.

11 The determination of whether to grant the
12 amendment requires a plant-specific analysis of the
13 risk.

14 As the State alleges in its first
15 contention, the License Amendment Request fails to
16 include such a plant-specific analysis.

17 JUDGE HAWKENS: Can you launch into what
18 precisely is deficient in the license Application, Mr.
19 Lusignan?

20 MR. LUSIGNAN: Yes, Your Honor, I will
21 provide a brief summary of the evidence that the State
22 has supported to submit contention NYS-1.

23 The State has provided information about,
24 one, historical events that affected the IP-2
25 containment liner.

1 Two, recommendation by the Atomic Energy
2 Commission staff to increase inspections of the IP-2
3 containment liner throughout its operating life.

4 Three, recent visual inspection results
5 showing degradation, some of which has been attributed
6 to the historical events.

7 Four, consistent increases in the observed
8 leak rate during previous tests indicating that the
9 next test is expected to exceed the applicable
10 acceptance criteria.

11 Five, an increased risk in damaging
12 seismic events.

13 And, six, flaws in the probabilistic risk
14 assessment, including its generic rather than plant-
15 specific analysis and its reliance of a flawed severe
16 accident mitigation alternatives analysis.

17 Taken together, these facts support the
18 State's overarching contention that the License
19 Amendment Request is deficient.

20 JUDGE HAWKENS: So, let's start with the
21 historical events, Mr. Lusignan. You say taken
22 together, but I think it's important for you to make
23 your case to show there's a genuine dispute you're
24 going to have to go into some detail and specifics
25 about why each event contributes cumulatively to

1 making this deficient.

2 And, the historical events, the record
3 suggests that Entergy took corrective action in each
4 instance and that corrective action was satisfactory
5 both to their experts and satisfactory as well to the
6 experts in the NRC staff.

7 What, in the '68 liner buckling incident
8 or the '73 liner deformation or the '80 containment
9 flooding, what was deficient about the corrective
10 action that would prohibit Entergy from seeking this
11 15-year extension?

12 MR. LUSIGNAN: Your Honor, each time the
13 corrective actions were undertaken either by Entergy
14 or its predecessor licensee, Consolidated Edison, the
15 emphasis was on bringing the plant online ensuring
16 that conditions were sufficient that the plant could
17 continue to operate on a day to day basis.

18 There was very little consideration of the
19 long going impacts of these events. In fact --

20 JUDGE HAWKENS: Where in the record can
21 you show me that they didn't take into consideration
22 the long term impacts?

23 MR. LUSIGNAN: When you review the various
24 reports for the 1968 buckling event or the 1980
25 containment flooding event, you will see that the

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1 corrective actions involve steps to ensure that the
2 liner would continue to function on a day to day basis
3 as opposed to considering the long term impacts.

4 In 1973, in fact --

5 JUDGE HAWKENS: Were in the record does it
6 show they were just considering solely the short term
7 impacts? I didn't see that and if you could point it
8 out to me, I'd be grateful.

9 MR. LUSIGNAN: Sure, those documents are
10 cited in the State's petition.

11 JUDGE HAWKENS: Certainly, like any other
12 nuclear plant, they're anxious to get back online but
13 I didn't see anything that showed that their desire to
14 get back online outweighed their concern about safe
15 operation of the plant.

16 MR. LUSIGNAN: Well, I wouldn't
17 necessarily say that their concern to get the plant
18 back online outweighed the safe operation of the
19 plant, only that, at the time of these events, there
20 was not consideration of the possible long term
21 impacts and that no analysis has been conducted now of
22 those historical event to consider whether they may
23 have long term impacts.

24 In the 1973 event, in fact, as part of
25 their remedial action, NRC staff, or the predecessor

1 to NRC staff, the AEC staff, recommended that the
2 containment liner be inspected on a more frequent
3 basis than was then required.

4 At that time, it was required to be
5 inspected three times every ten years. And there's
6 been no consideration of why that recommendation
7 should no longer apply.

8 As far as the State is aware, that's the
9 only time that these historical events have been
10 considered in a long term perspective.

11 JUDGE HAWKENS: I'm wondering, though,
12 isn't that the initial recommendation? Wasn't that
13 superseded and consideration was given to that
14 implicitly by granting the ten-year, once every ten-
15 year inspection interval and then the one-time only
16 15-year inspection interval?

17 So, I don't think it's fair to say that
18 was never, even reconsidered. It was, obviously, the
19 historical events were considered and that particular
20 recommendation was essentially superceded by
21 subsequent determinations by both Entergy and the
22 staff.

23 MR. LUSIGNAN: That's been the position
24 taken by Entergy. However, they haven't actually
25 evaluated whether that recommendation should no longer

1 continue to apply. In effect, they argue that the
2 silence in the License Amendment Request as to that
3 recommendation means that it was necessarily
4 considered, there's been no specific evaluation of
5 whether that recommendation to continue to inspect the
6 containment liner more frequently should continue to
7 apply to the containment liner at IP-2.

8 And, in those prior License Amendment
9 Requests, there was no hearing or adjudication on the
10 sufficiency of those License Amendment Requests. So,
11 it's also not entirely -- these issues have never been
12 litigated before.

13 JUDGE ARNOLD: Concerning that
14 recommendation, as I see it, that was made in 1974, is
15 that correct?

16 MR. LUSIGNAN: Early 1974, yes, Your
17 Honor.

18 JUDGE ARNOLD: And, let's see, Appendix J,
19 Option B was promulgated in 1995 which is
20 significantly after that recommendation.

21 So, in promulgating the Option B, the
22 Commission had the opportunity to exempt Indian Point
23 from use of that. But I have found no indication that
24 that was done.

25 In fact, it looks to me, let's see, 10 CFR

1 50 Appendix J, Option B, Section V.A's applicability,
2 in there, it just says the requirements in either or
3 both Option B III.A for Type A tests may be adopted on
4 a voluntary basis by an operating nuclear power
5 reactor licensee as specified in 50.54.

6 So, I see no indication that the
7 Commission intended to restrict the applicability. Do
8 you know of anywhere it's documented that there should
9 have been exceptions?

10 MR. LUSIGNAN: Sure. When the NRC adopted
11 this performance-based standard, which is Option B
12 under Appendix J, it made clear that the performance-
13 based option was based on generic finding that,
14 generally, these extensions would not pose a
15 significant risk to the environment or to public
16 health.

17 However, they also recognized that a
18 plant-specific analysis of the risk posed by a
19 specific extension request still had to be conducted.

20 Additionally, in the industry documents
21 referred to by Entergy in License Amendment Request,
22 that's NEI-94-01 Revision 0 and Revision 2.A, they
23 both specify that plant-specific analysis of the risk
24 or specific requests for a license extension has to be
25 considered.

1 And, the State's contention is that if
2 there were ever a nuclear plant where this extension
3 was not appropriate, it's Indian Point Unit 2 given
4 the specific events that have affected the containment
5 liner, the increasing leak rate results, the elevated
6 seismic hazards as well as its location in one of the
7 most densely populated areas of the country.

8 So, again, the 1995 performance-based
9 standard recognizes that plant-specific issues are
10 still relevant to whether a specific license extension
11 should be granted.

12 There is also evidence that these
13 historical events have affected the Indian Point
14 containment liner even years down the road.

15 In 2000, a visual inspection discovered
16 corrosion that was attributed to the 1980 flooding
17 incident in which 100,000 gallons of river water
18 flooded the IP-2 containment.

19 In some places, the liner had corroded to
20 a thickness that was .015 inches or about 1/667th of
21 an inch thicker than the minimum required thickness.

22 Additionally, in 1993, a few years
23 earlier, corrosion from that 1980 event was detected
24 in the weld channel and penetration pressurization
25 system. Various pipes were found to be corroded under

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1 the containment base mat where they were essentially
2 inaccessible.

3 That was despite the fact that the
4 predecessor licensee had assured NRC that there was no
5 way these pipes could be corroded because they had
6 been pressurized greater than the pressure of the 1980
7 flood.

8 So, we have this evidence in the record
9 that the 1980 flooding event has continued to affect
10 the integrity of the containment liner as well as the
11 evidence that, at the time of the 1973 event, which
12 caused disruptions to a 60-foot swath of the
13 containment liner and broke about 50 percent of the
14 bolts in that affected area.

15 As part of the resolution of that issue,
16 there was a plant specific recommendation to monitor
17 this liner more frequently.

18 JUDGE HAWKENS: But, you're not able in
19 the most recent -- or the 2000, I think you indicated
20 they saw corrosion problems resulting from earlier
21 incidents. The record reflects they took corrective
22 action. Are you able to identify any problem with the
23 corrective action taken in 2000?

24 MS. LUSIGNAN: Again, the corrective
25 action was taken as short term way --

1 JUDGE HAWKENS: Answer that question and
2 then you can follow up on it. Can you identify any
3 problem in the corrective action taken in 2000?

4 MR. LUSIGNAN: No, Your Honor, and the
5 State is not challenging the adequacy of the
6 corrective action taken following these previous
7 events.

8 However, degradation, corrosion, aging
9 effects are ongoing processes that can continue to
10 affect these plants and the containment liners as has
11 been seen in the discovery of corrosion 20 years after
12 the 1980 event.

13 And, the State's point is that the long
14 term implications of these events was not considered
15 in the License Amendment Request and, therefore, that
16 there hasn't been a sufficient plant-specific analysis
17 as to form a basis of that License Amendment.

18 JUDGE ABREU: Mr. Lusignan, you mentioned
19 that these are unusual, as compared to other plants,
20 I'm assuming, is what your comparison point would be,
21 is that correct? You've used the term that these are
22 unusual events.

23 MR. LUSIGNAN: That's right, Your Honor.

24 JUDGE ABREU: And, we've heard the
25 reference back to the Option B. And so, are you

1 saying that there is something specific in the unusual
2 nature that you're saying is why that option doesn't
3 work right for this plant?

4 What makes this unusual compared to other
5 plants?

6 MR. LUSIGNAN: Sure. Well, to given an
7 example, the License Amendment Request relies on this
8 Calvert Cliffs Liner Erosion Analysis.

9 It's a procedure that was developed in
10 connection with the Calvert Cliffs Nuclear Plant for
11 determining whether a license extension -- or to
12 determine the effects of the corrosion on the liner.

13 And, in the Calvert Cliffs request, it was
14 -- they noted that in over 500 visual inspections,
15 corrosion had never been found on the liner.

16 In this case, we have the 2000 incident
17 where corrosion was specifically found on this liner.

18 Additionally, the Calvert Cliffs liner,
19 there's no evidence that it has these installation
20 panels which obstruct visual inspections of large
21 portions of the IP-2 containment liner.

22 JUDGE ABREU: That's Calvert Cliffs. I'm
23 saying in general, the applicability of Option B is
24 to, as it stated, basically everyone. So, what I'm
25 looking for is for you to tell me what's different

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1 about Indian Point 2 that makes -- that connects with
2 your statement that that doesn't work right for Indian
3 Point 2 because it's unusual.

4 MR. LUSIGNAN: Sure. And there are --

5 JUDGE ABREU: All others, not just one
6 specific plant.

7 MR. LUSIGNAN: Of course. And the Calvert
8 Cliffs was just to provide one example of a different
9 containment liner.

10 But, the Indian Point Unit 2 is unusual or
11 even unique in a number of ways. The first being the
12 simple density of the population in the surrounding
13 area.

14 JUDGE ABREU: The plant physical
15 characteristics because we're talking about that liner
16 integrity. What about that makes this specific option
17 not make sense?

18 MR. LUSIGNAN: Well, additionally, the
19 previous Integrated Leak Rate Tests have shown an
20 ongoing trend towards surpassing the applicable
21 acceptance criteria.

22 If Mr. Welkie --

23 JUDGE ABREU: It's considered in this
24 option -- in the critique for it, correct?

25 MR. LUSIGNAN: It was not considered in

1 the License Amendment Request. There was a staff
2 Request for Additional Information in response to
3 which Entergy submitted some materials.

4 JUDGE ABREU: You're saying the previous
5 ILRTs are not considered?

6 MR. LUSIGNAN: They are set forth in the
7 Application, but the --

8 JUDGE ABREU: That's not considered as
9 part of the analysis of Option B of meeting the
10 criteria for utilization of Option B, is that -- am I
11 understanding you correctly?

12 MR. LUSIGNAN: The fact that the results
13 are on a continuous trend towards eclipsing the
14 acceptance criteria was not considered in the --

15 JUDGE ABREU: I think you're looking at
16 the slope of the curve as opposed to the finding
17 versus other criteria is what you're saying?

18 MR. LUSIGNAN: That's right. And if Mr.
19 Welkie can --

20 JUDGE HAWKENS: May I interrupt? What
21 makes you say the trajectory, the trend, was not
22 considered by Entergy or by the NRC staff?

23 MR. LUSIGNAN: There's nothing in the
24 License Amendment Request to indicate that it was.
25 This License Amendment Request is the basis upon which

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1 NRC staff -- NRC must grant or deny the Application,
2 they failed to consider that analysis.

3 JUDGE HAWKENS: Data points are all there
4 and the Appendix J explicitly says the test results
5 must be compared with previous results to examine the
6 performance history of the overall containment system.

7 So, necessarily, if they're to comply with
8 the regulation, they're going to be considering all
9 the data points and the trajectory of those data
10 points.

11 MR. LUSIGNAN: The consideration, though,
12 was to say simply that it did not surpass the
13 applicable acceptance criteria in those previous
14 inspections.

15 JUDGE HAWKENS: That's a correct
16 statement, is it not?

17 MR. LUSIGNAN: That is a correct
18 statement. We will concede that.

19 If Mr. Welkie could display the first of
20 the charts that I submitted, though, you can see
21 visually the trajectory of these previous Leak Rate
22 Tests.

23 So, this is a simple visual representation
24 of the data that's set forth. It's reproduced in an
25 NYS Petition at page 17. You can see underneath there

1 the underlying source of the data.

2 And, this visually shows the fact that
3 each successive test has revealed increased leakage.
4 The State's theory is that this is evidence of ongoing
5 degradation affecting the integrity of the IP-2
6 containment.

7 Entergy has offered an alternative
8 explanation in response to a staff RAI. However, that
9 goes to the merits of this particular contention, not
10 whether it should be admissible in the first place.

11 JUDGE ABREU: The data points you're
12 showing are the "as found," correct?

13 MR. LUSIGNAN: The data points are "as
14 found" leakage, that's right.

15 JUDGE ABREU: Well, then your acceptance
16 criteria line, though, is "as left" acceptance
17 criteria, right?

18 MR. LUSIGNAN: Yes, Your Honor.

19 JUDGE ABREU: So, those are different
20 pieces of information?

21 MR. LUSIGNAN: Right, but the "as left"
22 acceptance criteria is the leak rate below which the
23 containment must be brought before the plant can come
24 back online after an Integrated Leak Rate Test.

25 JUDGE ABREU: Yes, but that is different

1 than the "as found" data? There are two different
2 types of data here is my point and I'm just confirming
3 that that is your understanding.

4 MR. LUSIGNAN: That's right, Your Honor.
5 The "as found," and this is one of the issues that was
6 raised by the Board, so perhaps, I'll move to that.

7 JUDGE ABREU: Well, let me just ask
8 another question then since we're talking about the
9 data points.

10 Since this is for the ILRT result which
11 encompasses also components of the findings in the
12 Type B and C testing, correct? It's not -- they don't
13 -- the ILRT isn't an isolated number that separately
14 the Type B and C testing does not relate to, there's
15 a combination of things here, right?

16 MR. LUSIGNAN: Correct.

17 JUDGE ABREU: Okay. So, have you looked
18 at how much the trend here could be due to Type B or
19 C problems as opposed to those other things that would
20 not be detected by Type B and C testing?

21 MR. LUSIGNAN: Respectfully, the overall
22 leak rate, it doesn't matter what parts of this
23 containment are leaking, the overall issue is that the
24 leakage has been increasing and if --

25 JUDGE ABREU: But, isn't your concern that

1 there's something not being found if the test isn't
2 done? Is that your concern with shifting from 10 to
3 15 years is that we're going to miss something?

4 MR. LUSIGNAN: Right.

5 JUDGE ABREU: In a simple terms?

6 MR. LUSIGNAN: Correct.

7 JUDGE ABREU: We're going to miss
8 something? But, if this trend is caused by something
9 that we're finding with another test, has that been
10 considered in your look at this?

11 MR. LUSIGNAN: Yes, the Type B and Type C
12 tests, they do consider the valves and the
13 penetrations and there has been analysis to suggest
14 that they discovered a majority of leaks.

15 However, they do not assess the integrity
16 of the containment liner itself.

17 JUDGE ABREU: No, but when we get back to
18 what the ILRt does, it encompasses components of the
19 B and C testing within it. So, it contains the issue
20 you're worried about, which is the parts B and C
21 doesn't test but also B and C.

22 So, theoretically, my containment liner
23 could be perfect, but my ILRT could be going up
24 because of problems in penetrations and valves that
25 I'm detecting with other tests. Is that a fair

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1 statement?

2 MR. LUSIGNAN: It's a fair statement that
3 some of these leaks could be detected in other tests.

4 In the event of an accident, however, it's
5 not going to matter whether the radiation is being
6 released through the containment liner or a valve.

7 JUDGE ABREU: The point is the Type A
8 test, the interval is extended where those other
9 things, those intervals are not changing. So, if it
10 is a penetration problem, a valve problem, those would
11 be detected at those more frequent interval tests.

12 MR. LUSIGNAN: Correct.

13 JUDGE ABREU: Okay.

14 MR. LUSIGNAN: And again, the Integrated
15 Leak Rate Test results have to be considered in the
16 context of the State's other evidence, specifically,
17 these historical events that have affected directly
18 the containment liner which is not tested by the Type
19 B or Type C tests as well as the other evidence that
20 the -- including seismic, increased seismic hazards.

21 JUDGE ABREU: But, just looking at the
22 trend, you brought out the chart, is that that trend
23 is not just looking at that issue that you just
24 pointed out, the issues with the liner itself, it
25 encompasses greater than that?

1 MR. LUSIGNAN: That's right.

2 JUDGE ABREU: That is correct? Okay.
3 That that is your understanding?

4 MR. LUSIGNAN: Correct.

5 And, I would just like to go back to this
6 issue of the acceptance criteria. The data points
7 shown on that chart were from the "as found" test
8 results. A failing "as found" acceptance criteria is
9 .1 percent containment leak rate per day.

10 However, when an Integrated Leak Rate Test
11 is conducted, the plant is offline and the plant
12 cannot come back -- and, if the leak rate exceeds .075
13 percent containment rate per day, the plant cannot
14 come back online until corrective actions are taken
15 and the leak rate is brought below the .075 standard.

16 So, the State believes that there's
17 evidence that the leak rate may already exceed .075
18 and that Indian Point should not be permitted to
19 operate for five years in a condition which, if
20 discovered, would require it to shut down.

21 Essentially, the State believes that this
22 "as left" acceptance criteria of .075 would be a
23 failing test result.

24 JUDGE HAWKENS: Mr. Lusignan, you say
25 that's the State's belief. Can you point to a

1 regulation that supports that?

2 MR. LUSIGNAN: Well, it's in the technical
3 specifications, Your Honor, that Entergy has requested
4 to amend that says, you know, .075 --

5 JUDGE HAWKENS: I understand that it says
6 that you cannot restart it until you are below the
7 .075, but is there anything which supports your
8 seeming assertion that the extension request cannot be
9 granted while you have the trajectory approaching that
10 .075 L_A acceptance criteria?

11 MR. LUSIGNAN: Well, just, again, the
12 practical consequence of exceeding that criteria is
13 the plant remains shut down and the State doesn't
14 believe it's appropriate to continue operating the
15 plant in a condition which, if discovered, would
16 require it to shut down. That's just putting the 17
17 million people who live within 50 miles of Indian
18 Point at risk every single day.

19 JUDGE ABREU: Well, what is your
20 understanding of the ILRT limits versus when -- how
21 far you'd have to go beyond that 1.0 L_A to get to the
22 point of having a significant problem with, let's say,
23 exposure to the population, do you have sense of what
24 that number is? What that order of magnitude is?

25 MR. LUSIGNAN: I don't have a specific --

1 JUDGE ABREU: Safety?

2 MR. LUSIGNAN: Right, I don't have a
3 specific number in my head.

4 JUDGE ABREU: Or an order of magnitude
5 concept of any kind?

6 MR. LUSIGNAN: My understanding is that
7 there's a significant margin of safety in the
8 acceptance criteria for this test.

9 However, the NRC, when it adopted the
10 performance-based test in 1995, or the performance-
11 based option, I should say, it specifically considered
12 the possibility of increasing that acceptance criteria
13 above that .1 percent containment rate per day, and it
14 rejected that idea because of the uncertainties
15 involved in the release of radiation in the event of
16 an accident.

17 So, the --

18 JUDGE ABREU: But, it is your
19 understanding that there is a large margin of safety
20 with that 1.0 number, it's not somewhere close to
21 something that would imminently change the risk?

22 MR. LUSIGNAN: My understand that there is
23 a margin of safety, and I can't speak to the specific
24 amount of that margin, however, it the margin that's
25 been maintained through the NRC regulations even as

1 the inspection period has been -- or frequency has
2 been decreased.

3 I did want to discuss the updated seismic
4 hazards analysis.

5 JUDGE ARNOLD: Could we just go back about
6 ten minutes before we get off the topic totally?

7 You're saying that the condition of the
8 containment and the events that have happened to the
9 containment have to be considered in this License
10 Amendment Request?

11 Now, in Appendix J under Option B in
12 Section III.A Type A Test, it states, Type A tests
13 must be at a periodic interval based on the historical
14 performance of the overall containment system as a
15 barrier to fission product releases.

16 Now, performance is how well has it done.
17 It doesn't say condition, it does say events that have
18 occurred to it.

19 When I look at how the containment has
20 done as a barrier to fission, I'm looking at all ILRT
21 results.

22 So, it seems to me that you're asking for
23 something even more strict, more restraining than the
24 rule calls for. How can you interpret that rule to
25 include the condition and past events that are not

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1 directly affecting how the containment has performed
2 historically?

3 MR. LUSIGNAN: I guess there are a couple
4 -- two real responses to that.

5 The first is that there is a separate
6 finding that the NRC must make that there is a
7 reasonable assurance of an adequate protection of
8 public health and the safety. And, that's kind of a
9 freestanding determination the NRC staff must make in
10 all License Amendment Requests.

11 Additionally, when it comes to the
12 specific requirements of Option B, again, there's a
13 recognition in Option B and in the supporting industry
14 documents that a plant-specific risk analysis still
15 must be conducted.

16 That is to say, if the NRC wanted to let
17 you extend your Leak Rate test based solely on the
18 fact that your prior test results hadn't exceeded the
19 "as found" criteria, they could have provided that in
20 the regulation instead, the amendment shall be granted
21 in the event it does not exceed .1 in the prior two
22 tests or however it wanted to phrase it.

23 But, it didn't do that. It specifically
24 allowed for the continued consideration of plant-
25 specific event. And, this is a case where the plant-

1 specific events, as well as the plant's unique
2 location and the evidence that there is a greater risk
3 of seismic hazard make it particularly ill suited for
4 this kind of extension.

5 I'd like to ask Mr. Welkie to display the
6 second chart that I had submitted?

7 And, this is a chart of the updated Ground
8 Motion Response Spectra submitted by the licensee and
9 NRC staff in connection with Indian Point Unit 2.
10 This appears on page 16 of the State's Petition. And,
11 again, you can see the underlying source on that
12 document.

13 The blue line here is the licensee's Safe
14 Shut Down Earthquake Spectra. And, that's the
15 earthquake spectra that Indian Point Unit 2 was
16 designed to withstand, designed to be safely shut down
17 in the event of an earthquake within that spectra.

18 The red and the green lines are updated
19 Ground Motion Response Spectra prepared by the
20 licensee and NRC, respectively. And you can see the
21 key on that chart as well.

22 Now, ideally, the safe shut down
23 earthquake like would entirely bound or entirely
24 encompass the true Ground Motion Response Spectra.
25 And, as you can see from this updated chart, the

1 Ground Motion Response Spectra exceeds the Safe Shut
2 Down Earthquake Spectra at virtually all frequencies
3 above I believe it's about 3 hertz there.

4 Now, this is relevant to whether the
5 Integrated Leak Rate Test frequency should be
6 decreased because one of the potential precipitating
7 events that could cause the release of radiation from
8 the reactor is an earthquake.

9 In fact, the Probabilistic Risk Assessment
10 prepared by Entergy's vendor purports to consider
11 seismic hazards in conducting its risk assessment.

12 However, that report was prepared more
13 than a year before this License Amendment Request was
14 submitted in October 2013. These updated graphs were
15 developed in early 2014. I believe this was submitted
16 in March 2014.

17 So, first of all, there's no way that the
18 License Amendment Request could have considered this
19 updated seismic hazard. Additionally, the License
20 Amendment Request does not purport to consider this
21 seismic data.

22 So, in the event of an earthquake that
23 exceeds IP-2's ability to shut down safely,
24 potentially causing the release of radiation, it will
25 be essential that the containment remain essentially

1 leak tight as it's designed to remain, and to continue
2 operating the plant for at least five years in a state
3 that would potentially allow the release of radiation
4 above acceptance criteria is another reason why the
5 NRC can't make that finding of reasonable assurance of
6 adequate protection of the public health and safety.

7 JUDGE ABREU: You mentioned that this
8 creates a significantly greater risk. How did you
9 determine the level of significance that the change in
10 the seismic studies would make in the calculation of
11 the Probabilistic Risk Assessment? That it's more
12 than what the licensee said is small or less than
13 small?

14 MR. LUSIGNAN: Right, Your Honor.

15 So, the licensee uses small or very small
16 to mean insignificant. However, the fact that the
17 risk of something occurring may be small does not mean
18 that that risk is insignificant when the potential
19 consequences are very large.

20 So, in a --

21 JUDGE ABREU: Do you have a regulatory
22 basis for your definition of significant?

23 MR. LUSIGNAN: Well, I'm not sure I've
24 offered a specific definition of significant. And my
25 --

1 JUDGE ABREU: Well, when does something
2 cross the threshold from not significant enough to
3 become a significant hazard as opposed to those that
4 fall below a cut line?

5 MR. LUSIGNAN: Well, when you have a plant
6 like Indian Point 2 which is surrounded by 17 million
7 people and a variety of unique --

8 JUDGE ABREU: I'm asking for what -- how
9 you determine that line? There are, for example,
10 there reg guides that have a discussion of this which
11 were used by the licensee. Do you have something
12 parallel to that to say this is why we call it
13 significant compared to what the licensee did?

14 MR. LUSIGNAN: Well, the fact is, Your
15 Honor, that the licensee didn't evaluate this updated
16 seismic hazard to determine whether or not it was
17 significant or insignificant --

18 JUDGE ABREU: But, what I'm asking is, you
19 said that the old versus the new creates a
20 significant. The word significant comes into play
21 many times. So, what do you mean by significant and
22 what's the basis for that determination? A
23 calculation? Some regulatory reg, you know, some
24 regulation, some reg guide, somewhere that says your
25 significant -- how do we understand your use of the

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1 term significant in perspective to the licensee's?

2 MR. LUSIGNAN: Right. And, the State's
3 position at the contention admissibility phase of this
4 proceeding is that Entergy or its vendor should have
5 considered these factors in evaluating the License
6 Amendment Request.

7 And, the fact that the State hasn't
8 offered a specific alternative standard or hasn't come
9 forward with a specific expert opinion is not required
10 at the contention admissibility stage. The State's
11 not required to prove the underlying merits of its
12 contentions at this stage in the proceeding.

13 JUDGE ABREU: Part of the requirements for
14 admissibility is that there has to be adequate
15 pleading. And, one of the challenges is to connect
16 assertions about, you know, you've got -- identified
17 some items, but then the State has made an assertion
18 that that word significant becomes significant.

19 And, saying it's significant, basically,
20 any one problem would be if all someone has to do is
21 say this is significant, virtually any contention
22 could end up admitted just because somebody says it's
23 significant and says, well, we'll just sort it out
24 later.

25 But, I'm looking for help from you on is

1 help me say -- help me connect that dot from what you
2 found and how it becomes significant enough to say,
3 yes, this needs to go on for a more in depth
4 evaluation.

5 MR. LUSIGNAN: Right. And, the
6 significance is the various specific facts that the
7 State has set forth in its Petition.

8 Again, the State hasn't simply offered a
9 contention that says, you know, there's a significant
10 risk of unidentified leakage in the containment liner.
11 The State has specifically identified events that
12 would have affected the containment liner, it's
13 offered evidence that the --

14 JUDGE ABREU: You're saying that those
15 items are significant, that's an assertion as opposed
16 to saying these are items that might be. The State
17 has said these are significant.

18 So, I'm looking for, you know, we did not
19 get expert opinion. We didn't get a calculation. We
20 didn't get something that puts -- that we can put a
21 nail on that says significant.

22 MR. LUSIGNAN: Right. And, I can't give
23 you a specific standard that the State is relying on
24 nor is that required at this stage of the proceeding.
25 And, the underlying determine the NRC must make is

1 that there's a reasonable assurance of adequate
2 protection of public health and safety.

3 And, under Option B, a determination that
4 the plant-specific risks have been fully evaluated in
5 this case.

6 The State has offered a variety of
7 evidence that that has not occurred here.

8 JUDGE ABREU: So, would your rule for
9 contention admissibility be that if you can point to
10 a factor that affects the technical specs or a request
11 to alter them that could conceivably be in the
12 negative range as opposed to the positive range of
13 risk, all I have to do is find something that could be
14 a little bad, that's enough for a contention
15 admissibility? It just has to kind of look bad?

16 Or what -- as opposed to saying, I have to
17 have some evidence that is a significant risk under
18 terms the NRC has defined or something parallel.

19 MR. LUSIGNAN: Well, when the NRC adopted
20 the new -- these pleading standards, it did say a
21 valid Petition can be based on one fact, one expert
22 opinion or many expert facts and expert opinions.

23 The State has offered evidence of
24 historical events specifically affecting the
25 containment liner, has shown that the containment

1 liner is not tested by Type B or Type C tests --

2 JUDGE ABREU: We're aware of the items
3 you've --

4 JUDGE ARNOLD: Can I ask him basically the
5 same question with a little bit more specific?

6 10 CFR 50.59 has to do with license
7 amendments and when you don't require a license
8 amendment. And, basically, one of the requirements to
9 avoid a license amendment is that there has to be less
10 than a significant increase in the risk. But, it
11 doesn't say what a significant increase is.

12 However, the statement of considerations
13 in the Federal Register Notice for that 10 CFR 59 goes
14 into a long discussion and what it boils down to is it
15 is less than significant if it's less than about an
16 order of magnitude increase in the risk.

17 Now, that's my works, but if you read it,
18 it's more than a small change, more than a small
19 fractional change.

20 Is it your belief that the increase in
21 risk in changing this test interval is something that
22 approaches an order of magnitude increase?

23 MR. LUSIGNAN: Well, again, I'm not sure
24 I can say a specific amount of increased risk that's
25 occurring here. What I can say is that, again, the

1 level of risk depends both on the likelihood of an
2 event occurring on the consequences of that event
3 occurring.

4 You have here a plant that's in one of the
5 most highly populated areas of the country.
6 Additionally, the License Amendment Request relies on
7 the Severe Accident and Mitigation Alternative
8 Reanalysis which does not consider various plant-
9 specific costs.

10 It's based on the Surry reactor which is
11 in rural Virginia and they basically just scaled up
12 the population to account for the greater population
13 in the New York City area, but that doesn't account
14 for the possible increased cost of decontaminating
15 various unique and historical landmarks such as the
16 Statue of Liberty or the Empire State Building. A
17 list of various unique and historical sites are
18 attached to the State's Petition.

19 JUDGE ARNOLD: Question. Do they actually
20 do those? Do they calculate a cost of clean up? I
21 saw results in terms of the large, early release
22 frequency and the REM per person. And the REM per
23 person doesn't care about property clean up.

24 So, could you be more specific?

25 MR. LUSIGNAN: Right, Your Honor.

1 Specifically, the issue is that they
2 considered per person cost to the basically only cost
3 of a leak at Indian Point.

4 Your Honor, I see that I'm out of time, if
5 I may just conclude this answer.

6 JUDGE HAWKENS: Yes, please continue.

7 MR. LUSIGNAN: However, what it did not
8 consider are the costs of clean up of clean up of
9 historic unique sites as well as, for instance, Wall
10 Street, the financial center of the country.

11 These are specific things that could be
12 affected by a leak at the IP-2 containment that could
13 be, potentially, very severe and, thus, increase the
14 risk posed by relaxing the containment monitoring.

15 So, I didn't get a chance to talk much
16 about our second contention, and we'll rest on our
17 papers on that one.

18 JUDGE HAWKENS: If my colleagues don't
19 object, I'd like to give you five minutes in addition
20 to the normal presentation time so you can address the
21 second issue.

22 MR. LUSIGNAN: Thank you, Your Honor.

23 The second --

24 JUDGE HAWKENS: One second, please.

25 Judge Arnold indicates he has a number

1 more questions, so let's -- rather than limiting you
2 to five minutes, I think it's important that Judge
3 Arnold gets his questions answered. So, I'm going to
4 let him ask.

5 MR. LUSIGNAN: Of course, thank you.

6 JUDGE ARNOLD: On page 8 in paragraph 7,
7 you talk about the corrosion and you say the LAR does
8 not report on this corrosion.

9 Now, I looked and saw on page 16 of 19 of
10 Attachment 1 of the LAR as item 7 on the list are the
11 words quote, included age-adjusted steel liner
12 corrosion effects in the ILRT assessment was
13 demonstrated to be a small contributor to the impacts
14 of extending the ILRT interval at IP-2.

15 Now, to me, that looks like they have
16 indeed considered corrosion. Any comment?

17 MR. LUSIGNAN: Yes, they considered
18 corrosion, but in the context of a generic analysis
19 based on this Calvert Cliff liner corrosion analysis.

20 And, again, as I've already mentioned, the
21 Calvert Cliffs liner is very different from the IP-2
22 liner, both in the fact that at the time that analysis
23 was developed, there had never been corrosion detected
24 on the Calvert Cliffs liner.

25 Additionally, the Calvert Cliffs liner

1 doesn't have all these inaccessible locations that are
2 covered by the insulation paneling that the IP-2 liner
3 has.

4 JUDGE ARNOLD: Do you discuss that in your
5 Petition somewhere? I didn't catch that.

6 MR. LUSIGNAN: That issue isn't
7 specifically addressed in our Petition. Again, it's
8 not the State's burden to come forward with its entire
9 case at this stage in the proceeding, but for the sake
10 of answering your question, I want to provide a little
11 more detail on that.

12 JUDGE ARNOLD: On page 9, let's see, no,
13 I'll ask Entergy that one later.

14 Once again, having to do with seismic
15 considerations, now, if the risk analysis had included
16 this new seismic information, if would have included
17 it in the base case at a 10-year interval and the case
18 with the 15-year interval.

19 Now, why would a higher core damage
20 frequency due to earthquakes affect that calculation
21 any different than it would the base case without
22 considering earthquakes?

23 MR. LUSIGNAN: I think the State's point
24 is a more fundamental one that, in the absence of
25 considering this updated data, you don't have an

1 accurate picture of the risk posed by the license
2 amendment request.

3 JUDGE ARNOLD: On page 18, you mention in
4 paragraph 22 two damaged areas of the stainless steel
5 insulation jacket had to be repaired at this time.
6 And I'm wondering, what is the insulation jacket and
7 what is its significance to safety?

8 MR. LUSIGNAN: Well, the significance --
9 so the insulation jacket is this series of steel
10 panels that are on portions of the IP-2 containment
11 liner.

12 Entergy has proposed to -- has designated
13 those sections as being inaccessible, the sections of
14 the liner that are behind the stainless steel
15 insulation jacket.

16 So, it will not be inspecting those
17 locations notwithstanding the fact that corrosion has
18 been detected behind the insulation liners,
19 specifically in 2000 when they found the thinner --
20 the liner which was within .015 inches of the minimum
21 required thickness that was behind an area of
22 insulation --

23 JUDGE ABREU: Minimum required? What is
24 your basis for saying that's minimum required?

25 MR. LUSIGNAN: That was based on the

1 number that Entergy's contractor at the time --

2 JUDGE ABREU: So, it's not a regulatory
3 requirement, correct? Is that correct?

4 MR. LUSIGNAN: Correct. It was a
5 contractor Entergy hired.

6 JUDGE ABREU: It has a different -- you
7 have to be -- I want to make sure we're clear on what
8 required meant.

9 MR. LUSIGNAN: Yes, thank you, Your Honor.

10 What I'm referring to as required is the
11 minimum safe thickness that was determined by an
12 Entergy contractor. I believe it was Raytheon at the
13 time, which was that it should be .35 inches.

14 JUDGE ABREU: And the conditions that
15 contractor indicated that would be the minimum for,
16 were those the same as present at Indian Point in this
17 area of the liner?

18 MR. LUSIGNAN: It was specific to Indian
19 Point. It was in the -- when the staff granted the
20 2002 request for a onetime extension, that's where
21 these facts were discusses.

22 JUDGE ABREU: Entergy, is that consistent
23 with your understanding of that segment of the
24 analysis? Is it that liner thickness limit determined
25 by the consultant was for the same conditions as the

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1 liner as far as thermal barriers and that sort of
2 thing were the same for --

3 MR. O'NEILL: Same.

4 JUDGE ABREU: -- determination versus the
5 area of the liner he was -- that was being examined
6 under this UT?

7 MR. O'NEILL: I'm not sure I understand
8 the question.

9 JUDGE ABREU: Okay, we have a consultant
10 -- he said there was a limit --

11 MR. O'NEILL: Yes.

12 JUDGE ABREU: -- of liner thickness that
13 a consultant determined under some conditions, but
14 there could be differences with the situation at the
15 liner area, like the thermal backing type of problem
16 whether there is or isn't and whether his issue was
17 that thickness, whether there was thermal backing or
18 not thermal backing. And I want to make sure we were
19 comparing apples and apples.

20 MR. O'NEILL: My understanding is the --
21 you're referring to thermal backing in relation?

22 JUDGE ABREU: I'm sorry, thermal
23 insulation.

24 MR. O'NEILL: I don't think that was
25 germane to what the consultant was doing. We have to

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1 defer to Mr. Acevedo, but I suspect that the tolerance
2 limits or minimum thickness that they were using
3 related to the thickness of the liner itself as
4 measured through non-destructive examinations or
5 tests.

6 JUDGE ABREU: That is my understanding was
7 liner, the steel thickness.

8 MR. O'NEILL: The steel, yes, yes.

9 JUDGE ABREU: The clarifying the details
10 of in what situation if it's exposed to thermal stress
11 would be different than if it has insulation behind
12 it, the stresses would be different and whether -- how
13 much thickness would be required. So, I just wanted
14 to make sure it was comparing what his rule was versus
15 what the State is concerned or make sure they are the
16 same.

17 MR. BESSETTE: Your Honor, we'll have to
18 consult with our -- perhaps we can do it during the
19 break.

20 MR. LUSIGNAN: And I'm happy to read you
21 the language from the specific License Amendment, the
22 August 5, 2002 document granting the onetime
23 extension.

24 JUDGE ABREU: We can do that during the
25 break.

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1 MR. LUSIGNAN: Okay.

2 JUDGE ARNOLD: So, let me understand your
3 answer. The insulation jacket, the significance
4 there, isn't the jacket itself, but the fact that
5 there was corrosion on it and there might have been
6 corrosion on the liner?

7 MR. LUSIGNAN: That's right.

8 JUDGE ARNOLD: Okay.

9 MR. LUSIGNAN: That liner is behind this
10 jacket and it's considered inaccessible where it's
11 behind the jacket.

12 JUDGE ARNOLD: On page 19, paragraph 24
13 second sentence, those admissions and errors worked to
14 undercount the costs of an offsite radiation release
15 and, therefore, skew the cost benefit analysis in
16 favor of the requested amendment.

17 I was unaware of any cost benefit analysis
18 in here. Could you point that out?

19 MR. LUSIGNAN: This has to do with the
20 Severe Accident Mitigation Alternatives Re-Analysis.
21 That was developed in connection with the relicensing
22 proceeding. But, it was apparently used as a basis
23 for the Probabilistic Risk Assessment prepared in this
24 case.

25 Now, the Probabilistic Risk Assessment

1 doesn't set forth the underlying data or assumptions
2 so it's difficult to know exactly what we're working
3 with here. But, to the extent that it relies on that
4 2009 SAMA, the State has identified a number of
5 undercounting errors.

6 JUDGE ARNOLD: I'll get into that. That's
7 my next question, but I'm just saying, where in the
8 LAR is this cost benefit analysis?

9 MR. LUSIGNAN: There's no specific cost
10 benefit analysis in the LAR.

11 JUDGE ARNOLD: Okay. Next page, page 20
12 in that paragraph, I see three specific issues. One,
13 the value of decontamination cost of offsite
14 properties, two the analysis artificially and
15 improperly limits its scope to land and population
16 only within 50 miles and, three, it relied on a dollar
17 per person REM value of \$2,000.00.

18 Now, I saw the two significant results
19 from the risk analysis expressed as large early
20 release frequency and the REM per person number.

21 Now, first, for the large early release
22 frequency, do any of these factors in any way impact
23 that?

24 MR. LUSIGNAN: The State's position is
25 that that analysis was unnecessarily cramped for not

1 considering these other factors, that simply scaling
2 up the population based on a reactor in rural Virginia
3 is not sufficient to account for the site-specific
4 risks that are posed at Indian Point.

5 Again, the NRC must make a finding that
6 there's reasonable assurance of adequate protection of
7 the public health and welfare and this is -- and that
8 is not necessarily satisfied just because an Applicant
9 has checked off the boxes in an industry regulatory
10 document or has conducted probabilistic risk
11 assessment.

12 JUDGE ARNOLD: Now, I haven't seen
13 anywhere any reference to an expert who has done this
14 evaluation. Do you have an expert that has said that
15 the risk analysis is done improperly or is this just
16 from you?

17 MR. LUSIGNAN: I can tell you, Your Honor,
18 that it's not just from me. We've been consulting
19 with experts on this. We were not able to get an
20 expert opinion in time to submit something in support
21 of our contention in a world where Government's had
22 infinite resources and infinite time. We would have
23 done that.

24 It is my understanding that if this
25 proceeds to trial, we will be retaining an expert.

1 JUDGE ARNOLD: And those three factors,
2 when the risk analysis was done, they saw an increase
3 in the REM per person of approximately .6 percent.

4 If these factors had been included, would
5 that number have changed significantly?

6 MR. LUSIGNAN: Again, I don't think we
7 know that because they were not considered and the
8 State hasn't conducted its own analysis of these
9 numbers with the State's position is that Entergy and
10 its contractor should have considered all relevant
11 information to apply for this plant-specific license
12 amendment.

13 JUDGE ARNOLD: Okay.

14 JUDGE HAWKENS: I want to follow up on one
15 of those questions. Is it your position the PRA is
16 inadequate because it relies on an inadequate SAMA
17 analysis?

18 MR. LUSIGNAN: Among other things, Your
19 Honor. It also relies on this kind of joint
20 evaluation of IP-2 and IP-3 that was conducted more
21 than a year before the License Amendment Request. It
22 does not consider the updated seismic hazards. It
23 relies on this generic liner corrosion analysis
24 developed in connection with Calvert Cliffs. And it
25 fails to consider the various plant-specific events

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1 that the State has set forth in its Petition.

2 JUDGE HAWKENS: Is the same SAMA analysis
3 that was prepared for the Indian Point License
4 Renewal?

5 MR. LUSIGNAN: That's correct, Your Honor,
6 and it's currently before the NRC on an unrelated NEPA
7 -- or a NEPA related contention in the relicensing
8 proceeding.

9 JUDGE HAWKENS: Not raising the same type
10 of challenge to the SAMA on appeal or does it raise
11 the same type of challenge?

12 MR. LUSIGNAN: This is the same type of
13 challenge being raised in this case, but in connection
14 with the License Amendment Request Probabilistic Risk
15 Assessment.

16 MR. BESSETTE: Your Honor, Paul Bessette.
17 We would have to disagree to the answer to
18 that question.

19 JUDGE HAWKENS: You said you would or
20 would not disagree?

21 MR. BESSETTE: We would disagree.

22 JUDGE HAWKENS: All right, we'll come to
23 you later on that.

24 Let me -- I'd like you to -- given that
25 you had this extra time, let's limit your discussion

1 of the second contention at this point to three
2 minutes and just summarize your position on that,
3 please.

4 MR. LUSIGNAN: Yes, thank you, Your Honor.

5 Briefly summarized, contention two alleges
6 that the license is also deficient because no
7 environmental report has been conducted and the
8 categorical exclusions set forth in Section
9 51.22(c)(9) does not apply here.

10 Specifically, the categorical exclusion
11 does not apply for three reasons.

12 One, there are special circumstances that
13 exist that preclude the application of that
14 categorical exclusion.

15 Two, the license amendment constitutes a
16 significant hazard.

17 And, three, the license amendment may
18 result in an increase in the release of radioactive
19 effluence into the environment.

20 Briefly stated, Entergy and NRC staff have
21 argued that a finding of significant hazards
22 consideration essentially can work to bar NEPA review.

23 However, the history of that regulation is
24 clear that the no significant hazards consideration
25 determination is supposed to be a purely procedural

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1 device used to determine the timing of a hearing.

2 So, it's inappropriate in this case to
3 attempt to use that proposed determination to block
4 review of whether categorical exclusion applies here.

5 JUDGE HAWKENS: That sound very much like
6 a challenge to the regulation. You cloak it as a
7 challenge to the Application of the regulation, but,
8 in fact, you say that 51.22(c)(9)(I) should not be in
9 that regulation. Is that correct?

10 MR. LUSIGNAN: The State argues that what
11 --

12 JUDGE HAWKENS: Is that correct, yes or
13 no? I mean you're not saying --

14 MR. LUSIGNAN: No.

15 JUDGE HAWKENS: -- it shouldn't apply in
16 this circumstance, you're saying it's inappropriate to
17 apply it in any no significant hazards consideration
18 case on a categorical basis, is that right?

19 MR. LUSIGNAN: No, what the State is
20 saying is that the no significant hazards
21 consideration in that subsection is a different issue
22 than the no significant hazards consideration
23 determination that's unreviewable in connection with
24 the procedural determination of when to have a
25 hearing.

1 JUDGE HAWKENS: Do you have any case law
2 or a regulatory history to support that? That seems
3 like a term of art, no significant hazard
4 consideration.

5 MR. LUSIGNAN: Well, when that categorical
6 exclusion was expanded to include that no significant
7 hazard --

8 JUDGE HAWKENS: I'm sorry, let me ask the
9 question again and you can answer it and then
10 supplement your answer.

11 But do you have any case law or regulatory
12 history support for your position?

13 MR. LUSIGNAN: Yes, Your Honor.
14 Specifically, I would direct you to the case of the
15 ASLB decision in Pahaina Hawaii, LLC which says that
16 an intervener can challenge the applicability of a
17 categorical exclusion and that doesn't constitute a
18 challenge to the underlying regulation.

19 Second, in the regulation that expanded
20 this categorical exclusion to include the no
21 significant hazards consideration, there's no
22 discussion of that determination being unreviewable
23 and it's essentially saying that a determination can
24 both preclude NEPA review and not be reviewable by the
25 ASLB or the Commission.

1 I see that my much expanded time has now
2 also expired.

3 Thank you, Your Honors.

4 JUDGE HAWKENS: Thank you, Mr. Lusignan.

5 If no counsel objects, I propose we take
6 a ten minute recess and return at 2:25.

7 Thank you.

8 (Whereupon, the above-entitled matter went
9 off the record at 2:15 p.m. and resumed at 2:25 p.m.)

10 JUDGE HAWKENS: Having heard from the
11 Petitioner, the State of New York, we'll now be
12 hearing from the licensee, Entergy, and will it be Mr.
13 Bessette making the presentation?

14 MR. BESSETTE: No, Your Honor, Mr. O'Neill
15 would like to present some initial comments for Your
16 Honors. It's kind of a summary of our position and
17 we're ready to answer any Board questions.

18 JUDGE HAWKENS: Right, thank you. Please
19 proceed.

20 MR. O'NEILL: Thank you, Your Honors.

21 We really appreciate the opportunity to
22 present our views on the Petition here today and I
23 think we made a very diligent effort to debrief the
24 issues thoroughly and we hope that it helps you in
25 your decision.

1 You know, as an initial matter, we would
2 note that we don't contest New York's standing
3 intervene in the proceeding. As you know, they're an
4 intervener in the license renewal proceeding.

5 However, we do oppose the admission of
6 both of their contentions, safety contention, New York
7 State 1, environmental contention, New York State 2,
8 on the grounds that they fail to meet any of the
9 contention admissibility criteria set forth in 10 CFR
10 2.309.

11 We recognize that interveners are not
12 required to prove their case or even meet a summary
13 disposition, but it is well established that the
14 contention admissibility standards are strict by
15 design and they do require a minimal factual showing
16 which we think they have not made in this case. So,
17 we respectfully disagree of Mr. Lusignan on that
18 point.

19 But, in summary, we believe that they have
20 failed to provide adequate support for the proposed
21 contentions, have not established the genuine dispute
22 on a material issue of fact or law and have even
23 raised certain issues that are beyond the proper scope
24 of this proceeding or simply not material to the
25 staff's on the Application.

1 As is evident from the filings made in
2 this proceeding, we're dealing with some highly
3 technical subject matter.

4 In preparing the Application, Entergy used
5 engineers with very diverse areas of expertise,
6 structural engineering, mechanical engineering,
7 nuclear risk assessment, ASME code applications. And,
8 significantly, New York has not presented any type of
9 supporting expert opinion or affidavits, much to the
10 determent of its case in our view.

11 Instead, they rely heavily on assertions,
12 often grave assertions, by counsel that we view as
13 unfounded or simply unsupported by the record.

14 We recognize, of course, that they're not
15 required to have an expert at this stage of the
16 proceeding, but it is interesting to us they
17 participated -- they are the lead intervener in the
18 Indian Point license renewal proceeding.

19 And I can personally attest that they've
20 offered expert declarations or affidavits in
21 connection with all of their safety contentions and I
22 believe most of the environmental contentions. And
23 they did that at the initial admissibility stage.

24 So, I think it is a significant omission
25 in this case.

1 But, even putting that aside, the State
2 had the burden. Again, it's the State's burden of
3 persuasion here, not Entergy's, not the staff's, to
4 establish a material dispute with the Application.

5 They'll point to specific aspects of the
6 Application that fail to meet a regulatory or
7 statutory standard and explain why. And, again, we
8 believe they've not done so here.

9 I think what is very telling and
10 significant is many of the documents on which they
11 rely, including the Application itself, generally
12 contradict, not support their claims. And, I'll
13 provide a few examples.

14 New York references four documents in
15 connection with an event that occurred in November
16 1973, almost 42 years ago, involving a feedwater line
17 to one of the IP-2 steam generators.

18 That event caused a slight inward
19 deformation to portions of the IP-2 containment liner
20 above the feedwater pipe penetrations.

21 We carefully, methodically, went through
22 the documents and came to the conclusion that they
23 undercut New York's position. This particular
24 incident included a detailed technical report prepared
25 by the licensee which makes very clear they took a

1 number of corrective actions in response to the event
2 including a survey of the liner profile, UT testing,
3 liner studs, magnetic particle inspection of the liner
4 vent test, pressure leak tests.

5 And, the ultimate conclusion was that
6 there was no evidence of any reduction in the
7 containment liner integrity. And the NRC reviewed the
8 licensee's actions as well as its technical evaluation
9 and reached the same conclusion. Quote, unquote, the
10 damage to the liner has not impaired its integrity and
11 that it can perform its function with an adequate
12 margin of safety.

13 So, New York fails to mention this
14 directly contrary evidence and I think that's just one
15 good example.

16 Another good example is pointing the
17 Application itself. New York claims that more recent
18 inspections of the IP-2 containment surfaces,
19 including the containment liner, supposedly confirm
20 that the liner and related surfaces have been harmed
21 by historical accidents.

22 In reality, when you review the summary of
23 those inspections in the Application as well as some
24 other correspondence that I'll get to shortly, the
25 recent ASME code IWE and IWl inspection summarized in

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1 the Application found no indications of any structural
2 degradation that adversely affects the ability of the
3 containment performance design function which is the
4 only attaining integrity during accident conditions.

5 Certainly, they have detected indications
6 as would be expected with a, you know, a 40-year-old
7 structure. But, for the most part, they were
8 superficial. You know, a general surface corrosion,
9 flaking or peeling of paint or certain coatings and
10 all of these were either repaired and/or being
11 appropriately monitored in subsequent inspections.

12 Another point I do want to emphasize is
13 that we do view the risk assessment as appropriately
14 addressing liner corrosion.

15 It is true that it borrows from a
16 methodology developed originally in connection with
17 the Calvert Cliffs plant in response to a staff RAI.
18 But, I understand that analysis has been used by other
19 licensees, I presume previously reviewed by the staff
20 in connection with the IP-3 ILRT amendment was granted
21 five months ago.

22 And, just indulge me for a moment here.

23 Attachment 3 to the Application is the
24 Confirmatory Risk Impact Assessment and I would just
25 point the Board, or at least for the record, to pages

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1 416 through 418 where it walks through the various
2 assumptions that were made for purposes of assessing
3 liner corrosion. You know, historical steel liner
4 flaw likelihood.

5 There's an example, two events over a five
6 and a half year data period. Age-adjusted steel liner
7 fail likelihood. These are just a few of the examples
8 of the likelihood that a visual inspection would fail
9 to detect corrosion or some other flaw. So, I did
10 want to get that on the record. We do think it's been
11 adequately addressed.

12 I would also like to emphasize that, you
13 know, Entergy does not rely on the ILRT to detect
14 corrosion of the liner, degradation of the containment
15 concrete. Rather, it uses these other programs that
16 I mentioned, IWE, IWL inspections.

17 And the frequency of those tests is
18 unaffected by the current application. So, they will
19 continue to do the IWL inspections every five years.
20 The IWE, which is essentially the internal containment
21 inspection, the metal surfaces, every three and one-
22 third years.

23 Returning to yet another example of what
24 I believe is New York's inaccurate characterization --

25 JUDGE HAWKENS: Mr. O'Neill?

1 MR. O'NEILL: Yes?

2 JUDGE HAWKENS: Ultrasonic testing, how
3 often is that performed?

4 MR. O'NEILL: The ultrasonic --

5 JUDGE HAWKENS: There was one performed in
6 2000, it's noted in either the Application or
7 documents referencing the Application and I'm just
8 wondering.

9 MR. O'NEILL: I think -- and I'll need to
10 confer with Mr. Acevedo, but I believe it's probably
11 a function of the visual inspection results, you know,
12 if they do detect some potential surface corrosion, in
13 that case, they may take, you know, the NB or UT test.

14 JUDGE HAWKENS: So, was 2000 the most
15 recent ultrasonic test?

16 MR. O'NEILL: I know it's -- I think --
17 well, I should say that.

18 In 2000, they did, yes, a number of UT
19 inspections of the areas of the concrete containment
20 floor where there had been some corrosion degradation.
21 And I know they did follow up inspections for the
22 following three, yes, the following three refueling
23 outages, they did inspections. But, I would need to
24 confirm whether they did UT during those inspections.

25 JUDGE ABREU: Were there any other types

1 of testing that would be able to look at corrosion or
2 other effects on the liner concrete interface that
3 were done besides the ultrasonic testing? The concern
4 being the inaccessible areas, how do we know what's
5 going on in those inaccessible areas?

6 MR. O'NEILL: Yes --

7 MR. BESSETTE: Your Honor, it's my
8 understanding that the IWE inspection program is
9 focused on accessible areas. But, the -- if you're
10 finding any signs of degradation in the accessible
11 areas, they do look at inaccessible areas.

12 Also, the thermal insulation which we were
13 talking about is sealed all along the paths and at the
14 bottom where it touches the liner floor. So, and that
15 is inspected during each IWE inspection.

16 So, that severely limits any intrusion of
17 what which could contribute to the inspection.

18 JUDGE ABREU: Based on that brackish water
19 event back at 1980 I believe it was, how do you know
20 what areas that water got to and that those are not
21 having continue corrosion despite having sealed the
22 area?

23 You know, in other words, you could have
24 trapped it in, for example, being the theory. How do
25 you know those areas -- and how big is that area that

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1 was affected?

2 MR. BESSETTE: Your Honor, the water
3 intrusion event from 1980, my understanding has, you
4 know, I think it was I think a hundred thousand
5 gallons. So, it rose quite a height within the
6 containment itself, though it would have affected --

7 JUDGE ABREU: Inside the liner?

8 MR. BESSETTE: Yes.

9 JUDGE ABREU: What about outside that
10 liner concrete interface, did --

11 MR. BESSETTE: I'm not aware of - my
12 understanding is it didn't affect that, but I would
13 have to confirm.

14 MR. O'NEILL: Yes, and I can add to it and
15 this is probably a good opportunity to point the Board
16 to one document that it's actually cited on page 12,
17 footnote 59 of our brief, really and acts as
18 background material.

19 But, this was an RAI response remitted by
20 Entergy in connection with this Application on -- get
21 the correct date here -- May 20, 2015, it's Entergy
22 correspondence NL-15-062.

23 And, this particular document actually
24 contains a fair amount of discussion on how the
25 Applicant, the licensee, deals with inaccessible areas

1 and on page 3 of the attachment, it contains a
2 discussion of what they did in 2000.

3 And it explains that during the Unit 2
4 refueling outage in 2000, it was discovered that some
5 of the caulking, the inner section of the stainless
6 steel liner jacket was degraded which provided a
7 potential water path to the liner.

8 So, as a result, the liner was removed at
9 12 locations and examined in accordance with IWE
10 requirements.

11 They observed -- some corrosion was found
12 but the NDE results showed that the liner thickness in
13 all areas was greater than the required minimum
14 thickness. And, this is what I mentioned before, they
15 did this three successive periods and found no
16 additional degradation.

17 So, the liner was found to be in good
18 condition. And --

19 JUDGE ABREU: There was corrosion on the
20 outside?

21 MR. O'NEILL: They had -- yes, have
22 detected some corrosion on it but it's not a
23 structural concern --

24 JUDGE ABREU: The source of that
25 corrosion?

1 MR. O'NEILL: I think it is the 1980
2 event, yes.

3 JUDGE ABREU: So, there was some of the
4 brackish water getting outside the liner between the
5 concrete?

6 MR. BESSETTE: Your Honor, I believe the
7 --

8 JUDGE ABREU: You're saying there was
9 water on the outside of the liner where the corrosion
10 occurred?

11 MR. O'NEILL: I'm sorry, Your Honor, I
12 believe the corrosion --

13 JUDGE ABREU: Of the base mat?

14 MR. BESSETTE: Yes, the base mat.

15 MR. O'NEILL: It's on the -- when you take
16 away the insulation, they saw the corrosion.

17 JUDGE ABREU: The difference was it's
18 above the base mat, so it's --

19 MR. O'NEILL: Yes.

20 JUDGE ABREU: But it's still in the -- is
21 it -- but it's in an area you can't visually inspect?

22 MR. BESSETTE: You can inspect it if you
23 remove the insulation panels.

24 MR. O'NEILL: If you remove the insulation
25 -- which is what they did, yes.

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1 JUDGE ABREU: And that was what year?

2 MR. O'NEILL: This was 2000.

3 JUDGE ABREU: Okay, so, since 2000 --

4 MR. O'NEILL: But they did follow up
5 inspections the next three refueling outages, every
6 two years, yes.

7 JUDGE ABREU: So, yes, so since 2000, how
8 have you looked at -- how have you evaluated those
9 inaccessible, nonvisualizable areas that might have
10 been affected by the 1980 event?

11 MR. BESSETTE: Your Honor, as noted in the
12 RAI response that Mr. O'Neill referenced, after the
13 2000 inspection where some corrosion was identified,
14 per requirements of the ISI program, they were
15 required to look at those same areas in three periodic
16 inspections. So, three outages after 2000, they went
17 and looked --

18 JUDGE ABREU: At the inside in those
19 spots?

20 MR. BESSETTE: At those same spots, right,
21 yes.

22 JUDGE ABREU: You really don't know what's
23 -- you haven't been able to evaluate what goes on on
24 the outside with the current evaluation methods used?

25 MR. BESSETTE: My understanding is that

1 NDT would look at the general thickness of it which
2 would determine the overall corrosion of the liner.

3 JUDGE ABREU: And have any of those -- any
4 form of NDT been done?

5 MR. BESSETTE: During the 2000?

6 JUDGE ABREU: In 2000?

7 MR. BESSETTE: Your Honor, they could have
8 been in the three consecutive periods required by the
9 ISI, but we would need to confirm that.

10 JUDGE ABREU: Could have been?

11 MR. BESSETTE: Right, we just need to --

12 MR. O'NEILL: I mean, they say per IWE
13 requirements, inspections at these locations were
14 performed for three successive periods with no
15 additional degradation found.

16 So --

17 JUDGE ABREU: For IWE as opposed to --

18 MR. BESSETTE: And, Your Honor, we would
19 note that as the discussion of the Calvert Cliffs
20 corrosion methodology included in the risk assessment,
21 there are factors and sensitivity analysis that assume
22 there is corrosion occurring in nonaccessible areas.
23 But, we specifically include that analysis and those
24 assumptions in the risk assessment and the sensitivity
25 factors that you will not detect it by visual

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1 inspection and that it is occurring where you cannot
2 see it.

3 JUDGE ABREU: Did those consider an event
4 such as the brackish water event which we could have
5 discussion about how common or uncommon that type of
6 event is, but would that -- would Calvert Cliffs
7 analysis include something like that which is
8 something not seen at every plant potentially?

9 MR. BESSETTE: My understanding is the
10 Calvert Cliffs analysis does include operating
11 experience in the determination of that methodology.

12 But, again, our --

13 JUDGE ABREU: Would you consider the
14 brackish water event typical for operating experience?
15 Were you --

16 MR. BESSETTE: Really, not a hundred
17 thousand gallons is not typical. But the corrosion
18 was not atypical that we found. The corrosion was
19 very minor that was identified and verified under
20 three periodic inspections.

21 We have absolutely no evidence of
22 continuing degradation of the liner. We believe we
23 identified it, we remedied it, we tested it and we
24 have no reason to believe there's any further
25 degradation. Plus, there's no source of water that we

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1 know of that can cause further degradation.

2 JUDGE ARNOLD: You say you evaluated the
3 corrosion and then the risk analysis. Now, according
4 to New York State, the risk analysis started with the
5 Surry Analysis and just scaled the population.

6 So, how did you evaluate corrosion in
7 there?

8 MR. BESSETTE: First, I completely agree
9 -- that disagree that the risk analysis was based on
10 the Surry. I mean any analysis that a utility uses,
11 particularly in a risk analysis, is based on a certain
12 template that you have to use.

13 But, the analysis that Entergy performed
14 wasn't entirely plant-specific. It used the Unit 2
15 Probabilistic Risk Assessment. It used the source
16 terms. It used the containment design. It used the
17 actual population density around the site.

18 I know Mr. Lusignan has, at times, called
19 it generic but we fully disagree with. This was a
20 very site-specific analysis.

21 JUDGE ARNOLD: Mr. O'Neill, did you have
22 anything further to add?

23 MR. O'NEILL: Well, the one point I would
24 like to clarify it relates to the population. That is
25 very plant and region specific. It was derived for

1 purposes of the License Renewal SAMA Analysis using
2 regional, county, even city level data in, you know,
3 the case of Manhattan and the Burrows. They used
4 Census data.

5 And it was ultimately litigated in the
6 license renewal proceeding. New York challenged the
7 adequacy of the year 2035 projections. The staff
8 found them to be adequate in their FSEIS, their final
9 SEIS for license renewal. And, the Board presiding
10 over that proceeding agreed.

11 So, they resolved that contention in favor
12 of the staff and Entergy found the population estimate
13 to be adequate and that issue was not appealed by New
14 York to the Commission.

15 JUDGE HAWKENS: I'm trying to determine if
16 there is any relationship between the conclusion by
17 the Indian Point License Renewal Board that would
18 extend to this case regarding the SAMA Analysis.

19 MR. BESSETTE: Your Honor, my
20 understanding is the only portions of the SAMA
21 Analysis that were -- the risk assessment is not a
22 SAMA Analysis. I know Your Honors identified. We're
23 not looking at the cost to decontaminate.

24 There's particular factors in the
25 methodology that we looked at which is the change in

1 large early release frequency, the containment
2 conditional probability and dose. Those are the
3 factors we look at. It's not a SAMA Analysis in the
4 pure sense of looking at decontamination costs.

5 So, many of the factors that Mr. Lusignan
6 referenced are not relevant here. They're not even
7 considered.

8 What is considered, though, is the
9 population that we used in the SAMA Analysis and that
10 is, in fact, based on 2000 -- it's actual Census data
11 for the entire 50 mile region which is a standard SAMA
12 Analysis that the NRC endorses and that population,
13 and it's projected to 2035 conservatively, and that
14 population was fully vetted by the ASLB, found to be
15 appropriate and not appealed by New York.

16 So, we believe there's really no basis for
17 New York to challenge that figure now when they lost
18 that argument and didn't appeal it.

19 MR. O'NEILL: Well, continuing on, I was
20 talking about examples for the record that undercut
21 New York's position and I think another key one
22 relates to the issue of the "as found" leakage. And,
23 I know Your Honors addressed this already to some
24 extent, but New York keeps pointing to a criterion
25 which is the "as left" criterion of 0.075 percent

1 containment air weight per day.

2 I mean, the Application makes very clear
3 that the applicable criterion is the 0.1 weight
4 percent per day of the containment atmosphere.

5 So, New York's own extrapolations indicate
6 that the relevant criterion will not be exceeded even
7 by 2021. So, New York's not only citing the wrong
8 limit, but there's been no evidence presented that
9 that limit would be exceeded. Again, they've offered
10 no expert opinion to, you know, back their claim that
11 we're going to exceed the applicable limit.

12 To summarize that portion of the
13 arguments, New York, not Entergy or the staff, bears
14 the burden of persuasion at this stage of the
15 proceeding. It has not met that burden here. And our
16 view, simply citing documents without adequately and
17 accurate disclosing their actual contents is not
18 enough to support the admission of a contention.

19 JUDGE HAWKENS: Mr. O'Neill, I'm looking
20 at the ILRT test results, the trajectory provided by
21 Mr. Lusignan. Andy, could you put that on the
22 projector, please? The ILRT tests?

23 Now, if I understood you correctly, Mr.
24 O'Neill, the trend on this graph is not material and
25 could you explain to me why it's not material?

1 MR. O'NEILL: Well, yes. As Judge Abreu
2 pointed out before, it's plotting "as found" data
3 relative to the "as left" acceptance criterion.
4 That's the .75 L_A as the "as left" acceptance
5 criterion.

6 And I'm saying it's material here because,
7 even if we assume this trend continues out even to
8 2021, we're still going to be below the 1.0 time L_A
9 "as found" acceptance criteria.

10 JUDGE HAWKENS: That's the determinative
11 criteria for purposes of this License Amendment
12 Request?

13 MR. O'NEILL: Yes, yes. If you perform
14 the test and come in under that value, you know, the
15 test, you have passed the test.

16 My understanding is the .75 "as left" is
17 really intended to provide some margin until the next
18 test. So, in case there is some degradation of the
19 containment leakiness integrity or tightness, kind of
20 building in some margin before the next test is
21 performed.

22 JUDGE HAWKENS: How would you respond to
23 Mr. Lusignan's argument that the trajectory these data
24 points combined with the unusual history of Unit 2
25 give rise to safety and health concerns unless we keep

1 the period at 10 years rather than 15 years?

2 MR. BESSETTE: Well, Your Honor, we
3 obviously disagree.

4 First, we don't agree that these data
5 point are indicative of an adverse trend. If you
6 study the way the ILRT tests are conducted, and
7 they've been conducted at Indian Point 2 over the past
8 40 years, they are not conducted to an absolute common
9 baseline.

10 Each ILRT, there are different systems
11 isolated at the time and if they're isolated, as we
12 discussed, you have to provide -- if a system is
13 isolated and it's not tested, you have to provide that
14 ILRT results to the results.

15 So, it can vary, depend on which systems
16 are -- you may have to penalty for what systems are
17 isolated. In fact, the most recent 2006 test had the
18 largest ILRT penalty. It really isn't indicative of
19 an adverse trend.

20 In addition, a key factor is the length of
21 the test, we understand how long it's performed, it's
22 much like the longer you hold the test pressure,
23 there's almost a soak in period where you'll see, you
24 know, leakage continue to rise, but then it slowly --
25 it'll settle out.

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1 But, over the years, and frankly, these
2 tests can take a very long time to conduct, whereas
3 the pressure may have been held 48 hours years ago,
4 they're held now until you get a satisfactory result.
5 If your results are less than 1.0, there's no reason
6 to hold it for another 24 hours and wait for the
7 results to settle out for potentially lower value.

8 So, there's various factors that go into
9 the ILRT results, but we don't believe it's indicative
10 of an adverse trend.

11 JUDGE ARNOLD: What is the safety
12 significance of having leakage that is some amount,
13 say 20 percent greater than L_A ?

14 MR. BESSETTE: Well, I mean --

15 JUDGE ARNOLD: Does it affect the real
16 risk of the plant?

17 MR. BESSETTE: It's a population dose
18 risk, Your Honor. I mean, obviously, your containment
19 leakage does not contribute to your core damage
20 frequency.

21 I was trying to come up with an analogy
22 yesterday and I was thinking, you know, the age of
23 your air bag in your car doesn't affect how often your
24 car gets into an accident.

25 So, I think that it's how much, an in an

1 assumption of an accident where there's a radiation
2 release is how much goes to the population? So, no,
3 it doesn't affect the core damage frequency, although
4 it does affect the population.

5 MR. O'NEILL: And, can I add to that? I
6 think that's why the principle risk metric is the
7 LERF, the large early release frequency, because that
8 pertains to those accident scenarios that involve
9 rapid unmitigated releases to the environment.

10 Whereas, the core damage frequency, you're
11 just simply looking at the likelihood that an accident
12 will cause damage to the core. So, that's -- and same
13 thing, the CCFP, conditional containment failure
14 probability is really -- and it represents the
15 fraction of the overall core damage frequency that's
16 the LERF, you know, that's attributed to the LERF.

17 JUDGE HAWKENS: Can you refresh my memory
18 on the periodicity of the Type B and Type C testing,
19 Please?

20 MR. O'NEILL: The Type B testing, and I
21 may need to confirm this with Mr. Acevedo, I believe
22 is at least every 60 months, so I guess that would
23 five years.

24 If they are, depending on the nature of
25 the findings, I think, you know, if there is some

1 leakage, the fact that they may be reduced -- or I
2 should say the frequency will be increased to every 30
3 months.

4 MR. BESSETTE: Yes, Your Honor, those --
5 well, I guess you can call it like well performing
6 penetrations can go up to 60 months, those that have
7 evidenced some leakage over the continued test can go
8 down as much as every 30 months.

9 JUDGE HAWKENS: Going forward, Indian
10 Point Unit 2 then will be performing Type B every five
11 years, is that correct?

12 MR. BESSETTE: At least.

13 JUDGE HAWKENS: At least?

14 MR. BESSETTE: Yes. The -- as Mr. O'Neill
15 said, none of the other ILRT, Type B or Type C
16 frequencies are affected by this License Amendment
17 Request. Neither are the IWE or IWL inspection
18 frequencies.

19 JUDGE HAWKENS: Is Type C likewise at
20 least every five years or is that different?

21 MR. O'NEILL: Yes, it's the same, between
22 30 and 60 months, so at least every five years.

23 JUDGE ABREU: The data from 2006 when the
24 leakage rate was .0636 but the minimum pathway leakage
25 rate was unusually high at 46,000 roughly cc's per

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1 minute. Can you give us some idea how much that high
2 minimum pathway leakage rate plays into elevating the
3 overall ILRT result?

4 MR. BESSETTE: I would need to consult
5 with Mr. Acevedo on that, Your Honor.

6 JUDGE ABREU: Since both were high, I
7 don't have a sense of what the other factors ended up
8 being.

9 MR. O'NEILL: Can I continue on? Thank
10 you, Your Honors.

11 I guess the second line of argument or
12 that I wanted to pursue was the fact that New York has
13 not, in our view, challenged the contents of the
14 Application in any direct meaningful and adequately
15 supported way as required by Section 2.309(f)(1)(6).

16 I think we've talked at some length about
17 the risk impact assessment and, again, we feel that
18 they really haven't identified any particularized
19 challenges to that assessment.

20 You know, and on that front, I'd like to
21 point out a couple of things. You know, overall the
22 estimated increase in risk is very small because ILRTs
23 tend to identify only a few potential containment
24 leakage paths that cannot be identified by Type B and
25 Type C testing.

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1 You know, in fact, when the NRC revised
2 Part 50 Appendix J in 1995, it noted that Type B and
3 Type C tests are capable of detecting over 97 percent
4 of the containment leakages. And, that of the 97
5 percent, most of that is identified by the Type C
6 test. And this was a key factor in the NRC's decision
7 to move to, you know, a performance-based approach.

8 And, I think we've touched on this as
9 well, New York refers to the risk impact assessment as
10 generic in nature. You know, we disagree, that it
11 makes use of Unit 2 specific Probabilistic Risk
12 Assessment information, the Level I and Level II PRAs,
13 you know, as well as the region-specific population.

14 Page 4-6 to 4-12 of the Confirmatory Risk
15 Impact Assessment discuss the plant-specific inputs.

16 Though, again, we feel that they have not
17 -- New York has not identified any direct
18 particularized challenges.

19 Finally, we'd add that New York's proposed
20 contentions raise issues that are neither within the
21 scope of the proceeding or material to the staff's
22 findings.

23 As I mentioned, the SAMA Analysis
24 population estimate was thoroughly reviewed by the
25 staff as well as the Board in an evidentiary hearing

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1 context and found to be adequate. We don't think
2 that's really an issue in this proceeding for that
3 reason.

4 Also, New York improperly challenges the
5 staff's proposed no significant hazards consideration
6 determination. 10 CFR Section 50.58(b)(6) is crystal
7 clear, it explicitly bars the type of challenge New
8 York's making. It states, no --

9 JUDGE HAWKENS: With relation to their
10 second contention or the first one?

11 MR. O'NEILL: Well, they make arguments in
12 connection with the first contention and the second
13 contention. So, this applies to both.

14 JUDGE HAWKENS: How do you respond to Mr.
15 Lusignan's position that no significant hazards
16 consideration means something different with regard to
17 their argument in the second contention?

18 MR. O'NEILL: It doesn't, Your Honor. I
19 think they're just couching the same challenge as a
20 challenge under NEPA. They made arguments, and this
21 was addressed in our brief in support of contention
22 number one saying, you know, we should be able to
23 challenge the no significant hazards.

24 In our view, they, essentially, rehashed
25 those arguments under the rubric of NEPA in the second

1 contention.

2 JUDGE HAWKENS: Again, do you have any --

3 MR. O'NEILL: Again, I'd go back to -- I'm
4 sorry.

5 JUDGE HAWKENS: Do you have any case law
6 support for that position?

7 MR. O'NEILL: That is our position, excuse
8 me?

9 JUDGE HAWKENS: With regard to the
10 conclusion that no significant hazards consideration
11 means the same thing in both regulations and,
12 therefore, cannot be challenged in either regulation?

13 MR. O'NEILL: I would go back to the plain
14 language of the regulation, 50.58(b)(6). It says no
15 petition or other requests for review of or hearing on
16 the staff's significant hazards considerations
17 determination will be entertained by the Commission.
18 It doesn't distinguish between safety and
19 environmental contentions. I think it's very clear.

20 And, also, I believe the no significant
21 hazards considerations determination is subject to a
22 categorical exemption under Part 51. So, that
23 essentially constitutes the NEPA review for purposes
24 of Part 51.

25 And, I would add that, you know, if New

1 York believes that there are special circumstances
2 here, you know, warranting differential treatment or
3 a waiver of the regulation, they could have filed a
4 Petition for Waiver under Part 2 and they failed to do
5 so here. So, that was a procedural option for them.

6 JUDGE HAWKENS: And back to contention
7 one, can you address their argument regarding the
8 updated seismic hazards data, please?

9 MR. O'NEILL: Yes, I think the fundamental
10 point we would make there, and Mr. Bessette may chime
11 in as well, that the curves that he is -- or Mr.
12 Lusignan is pointing to are initial screening
13 evaluations that are being done as part of the --
14 NRC's post-Fukushima efforts, you know, in response to
15 the Near-Term Task Force.

16 And, so they are still very much fluid.
17 Those were intended to identify plants that may need
18 to do further seismic hazard evaluations and I believe
19 Indian Point 2 is one over 30 plants.

20 And so, the data are by no means final at
21 this stage, but also more fundamentally, they're not
22 part of the current licensing or design basis of the
23 plant. I think for purposes of our instant
24 application, you know, the Applicant was reasonable
25 using, you know, the best available information to it

1 from a seismic standpoint.

2 MR. BESSETTE: And, Your Honor, I would
3 add, Entergy had to use its current licensing basis.
4 There was really no basis for it to use results from
5 a screening criteria that have not been reviewed and
6 approved by the NRC.

7 And, in fact, I would refer you -- there
8 is a February 22, 2014 letter to all licensees
9 regarding the 50.54(f) request for data on the seismic
10 update. It says, the staff considered the seismic
11 hazard reevaluations being performed pursuant to
12 50.54(f) to be distinct from the current design and
13 licensing basis of operating plants.

14 Now, if Entergy had gone ahead and used
15 it, it could be -- there's just no basis to do so.

16 What we have is a screening results,
17 they're being further refined, that will not be
18 complete until 2017. They will then be submitted to
19 the NRC and then there'll be some determination of
20 what, if anything, needs to be taken.

21 It is entirely premature and, in fact, I'd
22 say reckless from a licensing perspective to rely on
23 that data.

24 MR. O'NEILL: You know, I would also point
25 out with respect to the data that, you know, the

1 portion of the curve where the safe shut down
2 earthquake is exceeded is in the above the 10 hertz
3 frequency. And, you know, I understand from
4 communications with some of the engineers that that
5 really has no effector on large structures like the
6 containment. They might undergo some additional
7 vibration, but tends to be more of a concern with
8 certain tanks or things of that sort onsite.

9 So, there's just no indication that it's
10 going to affect the seismic contribution to the core
11 damage frequency for the plant which is explained in
12 the risk assessment impact was based on the IPEE
13 seismic studies that were done back in the '90s and
14 reviewed and approved by the NRC and yielded a very
15 conservative core damage frequency.

16 MR. BESSETTE: Your Honors, if I might
17 address Dr. Abreu's question with regard to the
18 contribution of the ILRT?

19 In 2006, the results were .064 total. Of
20 the 46,000 pcm added constituted .023 of that total.

21 JUDGE ABREU: So, if you hadn't had --
22 let's say it was zero like it was back in '87, the
23 curve would have basically flattened from -- if '91
24 had also been zero. But, it would have been a much
25 flatter curve? That line would have been a much --

1 would have had a much different slope --

2 MR. BESSETTE: Yes, Your Honor.

3 JUDGE ABREU: -- if the ILRT results had
4 been different?

5 MR. BESSETTE: Yes, Your Honor.

6 MR. O'NEILL: Just a few more concluding
7 remarks and, of course, we're still amenable to
8 questions from the Board.

9 But, again, we would like emphasize that,
10 you know, Appendix J and this, you know, Amendment
11 Request in particular, are premised on defense in
12 depth concepts and I know we've noted this before, but
13 the ILRT is one of only numerous tasks that Entergy
14 performs to ensure that the containment is performing
15 its intended function.

16 As we mentioned, they do Type B local leak
17 rate tests for containment penetrations and air locks,
18 Type C tests for containment isolation valves. The
19 ASME code required IWE internal visual inspections of
20 the containment, the ASME code required IWL visual
21 inspections.

22 They also do general visual inspections of
23 certain outside surfaces of the containment mainly
24 around penetration areas every two years per a plant
25 procedure, a periodicity of all of these tests is

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1 unaffected by the current Application.

2 Another thing that we did address on our
3 brief as one of the unique design features of the
4 plant and I understand from speaking to Mr. Acevedo
5 that IP-2 and 3 are one of only a few plants that had
6 a containment well channel and penetration
7 pressurization system. And these systems were
8 installed for plants that were located in fairly high
9 population density areas like Indian Point.

10 And that system keeps the well channels
11 over the actual containment steel liner plate welds
12 pressurized during normal plant operation and by
13 design during accidents. The pressure is maintained
14 at or slightly above the calculated peak containment
15 accident pressure.

16 So, this system actually serves a couple
17 of functions. It provides for continuous online
18 monitoring or measuring leakage through portions of
19 the containment boundary that it pressurizes so plant
20 operators can see even very, very small changes or
21 increases in leakage during operation.

22 And, certainly, you know, they would be
23 able to detect leakage associated with the through
24 wall type flaw, you know, in the containment
25 structure.

1 And, it also helps --

2 JUDGE HAWKENS: It's sufficiently
3 sensitive to detect leakage that exceeded the ESTA
4 (phonetic) maximum criteria?

5 MR. O'NEILL: I believe so. From talking
6 to, again, to Mr. Acevedo, it can pick up leakage
7 associated with faulty gaskets and seals just in the
8 system itself. So, I believe it would be extremely
9 sensitive.

10 JUDGE HAWKENS: Can you go even -- and,
11 you may not know the answer, but you said you believe
12 it could detect a 1.0 L_A leakage rate, you know, could
13 it detect a .75 L_A leakage rate, do you know? Or a
14 .5?

15 MR. O'NEILL: I would have to confer, I
16 think, with Mr. Acevedo.

17 JUDGE HAWKENS: I'd be grateful if you
18 would.

19 MR. O'NEILL: He said it's much more
20 sensitive than, you know, integrated leak rate, and so
21 the answer to your question is yes.

22 JUDGE ABREU: Mr. Lusignan mentioned some
23 corrosion and it sounded like he said inside some of
24 those channels. Were those areas that were
25 pressurized or were those -- is that correct? And, if

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1 so, were those areas that were pressurized during the
2 interval in question or was that an area that happened
3 to have been cut off from the pressurization system?

4 MR. O'NEILL: I do know that there are
5 certain weld channels and we looked into this in the
6 process of preparing our brief. And, IPCEC (phonetic)
7 did cap and seal I think some portions of the system
8 but it amounts to only four percent of the system.
9 Whether that was due to corrosion or not, I don't know
10 specifically, but it is a very minute portion of the
11 system that's not operable.

12 JUDGE ABREU: Trying to follow up, what I
13 think he mentioned before, he can correct me if I'm
14 wrong, was that, hey, we shouldn't be seeing corrosion
15 there because it's pressurized. Yet, there was some
16 corrosion seen.

17 So, I was trying to figure out, okay, was
18 that corrosion because there was no pressurization in
19 those channels at that time or whether there really
20 was or wasn't -- did we misunderstand that there
21 really weren't corrosion episodes inside the channels
22 but maybe just at the site of welds? I wasn't quite
23 sure with what Mr. Lusignan said versus what your
24 position on that would be.

25 MR. BESSETTE: Your Honor, we're going to

1 just have to investigate that question and get back to
2 you on that.

3 MR. O'NEILL: Returning to that same
4 system, the other point I wanted to make is that, you
5 know, in the event of an accident or, you know, a leak
6 from containment, it would help to prevent the
7 containment atmosphere from leaking out, you know,
8 through the liner welds and penetrations.

9 It's not something they specifically
10 credited from, you know, a safety standpoint, but it
11 does perform that function.

12 And, the last point in my prepared remarks
13 is that we want to emphasize, the licensing action at
14 issue here is by no means novel or unusual. The NRC
15 has approved numerous onetime as well as permanent
16 extensions of the ILRT interval from 10 to 15 years
17 for a number of plants. We provided a list of
18 examples on page 4, footnote 12 of our brief.

19 The NRC, in fact, approved a similar
20 amendment request for Indian Point Unit 3 on March
21 13th, so roughly five months ago. My understanding is
22 New York didn't challenge that. They did submit a few
23 comments that were addressed in the staff's safety
24 evaluation.

25 The NRC also approved a License Amendment

1 that extended the Unit 2 ILRT interval on a onetime
2 basis from 10 years to 15 years in August 2002.

3 You know, in summary, for all these
4 reasons, we believe both contentions should be
5 rejected as inadmissible under 2.309(f)(1) and we
6 believe the contention requirements are deliberately
7 strict by design and New York has not met its burden
8 under those requirements.

9 Thank you.

10 JUDGE ARNOLD: Question, isn't Indian
11 Point 2 current operating under Option B of Appendix
12 J for an ILRT interval of 10 years?

13 MR. BESSETTE: Yes, Your Honor.

14 JUDGE ARNOLD: Okay. So, the NRC has
15 already determined that you should not be
16 categorically disqualified from using Option B?

17 MR. BESSETTE: Yes, Your Honor, in fact,
18 we were granted -- Unit 2 was granted a onetime
19 exemption for the 15 year ILRT. That's further
20 evidence that they should not be excluded from Option
21 B.

22 JUDGE ARNOLD: Okay, thank you.

23 JUDGE HAWKENS: You said you were going to
24 consult about whether UT tests had been done
25 subsequent to 2000 on the liner. Are you able to

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1 answer that now or --

2 MR. BESSETTE: Your Honor, we have a
3 pending question, so hopefully, we'll get an answer.

4 JUDGE HAWKENS: Okay, thank you.

5 So, we have nothing else right now and
6 don't have the answer, we will hear now from the NRC.

7 MR. BESSETTE: No, Your Honor, we are
8 checking the plant records.

9 JUDGE HAWKENS: All right.

10 JUDGE ARNOLD: Let me just ask one other
11 thing. Has any argument that New York State made
12 similarly applicable to the current temporary
13 extension to 15 years that you're operating under?

14 MR. BESSETTE: Your Honor, I think all of
15 them would apply.

16 JUDGE ARNOLD: Okay, thank you.

17 MR. BESSETTE: And I don't mean to -- you
18 know, I think all would apply and they've been
19 rejected.

20 JUDGE HAWKENS: Thank you.

21 Mr. Turk, are you prepared to proceed?

22 MR. TURK: I believe so, Your Honor.

23 First, let me indicate that I've asked
24 another member of the staff to sit with me at the
25 table and he is to my left. He is Mr. David Gennardo.

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1 He is in the Division of Risk Assessment Probabilistic
2 Risk Assessment Licensing Branch.

3 We don't know that you'll have any
4 questions that need his expertise, but just in case,
5 I thought he should be here.

6 And, as a housekeeping matter, let me
7 indicate also that I will respond to contention one
8 and Mr. Ghosh will address contention two.

9 JUDGE HAWKENS: All right.

10 MR. TURK: Let me begin, first of all,
11 Your Honor, by saying that I agreed with the
12 presentation by Mr. O'Neill and by Mr. BESSETTE in
13 whole, with possibly just a few points that I may have
14 misunderstood.

15 Our position is expressed in our response
16 to the Petition to Intervene and I believe that fully
17 states our position. That is the pleading that we
18 filed on June 12, 2015.

19 Just to summarize briefly before getting
20 into the technical details, we agree that New York
21 State has standing to intervene in this matter. But,
22 we agree with Entergy that New York has failed to file
23 an admissible contention as they are required to do
24 under 10 CFR 2.309(f). And, for that reason, their
25 Petition should be denied.

1 It is important to note that what New York
2 relies upon, first of all, are statements by counsel.
3 There's no expert witness provided. There's no
4 analysis provided to support the contentions.

5 And second, they haven't told you the
6 whole story. And, I don't mean to be critical when I
7 say that, but they have told you perhaps half. In
8 fact, they've probably only told you a quarter of the
9 story.

10 What they do with contention number one is
11 they point to some ancient events, 1968 during the
12 construction of the IP-2 reactor and containment, 1973
13 shortly after operation commenced and 1980.

14 They then skip ahead 20 years to talk
15 about inspections that have been conducted in 2000,
16 2004, 2006, 2008. These are much later and they don't
17 address what happened from the time those early events
18 occurred until these more recent inspections.

19 That's a significant omission. They omit
20 all of the corrective actions, all of the NRC
21 inspection reports that were issued during that time
22 frame, looking at the results of the corrective
23 actions that Entergy took and all of the other
24 inspections that were conducted during that time
25 frame.

1 More than that, they leave out any
2 reference that all the NRC's regulations have changed
3 from the time of those early events until now.

4 Very significant, the 1990s period was a
5 very important period with respect to ILRT
6 requirements.

7 In 1995, the NRC adopted the Option B
8 performance-based approach in Appendix J. And also,
9 in 1996 I believe, the NRC incorporated reference to
10 the ASME code of Section XI, Subsections IWE and IWL
11 into the regulations. And, specifically, the
12 regulations in 10 CFR 50.55(a) made specific reference
13 to those code sections and required all nuclear
14 reactor power licensee who follow the requirements of
15 the ASME code of Sections IWE and IWL.

16 Things changed significantly in the 1990s.
17 Whereas, the ACRS and perhaps the AEC staff in the
18 early years were concerned about the need to increase
19 surveillances of reactor containments.

20 In the 1990s, the Commission formalized
21 our approach which established the requirements for
22 licensees to meet in order to show that their
23 containments will perform the pressure barrier
24 function for which they were intended.

25 All of that's omitted from New York's

1 Petition. They would have you believe that it's
2 enough for them to raise these ancient events and say,
3 look, there's no mention of them in the Application.

4 But what the Application does do, and New
5 York only makes passing reference to this, the
6 Application describes the more recent inspections and
7 the findings of those inspections in which it was
8 determined that whatever degradation and corrosion was
9 observed in the past 15 years was of a minor nature,
10 was consistent with a finding of acceptability, that
11 where degradation or corrosion was found that was not
12 acceptable, it was addressed.

13 And, again, the requirements to address
14 the degradation or corrosion were adopted by the NRC
15 in the 1990s with the incorporation of the ASME code.
16 ASME stands, of course, for the American Society of
17 Mechanical Engineers and it's the boiler and pressure
18 vessel code Section XI and Subsections IWE and IWL.

19 But all of that is missing from New York's
20 Petition.

21 For this reason, it's not enough for you
22 to look at those ancient events and wonder, well, what
23 happened? It was New York's obligation when they
24 filed their Petition to explain to you why those
25 events are still significant for you to consider.

1 They had an obligation to explain to you
2 why is Entergy's analysis or the more recent
3 inspections insufficient?

4 They cite the Application. They point to
5 Entergy's statement that the degradation and corrosion
6 found in recent inspections was determined to be of
7 minor consequence or no consequence.

8 But, they don't have any basis to say that
9 Entergy was wrong in reaching those conclusions.
10 There's nothing that would create a genuine dispute of
11 material fact. And that is what the Commission's
12 regulations require for a contention to be admissible.
13 They have failed to meet that burden.

14 I say that with no disrespect to the
15 State's position. We value the State as an active
16 partner in our oversight of nuclear reactors within
17 the State of New York and we appreciate their
18 comments. They did submit comments on the NRC's
19 proposed granting of the 15-year interval extension to
20 IP-3, the Indian Point Unit 3. We considered those
21 comments when we issued the license amendment for
22 Indian Point Unit 3 and we will consider their
23 comments in their Petition here when we consider
24 whether or not to issue the requested ILRT interval
25 extension for IP-2.

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1 But the fact that we may consider their
2 comments doesn't mean that those comments should get
3 them to a hearing.

4 Instead, the Commission's contention
5 requirements are strict by design. The Commission has
6 said that to conserve resources, hearings should only
7 be held for those matters, for those contentions that
8 meet the contention admissibility standards. New York
9 has not met those standards.

10 Your Honors noted, I think it was Judge
11 Abreu, Dr. Abreu, that the overall Integrated Leak
12 Rate Test, that is the Type A test required under
13 Appendix J considers leakage from all pathways, not
14 just through the liner.

15 The containment is pressurized and a drop
16 in pressure is then measured if there is a drop in
17 pressure. But that would include a drop in pressure
18 for all pathways, including the Type B and Type C
19 pathways.

20 And, as Mr. Bessette mentioned,
21 substantially all of the leakage has been found in the
22 past to come through the Type C leakage. And the Type
23 C test, of course, has the containment isolation
24 valves. It was on the basis of the finding that it is
25 mostly responsible for the leakage observed during the

1 ILRT testing that the Commission decided to go with
2 the performance-based approach and to adopt the Type
3 A requirements.

4 And if my recollection serves me right, I
5 believe it was found that 97 percent of the leakage
6 was because of the Type C or Type B and Type C
7 leakage.

8 Now, New York mentioned that there is a
9 trend, an apparent trend. They didn't discover that
10 on their own. They looked at an NRC staff Request for
11 Additional Information where the staff pointed that
12 out to Entergy. And the staff asked Entergy to
13 explain why do we see this trend in the apparent
14 increase in containment pressure numbers in the
15 leakage rate that was detected over time.

16 And we asked them also to account for the
17 portions of the test results that may be attributable
18 to Type B and Type C leakage. And they did so in an
19 RAI response that was submitted to the staff on June
20 15th of this year I believe is the correct date. And
21 we are looking at that and will consider that in our
22 review of the Application.

23 But, as Judge Abreu noted, much of the
24 containment leakage came from the Type C or Type B
25 leakage. And, when you subtract out the Type C

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1 leakage from the Type A test, you get to a much
2 flatter curve than New York is asking you to believe
3 exists for containment liner leakage.

4 JUDGE ABREU: Related to that, you
5 mentioned in your evaluation, so is it correct that
6 while the Federal Register Notice mentions the
7 proposed no significant hazards consideration
8 determination, am I correct then that your statement
9 indicates that that has not been finalized at this
10 time?

11 MR. TURK: That's correct. And, the
12 staff's normal practice would be to complete its
13 review of the Application and to issue a safety
14 evaluation concerning the Application.

15 At the same time, to issue a final no
16 significant hazard consideration determination where
17 a Request for Hearing has been submitted.

18 Because New York has filed a Request for
19 Hearing, we would then proceed as is our normal
20 practice to issue a final NSHC determination.

21 And, by the way, I don't know if this is
22 relevant to your consideration, but in terms of
23 timing, we're expecting to issue a final SE and a
24 determination this fall, possibly September, possibly
25 somewhat later, depending on whether there is any need

1 to ask further Requests for Additional Information.

2 Your Honors also inquired about the
3 difference between the 0.075 percent criterion and the
4 0.1 percent criterion. And, as you rightly noted, the
5 applicable safety standard is the 0.1 percent L_A value
6 of which is the "as found" criterion. The .075
7 percent criterion is "as left."

8 In other words, if during an ILRT it's
9 discovered there's leakage up to the 0.075 standard,
10 then the plant is allowed to restart. If not, then
11 they would be required to do further evaluation or to
12 make any corrections necessary so that the pressure
13 can drop back down again.

14 The standards for the Commission's review
15 of the Application are quite different from the
16 standards for the NSHC determination. The Atomic
17 Energy Act requires the Commission to determine
18 whether an Application is protective of public health
19 and safety, whether there's adequate protection of
20 public health and safety and whether it would be
21 inimical to the common defense and security.

22 A totally different issue is raised by the
23 NSHC determination. For that, we only look to see if
24 there is a significant hazard consideration which
25 would warrant review of the Application and completion

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1 of the review before a hearing is held. It is a
2 procedural step only.

3 And the origin of it, you didn't ask about
4 this, but the origin, as you probably know, goes back
5 to the 1980 Sholly Decision by the U.S. Court of
6 Appeals for the D.C. Circuit.

7 When the D.C. Circuit decided that license
8 amendments require a hearing, the Commission went to
9 Congress and Congress revised the Atomic Energy Act.
10 And they specifically provided the term no significant
11 hazard consideration. It is Congress that imposed
12 that requirement on the Commission to decide whether
13 a hearing needs to be held before the license
14 amendment can be issued.

15 The NRC's regulations which use the same
16 terminology, the no significant hazard consideration,
17 follow Congress's action.

18 The Commission was asked when it adopted
19 the no significant hazard consideration regulation,
20 they were asked specifically to define what is meant
21 by the word significant. Interestingly, the
22 Commission declined to give a definition.

23 If I can, let me read to you from the
24 significant consideration. And I'm looking at a final
25 rule published on March 6, 1986, 15 Federal Register

1 7744, it's entitled Final Procedures and Standards on
2 No Significant Hazards Consideration.

3 At page 7752 of the Federal Register, the
4 Commission notes that one commenter believes the word
5 significant should be defined if only to forestall
6 court challenges by persons disagreeing with NRC.

7 And page 7753, the Commission responded
8 and indicated that based on a particular proposal --
9 by the way, I'm quoting here -- based on a particular
10 proposal in an amendment request, the Commission
11 welcomes any and all persons comments about the
12 significance of the proposed action.

13 Aside from using examples as guidelines,
14 it believes that the term significant should not be
15 defined in the abstract. It should be left to case by
16 case resolution, close quote.

17 So, if you're looking for Commission
18 precedent in defining what is significant, you would
19 have to examine a case by case evaluation.

20 You haven't asked me about it, and I'm
21 loathe to go there, but in Probabilistic Risk
22 Assessments, the term significance has a totally
23 different meaning.

24 In NEPA, significant has a different
25 meaning.

1 So, the work significant may not have the
2 same meaning in all contexts.

3 In fact, just to get into an area that Ms.
4 Ghosh may address when you hear from her on contention
5 two, under NEPA, the Council on Environmental Quality
6 has identified significance as safe dependent. The
7 safe dependence on the context and the intensity.

8 Though, for NEPA purposes, even the CEQ
9 says it's a case by case determination.

10 IN PRA space, I believe it's fair to say
11 that significance is generally, and I may be
12 oversimplifying, but it's generally an order of
13 magnitude determination.

14 I think -- I would argue to you that for
15 your purposes, because the Commission has not given a
16 strict definition of significance, your definition
17 should look to the circumstances of the case and find
18 that the use of a common dictionary definition is
19 appropriate. And the common definition, the common
20 dictionary definition of significance, to me, seems to
21 be something that is meaningful or important.

22 And that's case by case, it's not a bright
23 line quantitative standard. You would have to decide
24 is there something of a meaningful or important delta
25 in the increased risk that requires further

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1 consideration.

2 In PRA space, it's my understanding that
3 an increase in large early release frequency, or LERF,
4 that would go from 10^{-7} to 10^{-6} , for instance, might be
5 considered significant. Make sure I haven't misspoke.

6 I'm corrected. A small change under Reg
7 Guide 1.174 Revision 2 would define as small an
8 increase in LERF that has that dimension.

9 Reg Guide 1.174 Revision 2 is entitled
10 Risk Informed Decision Making and it defines a very
11 small increase in risk as follows, quote, when the
12 calculated increase in LERF is very small, which is
13 taken as less than 10^{-7} per reactor year, the change
14 will be considered regardless of whether there is a
15 calculation of the total LERF, only for context,
16 that's the definition of very small, an increase of
17 less than 10^{-7} per year in LERF.

18 A small increase in risk is defined as
19 follows, quote, when the calculated increase in LERF
20 is in the range of 10^{-7} per reactor year, the 10^{-6} per
21 reactor year, applications will be considered only if
22 it can be reasonably shown that the total LERF is less
23 than 10^{-5} per reactor year.

24 So, again, for context, the definition of
25 small is an increase of between 10^{-6} and 10^{-5} increase

1 in LERF.

2 And, I would point out in terms of
3 context, that when the staff makes a no significant
4 hazard consideration determination, it does not use
5 probabilistic methods to reach that conclusion. It is
6 a deterministic assessment only so that we do not use
7 the PRA terminology approach in trying to decide if a
8 matter involves a significant hazard consideration
9 such that a hearing should be held before the
10 amendment is issued.

11 I'm happy that I haven't heard any
12 questions. Unless you have something further --

13 JUDGE ABREU: In the -- what in the
14 Probabilistic Risk Assessment convinces you that
15 Entergy has adequately accounted for the future
16 potential problems that could be caused by some of the
17 issues they've identified? For example, the 190
18 brackish water event which was some would characterize
19 as unusual in the scheme of other plants.

20 MR. TURK: I can't speak for the staff's
21 final evaluation because they haven't presented that
22 to OGC for review. We don't know what the final
23 conclusion will be.

24 But, I do take some note and comfort in
25 the fact that the analysis includes consideration of

1 undetected corrosion. That was part of the Calvert
2 Cliffs methodology which the NRC staff approved and
3 it's done by Indian Point also. So, that even if they
4 have not detected corrosion, they still consider
5 undetected corrosion in their PRA approach.

6 So, even if New York is correct that there
7 may be some undiscovered corrosion, that is
8 incorporated into the PRA analysis.

9 JUDGE ARNOLD: I have one question. I've
10 read over Option B in Appendix J and it's, thankfully,
11 quite short. But, I have not found anything in there
12 to suggest that specific plants should be disqualified
13 from using Option B based upon containment condition
14 or past events even though the historical performance
15 of the containment is satisfactory based upon ILRT
16 results. I mean, basically --

17 MR. TURK: You're correct.

18 JUDGE ARNOLD: Okay. In your opinion,
19 that's not in there?

20 MR. TURK: It's not in there. In fact, I
21 want to get reference to another document. When the
22 NRC adopted the performance-based approach in Option
23 B, they noticed, they expressly stated that there had
24 been many instances of corrosion detected in liners as
25 well as in containment concrete structures. I think

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1 the numbers are in the range of the 30s.

2 Just one moment, Your Honor.

3 I'm looking at a Federal Register Notice
4 of August 8, 1996 and this is the statement for
5 consideration when the NRC adopted its final rule
6 incorporating the codes and standards of the ASME code
7 IWE and IWL sections.

8 This is at 61 Federal Register 41303,
9 August 8, 1996. And the statement of consideration
10 notes that there have been -- I'm sorry, let me quote
11 here.

12 The rate of occurrence of corrosion and
13 degradation of containment structures has been
14 increasing at operating nuclear power plants. There
15 have been 32 reported occurrences of corrosion in
16 metal containments and the liners of concrete
17 containments. This is one-fourth of all operating
18 nuclear power plants.

19 Only four of the 32 occurrences are
20 detected by the current containment inspection
21 programs. Nine were identified by the NRC staff, et
22 cetera.

23 The Federal Register Notice goes on to
24 say, there have been -- quote, there have been 34
25 reported occurrences of degradation of the concrete or

1 of the post-tensioning systems of concrete
2 containments. This is nearly one-half of these types
3 of containments, close quote.

4 So, despite the fact that corrosion and
5 degradation had been found both in liners and concrete
6 containment structures in so many plants, the
7 Commission still found it appropriate to go to the
8 performance-based Option B.

9 So, Indian Point, because it has corrosion
10 degradation, does not fall outside the universe of the
11 plants for which Option B was approved. In fact, it's
12 well within the category of plants that had corrosion
13 and degradation and were still found to be appropriate
14 for Option B.

15 JUDGE HAWKENS: Entergy, in one of its
16 footnotes, referenced about nine -- eight or nine
17 plants that the NRC has granted the 15-year extension
18 to. Is there anything unique about Indian Point Unit
19 2 that would distinguish it from these other plants
20 that have been granted the 15-year extension?

21 MR. TURK: No, and, in fact, let me be a
22 little more specific about the numbers.

23 In fact, there are two different types of
24 extensions that have been granted, either onetime
25 extensions to 15 years or permanent extensions to 15

1 years.

2 I believe the -- if I can get the correct
3 number -- something like almost all operating nuclear
4 plants have been granted a onetime extension to 15
5 years. I believe the number is 97.

6 The NRC has also granted approximately 12
7 permanent extensions. And there are more Applications
8 sitting with the NRC staff that are under
9 consideration now.

10 And, as Entergy noted, Indian Point Unit
11 3 has been granted a permanent extension of the ILRT
12 interval.

13 JUDGE HAWKENS: Mr. Turk, the Board, at
14 this point has no further questions for you. Unless
15 you have some concluding comments, perhaps we should
16 hear from Ms. Ghosh on contention two.

17 MR. TURK: Yes, thank you, Your Honor.

18 JUDGE HAWKENS: Thank you.

19 MR. GHOSH: Good afternoon, Your Honors.

20 The staff's position on contention two is
21 fully outlined in our brief, but there are a few
22 things that I'd like to respond to based on New York's
23 arguments earlier today.

24 New York argues that Entergy failed to
25 submit an environmental report. But, as we explained

1 in our brief, Entergy's not required to submit an
2 environmental report under 10 CFR Section 51.53 or any
3 other regulation under the Commission's regulations.

4 New York also argues that the categorical
5 exclusion in 10 CFR 51.22(c)(9) doesn't apply here.
6 And, Mr. Lusignan noted three reasons.

7 One of those reasons he stated was an
8 increase in radioactive effluent into the environment,
9 but, this is the first time that New York has raised
10 this issue. This was not in their original Petition
11 nor was it in their Reply.

12 New York also raises the issue of special
13 circumstances. And, again, this argument was not
14 briefed in their original Petition. It was made for
15 the first time in their Reply. And, it's well
16 established under Commission case law that a Reply
17 cannot expand the scope of arguments set forth in the
18 original hearing request.

19 And, essentially, this is because
20 consideration of new evidence in a Reply brief would
21 deprive the other parties of an opportunity to
22 challenge this new evidence.

23 JUDGE HAWKENS: Ms. Ghosh, if special
24 circumstances were to exist, some plant, can you give
25 me an example of what those special circumstances

1 might be?

2 MS. GHOSH: The NRC doesn't have -- yes
3 the determination of special circumstances is made on
4 a case by case basis. The regulation provides one
5 example, if you would give me one moment.

6 The regulation in 51.22(b) provides the
7 example of -- it states that special circumstances
8 include the circumstance where the proposed action
9 involves unresolved conflicts concerning alternative
10 uses of available resources within the meaning of
11 Section 102.2(e) of NEPA.

12 I'm not sure that's applicable to this
13 case, but beyond that, the Commission has consistently
14 declined to further define what special circumstances
15 mean.

16 In the 1984 categorical exclusion rule,
17 the Commission stated that it's impossible to identify
18 in advance the precise situations which might exist or
19 move the Commission to determine in the future that
20 special circumstances actually do exist.

21 So, this is essentially left to the
22 staff's discretion.

23 JUDGE HAWKENS: To your knowledge, has the
24 staff ever granted 51.22(b) special circumstances?

25 MS. GHOSH: I'm not sure, Your Honor.

1 New York also raises that the no
2 significant hazards consideration determination in the
3 categorical exclusion in (c)(9) is a different issue
4 than what it is under 50.92(c).

5 The staff has consistently interpreted the
6 exclusion in (c)(9)(1) where it states no significant
7 hazards consideration to be the same determination.
8 And, essentially, for each License Amendment
9 Application that comes in under (c)(9), the staff
10 would look to their proposed no significant hazards
11 consideration determination to make that assessment
12 for this categorical exclusion.

13 IN any event, essentially, this contention
14 is inadmissible because it is a challenge both to the
15 no significant hazards determination and the
16 categorical exclusion in (c)(9) and, therefore, the
17 contention should be denied.

18 JUDGE HAWKENS: Okay, thank you.

19 Mr. Lusignan, we've heard now from the
20 licensee and from the NRC staff. You requested 15
21 minutes of rebuttal time. You're on the clock, sir.

22 MR. LUSIGNAN: Thank you, Your Honor.

23 Organize my thoughts here briefly.

24 One issue that came up during Entergy's
25 oral argument had to do with this weld channel and

1 penetration pressurization system, the existence of
2 which was even included in the License Amendment
3 Request but which Entergy now seeks to rely as it
4 being a further safety measure.

5 And, there were some questions about
6 leakage in this WC & PPS system. I want to direct the
7 Board to the 2002 granting of staff safety evaluation
8 of the onetime extension of the Integrated Leak Rate
9 Test to 15 years. On page 9 of that document, it
10 discusses the 1980 flooding event.

11 It indicates that the licensee stated that
12 the WC & PPS was pressurized to 52 pounds per square
13 inch. The gauge pressure during the flood, a pressure
14 higher than that of the flood water so that the water
15 could not have intruded into the system.

16 However, the flood did apparently cause
17 exterior corrosion on some of the piping that supplies
18 WC & PPS air to the weld channels and the base mat and
19 lower wall region.

20 These small diameter pipes pass down
21 through the concrete containment floor to the base mat
22 and lower wall weld channels.

23 Starting in 1993, a licensee discovered
24 that some of these supply pipes have corroded enough
25 to develop leaks that exceed the TS limit for WC & PPS

1 leakage. And, subsequently, portions of that system
2 were retired in place.

3 Again, these are under the base mat in an
4 area that's considered inaccessible. And so, the
5 condition of these pipes cannot be tested except
6 through -- or, excuse me, the Integrated Leak Rate
7 Test will test the overall integrity of the
8 containment liner including possible passageways
9 through these pipes that go through the container base
10 mat.

11 I would also agree with a statement by Mr.
12 Turk that the Integrated Leak Rate Test evaluates all
13 leakage pathways and in the event of an accident that
14 releases radiation from the reactor, that radiation
15 will pass through all available pathways. So, the
16 State is not convinced that the difference between
17 whether pressure is escaping through Type A -- whether
18 pressure is escaping through the containment liner
19 values, the pipes or penetrations is sort of
20 irrelevant as far as the risk of that radiation of
21 being released to the environment.

22 The Integrated Leak Rate Test evaluates
23 all potential pathways and gives you a sort total
24 picture of whether that containment remains
25 essentially leak tight as it's required to remain.

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1 With respect to the "as left" acceptance
2 criteria, I think this issue's been pretty thoroughly
3 discussed, but just to reiterate that if the leakage
4 rate exceeds that "as left" criteria of .75, the plant
5 cannot come back online after the outage. It has to
6 be brought below that level. In the State's mind,
7 that's essentially a failing result.

8 JUDGE HAWKENS: That's in the State's
9 mind? That's not reflected in the regulations, is it?

10 MR. LUSIGNAN: Well, again, it's reflected
11 in the fact that the plant can't come back online and
12 that's in order to build in a safety margin so that if
13 there's ongoing degradation after that test, it can
14 continue to remain below the ultimate "as found"
15 threshold of .1, which is also further evidence that
16 this containment -- or the containment system is
17 subject to ongoing degradation that can increase with
18 the passage of time.

19 There was discussion about the IP-3
20 License Amendment Request. The State offered comments
21 on that request. The State didn't think that request
22 was a good idea but NRC ended up granting that
23 request.

24 IP-3 was different, though, because there
25 was no evidence of these various historical events

1 that affected the liner. Also, the Integrated Leak
2 Rate Test historically for IP-3 were more varied.
3 There was no trend towards failure in that case.

4 There was a suggestion by counsel for
5 Entergy that raising the issue of special
6 circumstances would constitute an impermissible
7 challenge to the regulations, that's an argument
8 that's been directly rejected by the ASLB in the
9 Pahaina Hawaii case which is cited in our brief which
10 says that 10 CFR 51.22(b) specifically bestowed upon
11 any interested person the right to challenge the use
12 of a categorical exclusion by presenting special
13 circumstances.

14 JUDGE HAWKENS: You make this argument in
15 your opening brief?

16 MR. LUSIGNAN: Well, the entire thrust of
17 the State's position is that special circumstances
18 exist at Indian Point Unit 2. The fact that we didn't
19 use those specific words underneath contention NYS-2
20 --

21 JUDGE HAWKENS: But, I don't think you
22 even cited 51.22(b) in your initial brief, did you?

23 MR. LUSIGNAN: Well, we cited 51.22(c)(9),
24 so we --

25 JUDGE HAWKENS: But, do you cite 51.22(b)?

1 MR. LUSIGNAN: No, we did not, but we
2 cited --

3 JUDGE HAWKENS: Did you use the term
4 special circumstances in your discussion of the second
5 contention at all?

6 MR. LUSIGNAN: We did not use that
7 specific term, but, again, all of the evidence
8 submitted in our Petition relates to why IP-2 is
9 unique or unusual and why it is ill suited for a
10 reduction in the frequency of these ILRT tests. So,
11 we think that's adequate to give notice to the other
12 parties that that's an issue that the State -- that
13 could -- that falls within the scope of that Petition.

14 Similarly, with respect to the increase in
15 effluence, the State cited 51.22(c)(9) and argued that
16 that categorical exclusion does not apply. There are
17 only three subsections in that categorical exclusion,
18 so we think that there's -- that the other parties are
19 on notice that those issues would be potentially
20 within the scope of the contention.

21 Finally, I'll note that the State doesn't
22 contend that Indian Point not rely on Option B under
23 the regulations. It already is relying on Option B
24 and, under its current licensing basis is required to
25 conduct Integrated Leak Rate Tests every ten years.

1 The State's objecting to the extension of
2 that period to 15 years on a permanent basis which
3 would essentially result in there being only one more
4 Integrated Leak Rate Test in the remaining life of the
5 Indian Point plant.

6 And just one more point about the
7 Probabilistic Risk Assessment, there was both Entergy
8 and NRC staff made reference to the fact that the
9 Calvert Cliffs steel liner corrosion analysis
10 considers the possibility that corrosion will develop
11 in areas of the liner that are inaccessible or not
12 inspectible or that they will go undetected by visual
13 inspections.

14 But, in the RAI where that Calvert Cliffs
15 analysis was developed, it makes clear that the
16 Calvert Cliffs sections that were inaccessible were
17 just an area around a fuel pump and the containment
18 base met. There was no insulation panels as there are
19 in Indian Point Unit 2.

20 So, that's sort of taking a larger portion
21 of the containment out of the inaccessible -- or out
22 of the area that can be visually inspected and it
23 makes that area inaccessible so it should then import
24 that analysis into the Probabilistic Risk Assessment
25 for Indian Point Unit 2 is inappropriate.

1 Ultimately, many of the arguments raised
2 by NRC staff and Entergy go to the merits of the
3 State's contentions.

4 At this stage in the proceeding, we are
5 the contention admissibility phase, the State isn't
6 under the burden to prove that its contention will
7 ultimately be correct.

8 So, to the extent that we're talking about
9 potential minimum pathway leakage rates being -- are
10 throwing the ILRT results or other very specific
11 arguments about whether there is something wrong at
12 IP-2 which is causing this trend in increased leakage
13 historically, those really go to the merits of this
14 dispute.

15 The State has offered one theory for why
16 the leakage rate is increasing and Entergy has offered
17 another theory, and that's an issue that is
18 appropriate to bring to a hearing.

19 Ultimately, there's a very easy way that
20 Entergy could prove the State wrong here and that's to
21 conduct an Integrated Leak Rate Test next year as
22 planned. And, perhaps, if they conducted that test,
23 the results would be well below the "as left" or the
24 "as found" threshold and the State's concerns would be
25 potentially assuaged in that situation.

1 However, ultimately, the State's position
2 is that if Entergy wants to delay this test and
3 continue to expose the millions of people who live
4 around Indian Point Unit 2 to the potential risk of
5 radiation, they should have to comply with the
6 regulations to submit sufficiently plant-specific
7 analysis, give a basis for the NRC to determine that
8 there is a reasonable assurance of protection of the
9 public health and safety and conduct an adequate
10 environmental review of the impact of the License
11 Amendment Request.

12 Ultimately, the only justification that
13 Entergy has submitted for seeking this amendment is
14 that it will reduce the outage time for Indian Point
15 Unit 2 and that it will save costs as well as saving
16 some worker dosage.

17 And, certainly, the State agrees that
18 worker dosage is an important issue, but none of those
19 factors have been evaluated in a methodical way.

20 And, ultimately, in the brief responding
21 to New York State's Petition, Entergy and NRC staff
22 have argued that that information was submitted in a
23 Petition essentially perfunctory and that it's not a
24 basis for Entergy's License Amendment Request.

25 The State believes if Entergy is going to

1 expose its citizens to the risk of an uncontrolled
2 release of radiation through the containment, it
3 should have a better reason than that it will save
4 money and outage time. And it certainly should have
5 a better reason than just because the regulations
6 permit it.

7 Ultimately, the State has submitted two
8 general contentions that are supported by a variety of
9 specific fact and information and legal arguments. I
10 think we've been through that all pretty thoroughly
11 today and it's all set forth in our briefs in this
12 matter as well.

13 The State asks that -- the State posits
14 that it has met the threshold contention admissibility
15 standard and asks this court to allow the State to
16 intervene and to set this matter down for a hearing.

17 Thank you, Your Honors.

18 JUDGE HAWKENS: Thank you.

19 Were you able to get any answers to the
20 questions before we --

21 MR. BESSETTE: Yes, Your Honor.

22 JUDGE HAWKENS: -- submit the case?

23 MR. BESSETTE: Two-thirds of a question.

24 JUDGE HAWKENS: All right.

25 MR. BESSETTE: When we found the

1 degradation in the year 2000, the ASME code requires
2 follow up inspections on subsequent three periods.
3 The periodicity is every three and a half years. But,
4 because it requires an outage, it is often more
5 frequently that.

6 We have confirmed that in 2004 and in
7 2006, UT examinations were conducted, that the results
8 are acceptable.

9 And, that's what we've been able to
10 collect so far.

11 Also, there was one question from Dr.
12 Abreu with regard to weld channel degradation and I
13 couldn't really answer that because I wasn't familiar
14 with it and I've gone through New York's pleadings and
15 I see no mention of that. So, I apologize, but I
16 frankly don't know what they're referring to.

17 JUDGE ABREU: I believe Mr. Lusignan
18 pointed out the reference in the previous LAR that it
19 said it was external.

20 MR. BESSETTE: Okay, all right.

21 JUDGE ABREU: Or in the statement he
22 referenced his to.

23 MR. BESSETTE: Yes, and I believe that's
24 referring to the system that supplies the air, not the
25 actual weld channels.

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1 MR. O'NEILL: The air supply.

2 MR. BESSETTE: Thank you.

3 JUDGE HAWKENS: Mr. Lusignan, as the
4 Petitioner, I want to give you a final word having
5 just heard from Entergy if you have anything to say.

6 MR. LUSIGNAN: Just to mention that the
7 weld channel -- the WC & PPS system wasn't referred in
8 the License Amendment Request, so there was really no
9 way the State could include it in its Petition which
10 is why that issue has come up sort of subsequent to
11 the Petition.

12 Thank you, Your Honors.

13 JUDGE HAWKENS: Thank you. The case is
14 submitted. We're grateful for everybody joining us
15 here today, for your very useful presentation and
16 responsive answers to our questions. They will be
17 useful to us in the drafting of our decision.

18 Pursuant to the NRC regulatory milestones,
19 we are obliged to issue a decision within 45 days and
20 we will endeavor to do so.

21 Thank you very much, we are adjourned.

22 (Whereupon, the above-entitled matter went
23 off the record at 3:56 p.m.)

24

25