

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Oral Argument in the Matter of
Florida Power and Light
Turkey Point Nuclear Generating
Units 3 and 4

Docket Number: 50-250-LA and 50-251-LA

ASLBP Number: 15-935-02-LA-BD01

Location: Homestead, Florida

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Pages 1-210

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
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ATOMIC SAFETY AND LICENSING BOARD
ORAL ARGUMENT

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IN THE MATTER OF: : Docket Nos.
FLORIDA POWER & LIGHT COMPANY : 50-250-LA
(Turkey Point Nuclear : 50-251-LA
Generating, Units 3 and 4) : ASLBP No.
: 15-935-02-LA-BD01
-----x

Wednesday, January 14, 2015

Hampton Inn & Suites
Miami-South/Homestead
2855 N.E. 9th Street
The Reef Room
Homestead, Florida, 33033

The above-entitled matter came on for oral
argument, at 9:01 a.m.

BEFORE:

MICHAEL GIBSON, Chairman
DR. MICHAEL KENNEDY, Administrative Judge
DR. WILLIAM SAGER, Administrative Judge

1 APPEARANCES:

2 On Behalf of the Nuclear Regulatory Commission:

3 BRIAN HARRIS, ESQ.

4 DAVID ROTH, ESQ.

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10 On Behalf of Florida Power and Light:

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18 Florida Power & Light Company

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1 On Behalf of the Petitioners:

2 BARRY WHITE

3 MICHAEL HATCHER

4 Citizens Allied for Safe Energy, Inc. (CASE)

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6 Miami, Florida 33176

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P R O C E E D I N G S

(9:01 a.m.)

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3 JUDGE GIBSON: Good morning. Please be
4 seated. Are we ready, Court Reporter?

5 We are here today for oral argument
6 regarding Florida Power & Light Company's Turkey Point
7 Nuclear Generating Units 3 and 4, which is regulated
8 by the United States Nuclear Regulatory Commission
9 under rules it has promulgated in Volume 10 of the
10 Code of Federal Regulations.

11 We convened this oral argument because
12 Citizens Allied for Safe Energy, Inc., which we will
13 refer to most of the day today I suspect as CASE,
14 filed a petition requesting a hearing on four
15 contentions challenging amendments issued by the
16 Nuclear Regulatory Commission to Turkey Point's
17 license. Those amendments allow Turkey Point to
18 increase the ultimate heat sink water temperature from
19 100 to 104 degrees Fahrenheit, and to revise
20 surveillance requirements for monitoring the ultimate
21 heat sink temperature and component cooling water heat
22 exchangers. CASE submitted its petition on October
23 14, 2014 in response to a Federal Register notice of
24 August 14, 2014 that invited such a request. In its
25 petition, CASE requests an adjudicatory hearing on

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1 these amendments to Turkey Point's licenses for Units
2 3 and 4.

3 As a result of this petition, on October
4 24, 2014, the Chief Administrative Judge of the Atomic
5 Safety & Licensing Board panel issued a notice
6 designated this three-member licensing board to
7 conduct this proceeding. The two issues that we will
8 be addressing today are standing and contention
9 admissibility. By standing, we mean that CASE must
10 show that the amendment of the Turkey Point license
11 threatens one or more of its members with some
12 concrete injury. By contention admissibility, we mean
13 that CASE must show it has some legal or factual basis
14 for the claims it asserts here, and that those claims
15 are within the permissible scope of matters that have
16 been entrusted to the Nuclear Regulatory Commission
17 and to this Board.

18 With that introduction, here is what is at
19 stake in this proceeding. If this license amendment
20 is proper, Turkey Point may increase the ultimate heat
21 sink water temperature from 100 to 104 degrees
22 Fahrenheit which CASE claims poses significant
23 environmental problems while Florida Power & Light and
24 the Nuclear Regulatory Commission both assert that the
25 environment will not be adversely affected by these

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1 amendments.

2 Prior to amending a nuclear reactor
3 license, the Nuclear Regulatory Commission Staff,
4 which is one of the participants here today, has the
5 important responsibility of completing and
6 environmental review to consider all requirements of
7 the National Environmental Policy Act, the Atomic
8 Energy Act, and applicable regulations of the Nuclear
9 Regulatory Commission. Both the Atomic Energy Act and
10 the Nuclear Regulatory Commission regulations provide
11 an opportunity for interested stakeholders including
12 individual members of the public, public interest
13 groups, and other organizations and governmental
14 entities including state and local government bodies
15 and native Indian tribes, to seek a hearing to
16 challenge the issuance of license amendments. The
17 essence of these hearings is to adjudicate health
18 safety, environmental and common defense, and security
19 concerns that may be raised in the Nuclear Regulatory
20 Commission Staff review documents related to the
21 amendment of the license.

22 Now, with respect to the conduct of this
23 adjudicatory proceeding, the three Administrative Law
24 Judges here were previously appointed to the Atomic
25 Safety & Licensing Board panel by the Nuclear

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1 Regulatory Commission. And we were drawn from that
2 panel to serve on this three-member licensing board
3 and to preside over contested matters that have been
4 raised in CASE's petition. It is important for
5 everyone to recognize that the Administrative Judges
6 with the Atomic Safety & Licensing Board panel do not
7 work for or with the Nuclear Regulatory Commission
8 Staff on the review of this application for amendment
9 of the Turkey Point license. Rather, this Board is
10 charged with independently determining whether the
11 contentions raised in CASE's petition are appropriate
12 for adjudication in this proceeding.

13 The shorthand for our initial task here
14 today is to determine if CASE's contentions are
15 admissible. If we determine that one or more of its
16 contentions are admissible, then our next task would
17 be to adjudicate those issues, which means we are to
18 determine the substantive validity of the claims CASE
19 asserts here which ultimately would result in the
20 acceptance of the license amendment, or conditioning
21 that, or denying that. Once this Board reaches a
22 decision on any of these matters, it is generally
23 subject first to review by the Nuclear Regulatory
24 Commission as our agency supreme tribunal, and then by
25 federal courts including, in appropriate instances,

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1 the United States Supreme Court.

2 In addition to the admissibility of the
3 contentions that CASE has proffered here, this Board
4 has and independent responsibility to assess and rule
5 upon whether CASE has standing to participate in this
6 proceeding. By standing, we mean that CASE must show
7 that the Nuclear Regulatory Commission's amendment of
8 Turkey Point's licenses would threaten CASE or its
9 members with some concrete injury. Both Florida Power
10 & Light and the Nuclear Regulatory Commission Staff
11 challenge whether CASE has standing to assert its
12 claims here.

13 I should add that during oral argument, we
14 may for convenience refer to the term Petitioner.
15 When we do so, we mean CASE. Likewise, if we refer to
16 Applicant, we mean Florida Power & Light. And if we
17 refer to Staff, we mean the Staff of the Nuclear
18 Regulatory Commission. Finally, if we use the term
19 Turkey Point, we mean Units 3 and 4 of the nuclear
20 reactors that Florida Power & Light operates at the
21 Turkey Point facility.

22 So, before we begin, I need to make some
23 introductions. To my immediate right, your left, is
24 Judge Mike Kennedy. Judge Kennedy is an engineer, a
25 full-time member of the Atomic Safety & Licensing

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1 Board panel, and in fact serves as its Deputy Chief in
2 Charge of Technical Matters. To my left is Judge
3 William Sager who is also an Earth Science professor
4 at the University of Houston, is a part-time member of
5 the panel, and a full-time professor at the University
6 of Houston. I'm Michael Gibson, I'm an attorney, and
7 I am the Chairman of this panel.

8 A couple of other introductions. Our law
9 clerk, Matt Zogby, will be working with us on this
10 matter. Our court reporter is Michael Hollar. If you
11 have any, if press is here and has any inquiries, Joey
12 Ledford is here. Hold your hand up, Joey, he's right
13 there. And we also have two security officers, Connie
14 Smith and Tom Mead, if there is any security matters
15 you'll have concerns with.

16 At this point, I would like to have
17 counsel for the various participants identify
18 themselves for the record. Let's start with Counsel
19 for the, or let's start with, I'm sorry, with CASE.
20 You don't have counsel, so please identify yourself
21 and your client.

22 MR. WHITE: Good morning. I am Barry
23 White, I'm the authorized representative for Citizens
24 Allied for Safe Energy in this matter.

25 JUDGE GIBSON: Thank you. And sitting

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1 with you, sir?

2 MR. HATCHER: My name is Mike Hatcher, I
3 am a member of CASE and I serve as senior policy
4 advisor on our case.

5 JUDGE GIBSON: Thank you. Okay. Let's
6 move to Counsel for the Applicant, Florida Power &
7 Light.

8 MR. BLAIR: My name is William Blair. I
9 am managing attorney with Florida Power & Light.

10 MR. HAMRICK: And I'm Steven Hamrick,
11 counsel for Florida Power & Light.

12 JUDGE GIBSON: Thank you. And for the NRC
13 Staff?

14 MR. HARRIS: Good morning, my name is
15 Brian Harris. I'm lead counsel for the NRC Staff
16 today. Sitting to my left is David Roth who is my co-
17 counsel. And to his left is Audrey Klett who is the
18 project manager for Turkey Point. Behind me is Briana
19 Grange and Daniel Straus. And I believe the resident
20 inspectors are in the audience also. Thank you.

21 JUDGE GIBSON: Okay. Thank you very much.
22 Okay. Now that we've completed our introductions, we
23 will proceed to argument as we address the issues of
24 standing and contention admissibility. We are going
25 to proceed with oral argument a little differently

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1 than the approach you may have seen other boards take.

2 This Board has a number of specific
3 questions it intends to ask of Mr. White and of
4 counsel for all sides here. Rather than allowing you
5 a specific amount of time for opening remarks or for
6 reply and rebuttal to a specific question, we will be
7 asking each party individual questions that we need
8 answers to. My suspicion is that by the time we
9 finish today, you're going to feel that you had an
10 adequate opportunity to address all of the issues of
11 concern to the Board; but if for some reason we don't
12 and you feel you just have to say something more, we
13 can reserve perhaps, you know, five or ten minutes for
14 you to do a closing if you're still just dying to say
15 something to us.

16 Before we consider their contentions,
17 we're going to proceed with some questions regarding
18 the standing of CASE to assert its claims here. Does
19 everybody understand that, the rules of the road here?

20 (General agreement.)

21 JUDGE GIBSON: Okay. Mr. White, on page
22 1 of your petition, you assert that CASE should be
23 accorded representational standing through its
24 members. Is that correct?

25 MR. WHITE: Sir, I don't have it in front

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1 of me, but yes.

2 JUDGE GIBSON: Okay. Well, I don't want
3 to put words in your mouth, Mr. White, but I think
4 that's probably what you have in your petition on page
5 1.

6 With respect to the members of CASE, eight
7 of them have signed affidavits at the time the
8 petition was filed, stating that they lived between 13
9 and 40 miles from the Turkey Point site. Is that
10 correct?

11 MR. WHITE: Yes, sir.

12 JUDGE GIBSON: Okay. In addition, on
13 Monday of this week, only two days ago, you filed an
14 affidavit of one Bernard Ginsberg who attests that he
15 resides within 25 miles of the reactor. Is that
16 correct?

17 MR. WHITE: Yes, sir.

18 JUDGE GIBSON: Why did you file Mr.
19 Ginsberg's affidavit on the eve of this oral argument?
20 And what possible justification do you have for this
21 late filing?

22 MR. WHITE: Mr. Ginsberg lives in Key
23 Largo. One of our contentions is that the movement
24 of, the intrusion of saltwater is moving westward in
25 such a way that it will, is close to endangering the

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1 source of water for the Florida Keys, that's the Keys
2 Aqueduct Authority. We realize quite honestly that we
3 did not have one of our members who actually was in
4 harm's way, and Mr. Ginsberg who lives in Key Largo
5 would be harmed by such an event should the water in
6 that area become saline to the extent that it could
7 not be used and water would have to be desalinated at
8 a cost of about \$100 million a year.

9 So, we asked Mr. Ginsberg to submit his
10 declaration and we filed it for that reason.

11 JUDGE GIBSON: Did you consult with
12 Counsel for the Staff or Florida Power & Light about
13 the submission of this affidavit before you did so?

14 MR. WHITE: No, sir, I did not. I did not
15 realize that that would be required. I did consult,
16 prior to my filing the total application, I did call
17 the Counsel for FPL in Washington and did discuss, I
18 did consult, I sent out a memo first and then he
19 called me.

20 JUDGE GIBSON: Very well. But the
21 question is, you know, generally, the way that we do
22 things is if you're going to be filing something, a
23 motion, for example, you'll consult with the other
24 parties about whether they're going to oppose your
25 motion or not. In this case, you've got an affidavit

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1 that you were submitting significantly after the time
2 of your petition, even after your reply. And it
3 doesn't appear that you consulted with either the
4 Staff or the Applicant about doing that.

5 I just want to tell you, Mr. White, in the
6 future, if you're going to be submitting something not
7 on time, okay, or you're going to, in this case, if
8 you're ever going to file any kind of a motion, you
9 need to consult with counsel for the parties. Do you
10 understand that, sir?

11 MR. WHITE: Exactly, thank you, sir.

12 JUDGE GIBSON: In advance, before anything
13 is filed. It doesn't, it's not a problem, you just
14 pick up the phone and call them, okay?

15 MR. WHITE: I understand.

16 JUDGE GIBSON: Okay. Now, I want to get
17 into some specifics about your standing, but I first
18 want to ask the Applicant. Are you all, do you all
19 care whether this affidavit comes in or not?

20 MR. BLAIR: Your Honor, we find that the
21 affidavit is cumulative to the already filed petition
22 and think that it adds nothing to the petition. We do
23 note, obviously, that it's late filed but don't
24 object.

25 JUDGE GIBSON: Thank you. Staff?

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1 MR. HARRIS: Staff has the same opinion,
2 Your Honor.

3 JUDGE GIBSON: Okay. So, they're going to
4 cut you some slack here, Mr. White, but I would
5 suggest in the future you try to, you know, check on
6 those rules and be sure that you submit things and
7 contact the counsel for the other parties before you
8 submit anything else, okay?

9 MR. WHITE: Agreed.

10 JUDGE GIBSON: Okay. I would like to turn
11 now to Counsel for the NRC Staff. It sounds like you
12 are not disputing that these eight or nine, if we
13 count Mr. Ginsberg, CASE members live within 40 miles
14 of the Turkey Point site. Are you?

15 MR. HARRIS: No, Your Honor.

16 JUDGE GIBSON: And neither are you,
17 Counsel for Florida Power & Light, is that correct?

18 MR. BLAIR: No, Your Honor, we don't
19 contest that.

20 JUDGE GIBSON: Okay. Now, Mr. White, is
21 it your claim that because of how close these eight or
22 nine people live to Turkey Point, that CASE should be
23 granted standing under the proximity presumption? Is
24 that correct?

25 MR. WHITE: Yes, sir.

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1 JUDGE GIBSON: But Counsel for the NRC
2 Staff, it's my understanding, from your answer on page
3 7, that you maintain that the proximity presumption
4 does not apply in a license amendment proceeding. Is
5 that right?

6 MR. HARRIS: That's right. It, you know,
7 generally is, the proximity presumption has been
8 applied to new reactor licensing and license renewals.
9 There are some license amendments where there has been
10 an issue of some type, a new kind of accident that,
11 you know, proximity has been applied in a very limited
12 set of circumstances. But generally, license
13 amendments, they've had to just show concept of
14 injury, you know, in fact, causation and
15 redressability.

16 JUDGE GIBSON: There are no Commission
17 decisions stating categorically, however, that the
18 proximity presumption cannot apply to an amendment
19 proceeding, is that correct?

20 MR. HARRIS: That's correct, Your Honor.
21 But it hasn't generally been applied to your normal
22 run-of-the-mill kind of license amendment proceedings.

23 JUDGE GIBSON: Well, I did understand you
24 to say that but I just want to make sure. There is no
25 Commission decision stating categorically, correct?

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1 MR. HARRIS: Yes, Your Honor.

2 JUDGE GIBSON: Okay, thank you. Counsel
3 for Florida Power & Light, on page 9 of your answer,
4 you acknowledge that the proximity presumption may be
5 used in some license amendment cases but not all. Is
6 that correct?

7 MR. BLAIR: That's correct, Your Honor.
8 Similar to Staff, for example, you know, some
9 amendment that, a power up-rate, for example, that
10 created either additional harm, something to that
11 effect, there are limited cases in which the key
12 element to the proximity presumption is the potential
13 for exposure, generally speaking according to
14 Commission president. There are some license
15 amendments that either may create additional or
16 prolonged or different types of exposure pathways that
17 perhaps could fall within the proximity presumption.
18 Our argument is simply that this does not.

19 JUDGE GIBSON: You cite the Zion case and
20 state that "the Petitioner has to demonstrate a
21 plausible chain of events that would result in offsite
22 radiological consequences posing a distinct new harm
23 to the Petitioner." Did I read that correctly?

24 MR. BLAIR: You did, yes.

25 JUDGE GIBSON: Is it your view under Zion

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1 that the offsite consequences must be radiological in
2 nature for the proximity presumption to be applied?

3 MR. BLAIR: We believe both Zion and other
4 similar Agency precedent would teach that conclusion,
5 yes.

6 JUDGE GIBSON: Okay. Mr. White, in
7 addition to the fact that these eight or nine members
8 of CASE live within 40 miles of the Turkey Point site,
9 you also allege that drawing excessive water from the
10 aquifer presents tangible and particular harm to the
11 health and well-being of these members. Is that
12 correct?

13 MR. WHITE: Yes, sir.

14 JUDGE GIBSON: Counsel for the NRC Staff,
15 assume with me that what CASE alleges is true. Are
16 you saying that this is not enough to confer standing?

17 MR. HARRIS: Yes, Your Honor. It's not
18 within the scope of the license amendment. There is
19 no redressability. Even if CASE is correct, there is
20 nothing that this Board could do to stop that
21 withdrawal. It was done by the State of Florida.

22 JUDGE GIBSON: Assume with me as well that
23 Mr. White is correct, is that not enough to confer
24 standing in your estimation as well?

25 MR. BLAIR: That's correct, Your Honor.

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1 To be clear, the NRC certainly has jurisdiction over
2 much, perhaps most operations at the facility but not
3 all. And we believe that even if CASE's contentions
4 on their face are correct and there is some
5 environmental harm to them, they are not caused by
6 this amendment, right? So, there is no causation or
7 redressability.

8 Further, we believe that this is not, the
9 specific claim -- harms are not within the purview of
10 the NRC except perhaps in an environmental impact
11 review under NEPA.

12 JUDGE GIBSON: And you're maintaining that
13 only where there's offsite radiological consequences
14 can the party be accorded standing here, is that
15 right?

16 MR. BLAIR: No, Your Honor, that's too
17 broad. We believe that only under radiological
18 consequences can the party be conferred presumptive
19 standing simply by proximity to their, their proximity
20 of location to the facility.

21 JUDGE GIBSON: Okay, thank you. I
22 appreciate that clarification.

23 Mr. White, on page 11 of your answer, you
24 state that CASE does not show -- I'm sorry, pardon me.
25 Florida Power & Light, on page 11 of its answer,

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1 states "CASE does not show that such withdrawals have
2 any impact whatsoever on its members." I think that's
3 the point Staff and the Florida Power & Light were
4 just making, and that without such an impact, CASE may
5 not secure standing. Do I understand that the essence
6 of the concern that you're raising is that drawing
7 excessive water from the aquifer will impact these
8 CASE members because this is their water source? And
9 the steps authorized by this amendment will endanger
10 that water source by producing excessive temperature
11 and saltwater intrusion?

12 MR. WHITE: I would say that's not our
13 contention at all.

14 JUDGE GIBSON: I didn't, I'm just trying
15 to understand how you get standing, okay? And are you
16 not making that claim?

17 MR. WHITE: I would say, let me say that
18 that is a part of our concern.

19 JUDGE GIBSON: Yes.

20 MR. WHITE: But I would submit it's much
21 more complex than that. If it would please the panel,
22 should I continue?

23 JUDGE GIBSON: Yes, please. Please, we
24 want to understand why it's more complex than that.

25 MR. WHITE: If I may, I have a map that

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1 I'd like to --

2 JUDGE GIBSON: Fine, fine.

3 MR. WHITE: I have copies of some of the
4 parts of Exhibit 1 to our original petition to pass
5 out for ease of reference. Is that permitted?

6 JUDGE GIBSON: I don't know that she'd
7 hand out the petition. But you know, if you want to
8 do it, it's okay. Just let's get going. And be sure
9 that this is displayed in a way that counsel for both
10 parties can see this, okay?

11 So, what are we looking at here?

12 MR. WHITE: Well, these are our infamous
13 cooling canals.

14 JUDGE GIBSON: Okay.

15 MR. WHITE: Turkey Point plant. And this
16 map represents, as of 2011, the saltwater intrusion
17 line. And as you can see, this was the previous line
18 which I think was in 2009, and you can see the in the
19 two years movement as we talk about to the west. That
20 is part of our concern. I have a prepared statement
21 if I may that will take us through this.

22 JUDGE GIBSON: Go ahead.

23 MR. WHITE: Thank you, sir. As I said,
24 from our standpoint, it's much more complex. It's all
25 about freshwater. FPL needs it to keep the cooling

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1 canal system (CCS) viable. The Everglades need to
2 hold back saltwater intrusion which freshwater does.
3 Biscayne National Park needs it to maintain the
4 estuary which is the source of most of the infant sea
5 life in the Florida Keys, and the people need it to
6 sustain life and for agriculture.

7 I wondered why the L31E canal was called
8 E, and the L31E canal, it runs right along the --

9 JUDGE GIBSON: Could you please show this
10 on your map here?

11 MR. WHITE: Absolutely.

12 JUDGE GIBSON: So we can follow what
13 you're saying, sir. Sorry, I didn't into speak into
14 the mic. Did you get that?

15 MR. WHITE: The L31E canal run here, on
16 the west side of the canals.

17 JUDGE GIBSON: Okay.

18 MR. WHITE: And I wondered, "Why do they
19 call it the L31E for east?" And the answer is because
20 it's the east of the Everglades, the Everglades before
21 a 6,100 acre canal system was built, I believe '73,
22 and into the ocean. In 1900, this was freshwater all
23 the way out into the ocean.

24 Now, freshwater is moving, the amount of
25 freshwater is moving in and the saltwater intrusion

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1 which comes away from the canal at a 40 degree angle
2 is moving westward. So, and this is what Marjory
3 Stoneman Douglas called the 'river of grass.' She
4 knew a hundred years ago that we would be standing
5 here today. So, it's all about our concern of
6 implications of the blockage of the movement of
7 freshwater into this area and the intrusion of
8 saltwater into this area by the saline water.

9 JUDGE KENNEDY: Mr. White, this is Judge
10 Kennedy. I'm just curious. Are you going to get to
11 further discussion as to what you think is influencing
12 this acceleration of the saltwater intrusion?

13 MR. WHITE: Certainly.

14 JUDGE KENNEDY: And put it in terms that's
15 related to this license amendment?

16 MR. WHITE: Yes, sir.

17 JUDGE KENNEDY: Okay.

18 JUDGE SAGER: Judge Gibson, if you don't
19 mind?

20 JUDGE GIBSON: Yes.

21 JUDGE SAGER: Just for the record, we
22 haven't identified what it is we're looking at. So,
23 this appears to be an aerial photograph or a space
24 photograph of a portion of Florida, is that correct?

25 MR. WHITE: That is the lower, the tip of

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1 the peninsula with Turkey Point to the right, the
2 cooling canals to the left. Homestead Air Force Base
3 would be up to the northwest. The city of Homestead
4 would be to the west. And the Florida Keys are down
5 below that.

6 JUDGE SAGER: And you pointed to some
7 lines saying that they are saltwater intrusion. What
8 is the source of those data?

9 MR. WHITE: This is from the Department of
10 Environmental Regulation now called, has now the name
11 of Miami Dade County Department of Environmental
12 Regulation.

13 JUDGE SAGER: Okay, thank you.

14 MR. WHITE: I'll read what I've written
15 here.

16 JUDGE GIBSON: While you've been
17 interrupted in what you wanted to say, I'll continue
18 with that. You said they called this E, put E on that
19 canal because it was east?

20 MR. WHITE: No, because it's on the east
21 side of the Everglades.

22 JUDGE GIBSON: Okay. But who, who is the
23 person or entity that gave that designation? You said
24 they called it E. I'm just wondering, who is that?

25 MR. WHITE: South Florida Water Management

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1 District, I believe.

2 JUDGE GIBSON: Okay.

3 MR. WHITE: And I mean, it's been the L31E
4 canal forever.

5 JUDGE GIBSON: Okay, fair enough. We
6 just, you know, when you said they, in other words we
7 had no context for that, Mr. White. So, thank you.

8 MR. WHITE: Okay. CASE holds that its
9 members have standing in these proceedings and will
10 show that the Turkey Point cooling canal system (CCS)
11 at its current extreme levels of temperatures and
12 salinity and increased use of freshwater resources is
13 a threat to the financial and ecological viability of
14 the area, that the corrective actions taken to
15 mitigate the situation were caustic and not
16 exhaustively evaluated experimentally, and that the
17 NRC by its own regulations does have the authority to
18 temporarily and permanently correct this situation in
19 these proceedings.

20 Turkey Point is at a critical geographical
21 nexus for the economy and the ecology for South
22 Florida, the Florida Keys, and actually for the entire
23 hemisphere. The area is a marsh wetland contiguous
24 with the Everglades National Park and adjacent to
25 Biscayne National Park. There is constant and

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1 significant flow of water between the canals and the
2 Biscayne aquifer on which they sit. The financial and
3 economic concerns in this matter are not subtle. They
4 are very apparent.

5 Mr. Lee N. Hefty, Director of
6 Environmental Resources Management, Miami Dade County
7 Department of Regulatory and Economic Resources, in a
8 letter to the Florida Department of Environmental
9 Protection dated November 26, 2014, commenting on a
10 draft administrative order for the current CCS
11 situation stated, "Based on review of available
12 monitoring data, it is evident that the operations of
13 the cooling canal system (CCS) have resulted in the
14 movement of saline water into areas outside of the
15 CCS, including into areas west of Levy 31E adjacent to
16 the CCS. In addition, the data indicate harm or
17 potential harm to waters of the state and county
18 including ecological resources, and document
19 exceedances of county water quality standards. CASE
20 Petition Exhibit 1, pages I and J which you have, show
21 plumes of tritium as they move outward from the CCS
22 for up to 6 miles, indicating that salinity and other
23 elements move to the same extent. Mr. Hefty's
24 concerns are ecological and, as a county official,
25 economic.

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1 The South Miami Dade portion of the
2 Biscayne aquifer is the source of the water supply for
3 the entire Florida Keys and much of Southern Miami
4 Dade County. If the area is compromised,
5 desalinization of the Florida Keys, home of CASE Key
6 Largo member Dr. Bernard Ginsberg, creating potable
7 water for the Florida Keys would cost over \$100
8 million annually. Insufficient freshwater in the
9 Redland, which is what we call the agricultural area
10 to the west in this area, the Redland, and --

11 JUDGE GIBSON: I'm sorry. Let's, hold on
12 just a minute. You said to the west. On this map,
13 where is that?

14 MR. WHITE: There is a --

15 JUDGE GIBSON: Is that on the map or is
16 that west of this map?

17 MR. WHITE: This Redland? Mike, you want
18 to show them?

19 MR. HATCHER: Sure.

20 MR. WHITE: He lives there.

21 JUDGE GIBSON: Okay, great.

22 MR. HATCHER: The area that he is
23 discussing would be this general vicinity here. This
24 is what we call the agricultural development, and most
25 of the water here is for agriculture use and even for

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1 our personal residential use. We literally pump it
2 out of the ground. We don't have the, we are outside
3 of what they call the urban development boundary, so
4 therefore, we pump our water --

5 JUDGE GIBSON: Okay. Thank you, sir.
6 Thank you. And that's called the Redlands?

7 MR. WHITE: Redland.

8 MR. HATCHER: Redland.

9 MR. WHITE: Don't say Redlands.

10 MR. HATCHER: Redland.

11 JUDGE GIBSON: Redland.

12 MR. HATCHER: Just like Redlands,
13 California but no S.

14 JUDGE GIBSON: Right, okay. Okay, good.
15 Okay, thank you.

16 MR. WHITE: You're welcome. Insufficient
17 freshwater in the Redland and Homestead to the west of
18 CCS and the home of CASE members Mr. and Mrs. Sydney
19 Robinson who are in the audience who grow avocados and
20 mangoes, Mr. Michael Hatcher has orchards, would
21 threaten their crops and agriculture and the winter
22 breadbasket for the entire nation, a \$2.7 billion
23 industry. To the west of the canals, saltwater
24 intrusion exacerbated by the salinity of the cooling
25 canals is threatening the rock mining operations

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1 there. You cannot use rock if it has been subjected
2 to saltwater. The area to the east and south of the
3 canals is the breeding ground for much of the sea life
4 in the area, and a lack of freshwater for hatchlings
5 and juveniles would threaten the fishing industry in
6 the Florida Keys that is worth \$7.6 billion annually
7 plus \$20 million in license fees.

8 The current estimate is that the saltwater
9 front from the CCS is moving westward at the rate of
10 300 to 400 feet annually and has already moved several
11 miles inland. Freshwater wells to the west of the
12 cooling canals used by residents and farmers for
13 irrigation are turning saline, and the Miami Dade
14 Water & Sewer Management District will be shutting
15 them down and bringing in water from the main system
16 replacing a natural source of water with a more costly
17 processed water source.

18 A recently completed -- I'm sorry, that's
19 not completed. A \$500 million project is on the
20 drawing boards for Everglades' restoration, a project
21 to the west of the canals and could be undone by the
22 westward moving front of high salinity water from the
23 cooling canals. So, the actual and potential
24 financial and ecological threat from the increasingly
25 challenged and failing CCS is of great concern and

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1 moment to CASE members. The CCS did not create
2 saltwater intrusion, it was noted as early as 1908.
3 But the CCS has exacerbated the problem and
4 accelerated the water disbursement in the area. It's
5 all about freshwater.

6 There are two major projects to bring
7 freshwater to this area. One is called CEP, one is
8 called CERP. They're in the magnitude of \$12 billion
9 and they will be in Northern and Central Florida, to
10 improve the flow of freshwater into this area.

11 JUDGE GIBSON: Mr. White, I told you you
12 weren't going to get an opening statement. We just
13 want to ask you questions. I think your question,
14 your answer to this point has largely been responsive
15 though to my question, which was what is the impact on
16 the members of CASE. And you've been explaining, I
17 think, that the impact on them is that their
18 livelihood is being challenged and their, I take it,
19 and that's really the guts of your claim. Is that
20 right?

21 MR. WHITE: There's a little bit more of
22 the science of it, if I may.

23 JUDGE GIBSON: Okay. If it's necessary to
24 explain the impact on the CASE representatives, but I
25 want to make sure you understand. We're just talking

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1 about standing right now, okay?

2 MR. WHITE: Okay. But I would submit
3 that, as I said, it's about the freshwater. And to
4 understand where our standing comes in there --

5 JUDGE GIBSON: It's fine, it's fine, go
6 ahead. I just want to be sure that we're on the same
7 page on the same hymnal, okay? We are not answering
8 a question I don't want to hear about yet, okay?

9 MR. WHITE: The average conductivity, as
10 measured in microsiemens I believe, in the L31E canal
11 is around 400 microsiemens, 400 to 500, making it
12 freshwater by the Miami Dade County standard of 500
13 microsiemens, and the state standard of 1,275 parts
14 per thousand. Without sufficient freshwater, this
15 entire area would be ecologically dead. The Federal
16 Government has budgeted, and we talked about that, \$12
17 billion to restore the historic flow of freshwater
18 from Central Florida through the Everglades to this
19 area.

20 It is freshwater which holds back the
21 saltwater intrusion from the ocean and from the
22 cooling canals. It requires 1 foot of freshwater
23 above sea level to hold back 40 feet of saltwater
24 front. So, any withdrawal of freshwater in the
25 Biscayne aquifer in South Miami Dade County promotes

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1 the westward movement of saltwater. That is an
2 exigent and persistent threat to all interest in the
3 area.

4 For FPL to say in its reply to CASE at 30
5 --

6 JUDGE GIBSON: Does this have to do with
7 standing?

8 MR. WHITE: Yes, I think so.

9 JUDGE GIBSON: Okay.

10 MR. WHITE: "The aquifer withdrawals are
11 brackish or saltwater and, therefore, not from any
12 potable water source." That was in FPL's reply to
13 CASE. I'll repeat, they said, "The aquifer
14 withdrawals are brackish or saltwater and, therefore,
15 not from any potable water source."

16 Potable water is not the issue.
17 Freshwater, for the reasons already cited, is the
18 issue. And FPL is using freshwater by any legal
19 standard from the Biscayne aquifer. Through October
20 15, 2014, FPL withdrew over five billion gallons of
21 freshwater to mitigate the CCS situation, an amount
22 equal to 25 percent of the water consumption of almost
23 three million people in Miami Dade County for the time
24 period. This is an exigent threat to the citizens in
25 the area.

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1 So, when FPL says at 30, "These 100
2 million gallons per day withdrawal do not relate to
3 any withdrawal from an aquifer," that is not correct.
4 At 30, FPL says, "The water was excess water from a
5 local canal," meaning the 31E canal. The L31E canal
6 and all of the surface water in the area is the
7 visible part of the Biscayne aquifer and is by
8 definition the water beneath the Turkey Point cooling
9 canal system. It is all Biscayne aquifer which begins
10 in Northern Florida with water moving for several
11 months being filtered by 500 miles of limestone.

12 When it reaches Miami Dade County, it
13 varies from 30 to 100 feet of freshwater in porous
14 limestone called oolite. Above the 20 to 50 confining
15 layer of rock, beneath that is a slightly brackish
16 Floridan aquifer with salinity between 1,000 and 3,000
17 microsiemens. Seawater is 35,000 microsiemens. Until
18 the 19th century when we began to change the flow, the
19 well-traveled freshwater in the Biscayne aquifer held
20 back the seawater from the Atlantic, Biscayne Bay and
21 Florida Bay. The CCS constructed in 1973 changed that
22 and is changing that.

23 Regarding water to drawn, the CASE
24 petition at 16 states, regarding water to be withdrawn
25 from the aquifer, Biscayne National Park

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1 Superintendent Brian Carlstrom wrote to the South
2 Florida Water Management District on August 29th, 2014
3 expressing his concern about the freshwater to be used
4 to mitigate the situation about it. The proposed
5 quantity of freshwater to be withdrawn has been
6 characterized as being above the amount reserved, that
7 is excess, for the Biscayne Bay Coastal Wetlands
8 Comprehensive Everglades Restoration Plan Project
9 (CERP).

10 In addition, when the water reservation
11 was codified, we were assured that the water in the
12 canals would not be available for withdrawal because
13 there would be neither demand nor means to withdraw
14 significant quantities of water. The park disagrees
15 with the characterization of the amount of wet season
16 water above the reservation line as being available
17 water. This disagreement is based on the use of a
18 daily average reservation quantity without
19 consideration of hydrological seasonality and
20 ecological water needs during the dry season.

21 During the dry season, the amount of water
22 needed for BBCW Restoration and the park far exceeds
23 the available amount of inflowing freshwater. The
24 amount of freshwater received in the wet season above
25 the reservation amount is necessary to maintain the

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1 correct salinity balance in the beginning of dry
2 season within the park, that's Biscayne National Park,
3 and Biscayne Bay. The proposed increased use of the
4 mildly brackish water from the Floridan aquifer to
5 mitigate the CCS situation is not without
6 consequences.

7 The hydrology of the Floridan aquifer is
8 not well understood, and using this water by
9 regulation requires respecting the rights of all other
10 existing legitimate users. Some local municipalities
11 and communities as well as FPL already use the water
12 from the Floridan aquifer. Further use must be done
13 judiciously. It's all about freshwater.

14 JUDGE GIBSON: All right, Mr. White. Now,
15 these two gentlemen on my right and my left I'm sure
16 will have some specific questions for you during the
17 course of our day today addressing some of the
18 technical questions you have. And I suspect counsel
19 for these two parties are probably going to be
20 challenging it as well. I don't want to do that right
21 now. I just want to focus on one thing.

22 I think I understand you to say that the
23 livelihood of some of these members is adversely
24 affected by this encroaching salinity as we go west,
25 and I appreciate that. You know, I think I understand

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1 that. I get it. And I understand that, you know, you
2 have an argument about how this came about. I'm not
3 disputing that either.

4 My question really has to do with what
5 Florida Power & Light would do by virtue of this
6 amendment is to increase the temperature, the ultimate
7 heat sink temperature. I believe from, is it 100 to
8 104 degrees Fahrenheit? Now, that is essentially the
9 only thing that we are concerned with for this
10 immediate purpose, okay, is they are increasing it.
11 And I just would like for you to, with what you just
12 said, I would just like for you to now tie that to
13 what is, and you can consult with your colleague
14 there, I think he has something he wants to tell you.

15 (Slight pause while CASE
16 conferred.)

17 JUDGE GIBSON: Fair enough? Okay. Now,
18 what I want to know is what is the impact of
19 increasing this temperature, okay, on the concerns
20 that you say affect the economic interests and other
21 interests I assume of these people who live close by.
22 Just the temperature.

23 MR. BLAIR: That would, if I may, to
24 answer it correctly --

25 JUDGE GIBSON: Yes?

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1 MR. BLAIR: Would take me to the
2 justification for contention 1.

3 JUDGE GIBSON: Okay, fair enough, and
4 we'll get to contention 1. We'll talk about it then.
5 Okay.

6 MR. BLAIR: Okay.

7 JUDGE GIBSON: But I just want to be sure.
8 You need to understand that ultimately what we are
9 here about is an amendment that is at least
10 technically very narrow, increasing the ultimate heat
11 sink from 100 to 104. Now, in your estimation, it may
12 be a really big deal, and I understand in contention
13 1 that may be what you're trying to say. But I just,
14 you know, ultimately, we think of standing and
15 contentions as separate issues. And I just want to
16 understand how this amendment is affecting the
17 interests.

18 And so, I guess what we'll do is this.
19 When we get to contention 1, I would like for you to
20 be able to address this question of how does this
21 increased temperature affect the salinity that is
22 posing a problem for the interests of your people in
23 CASE so that they would have standing. Okay?
24 Normally, they are unrelated, but in this case it
25 sounds like they are. Okay?

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1 MR. BLAIR: Yes. I would say that I will
2 relate that ad nauseam.

3 JUDGE GIBSON: Okay. Okay, well, we may
4 cut you off if you try to do it ad nauseam. But let
5 me just ask you, you were, CASE was accorded standing
6 in a previous combined operating license case
7 involving Turkey Point. Is that correct?

8 MR. BLAIR: Yes. And I believe Mr.
9 Kennedy was here four years ago when that, Dr.
10 Kennedy, when that occurred.

11 JUDGE GIBSON: Counsel for the NRC Staff,
12 had the matters that are now before us been ripe for
13 adjudication at the time of the COL evidentiary
14 hearing, would CASE have standing to assert these
15 contentions?

16 MR. HARRIS: If I understand you --

17 JUDGE GIBSON: At that time?

18 MR. HARRIS: Are you asking to assert it
19 in the COL proceeding or --

20 JUDGE GIBSON: I'm saying had this been,
21 had this issue of the increase of temperature been
22 something you were aware of at the time that that --
23 oh, I'm sorry, they're different reactor units, I'm
24 sorry.

25 MR. HARRIS: Yes.

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1 JUDGE GIBSON: Forget the question, it was
2 a really bad one. I see what you're saying.

3 I do want to talk about the up-rate
4 though. CASE did not attempt to intervene during the
5 previous license amendment proceeding related to the
6 extended power up-rate, is that right?

7 MR. HARRIS: That's correct, Your Honor.

8 JUDGE GIBSON: Is it your position that
9 CASE through its members would not have had standing
10 to intervene in the extended power up-rate amendment
11 proceeding? It was an amendment?

12 MR. HARRIS: Yes, Your Honor, it was an
13 amendment. But are you saying based on proximity or
14 based on --

15 JUDGE GIBSON: Yes.

16 MR. HARRIS: I think we'd have to look on
17 it, I mean in terms of exactly what they were
18 submitting in terms of how they were challenging the
19 EPU. At this point, it would be hard to speculate
20 what they would have submitted then that would allow
21 me to fully answer that question. But even had they
22 had standing in the EPU proceeding or, you know, as
23 they do have standing in the COL proceeding is that
24 you have to show standing for each proceeding
25 separately.

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1 JUDGE GIBSON: Sure. And I appreciate
2 that fact. But you know, part of the problem is that
3 we don't ever want to get into segmentation, okay?
4 And had this increase in temperature, you obviously
5 figured this out after the power up-rate went up,
6 right? It may or may not be related to the power up-
7 rate but you eventually found out that the temperature
8 was going to have to be increased. Had you all been
9 aware of it at the time, you all could have put a
10 condition in the license as well at the time of the
11 up-rate that there would have been 104 instead of 100
12 degrees, and they could have submitted a contention at
13 that time.

14 Now, my only question is we don't want to
15 get into a situation where we're segmenting.

16 MR. HARRIS: I understand the question,
17 and I don't believe that the issue is segmentation.
18 I believe with the EPU, they even looked at what they
19 thought at that time based on the available
20 information how the cooling canals would react to that
21 increase in temperature load. And so, I don't believe
22 that they were expecting much change in the actual
23 cooling canals from that. So, using the best
24 available data at that time, they made a decision, you
25 know, they analyzed how the cooling canals would react

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1 to it.

2 If you are perhaps doing that now where
3 you're seeing these, you know, different temperatures,
4 it's different sets of facts that you'll be dealing
5 with.

6 JUDGE GIBSON: Sure. Well, of course it
7 is. And I appreciate, I'm not suggesting that you all
8 put 100 in there knowing it should have been 104. I'm
9 not suggesting that. I'm only trying to understand,
10 I know we have a dispute about whether the up-rate is
11 the cause of this increase in temperature or not. And
12 that's fine.

13 But my only real question is had you all
14 said, oh, we are also going to need 104 degrees in
15 that canal and they had challenged the up-rate, would
16 they have had standing? And that's my only question.

17 MR. HARRIS: If we'd known that you were
18 going to need 104 degrees in the canal at that time,
19 of course they could have tried to, you know,
20 challenge it from a standing perspective of whether or
21 not 104 degrees was safe, you know, that was an
22 allowable change to the way the cooling canal system
23 operated from a safety perspective. And of course,
24 you know, if you would have had a different kind of
25 accident, you know, resulting from that increase in

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1 temperature, some sort of different kind of
2 radiological exposure, then you could, you know,
3 probably show that you would have a proximity
4 presumption based on that as we talked about a little
5 bit earlier today.

6 Of course, if they could, for those same
7 things, you know, based on the way it's been argued
8 now about the saltwater intrusion, he could have still
9 made those same arguments. You know, from the narrow
10 scope of the 104 degrees, I don't think that, you
11 know, of allowing the cooling canal system to go to
12 104 degrees, that ties into the saltwater intrusion.
13 So, you know, those two things don't seem to be really
14 related to each other.

15 JUDGE GIBSON: Right, I understand your
16 question. Counsel for Florida Power & Light, you
17 filed a motion to strike in this proceeding. We'll
18 get to some of that later.

19 With respect to standing, my understanding
20 is that the Commission in the past has allowed
21 petitioners the opportunity to cure in the reply
22 potential standing defects that may have existed in
23 the petition. Would that practice negate your
24 arguments for striking at least those portions of the
25 reply that address standing?

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1 MR. BLAIR: To the extent that there are
2 attempts to address standing, yes, that may be
3 exempted. Our primary argument was to supplemental
4 information.

5 JUDGE GIBSON: Surely, I understand.
6 Thank you.

7 MR. BLAIR: Judge Gibson, if I may respond
8 to the question that you asked the Staff, I'd like to
9 respond.

10 JUDGE GIBSON: Sure, sure. Fair enough.

11 MR. BLAIR: I think that, it's our opinion
12 that CASE likely would have had standing to intervene
13 into the extended power up-rate simply by nature of
14 the amendment, right, it was to increase the power of
15 the reactor. And by definition, that's the source
16 term, therefore, the potential exposure in an accident
17 scenario. Those are the circumstances under which a
18 proximity presumption is enjoyed. So, this is exactly
19 consistent with the position of FPL and Staff here
20 today, that the proximity presumption, right, is
21 enjoyed by potential intervenors only under a narrow
22 set of circumstances.

23 Even had CASE, to answer the second part
24 of your question, even had CASE intervened in that and
25 if there had been a hypothetical request to raise the

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1 ultimate heat sink temperature contained within that
2 amendment, we would contend that none of CASE's
3 contentions would be admissible even in that
4 proceeding. In other words, we would go to part two
5 of our argument which is, you know, CASE's contentions
6 are still not admissible whether raised here or there
7 or somewhere else. They simply would have overcome
8 the standing part that they don't overcome here.

9 JUDGE GIBSON: Okay, fair enough. Do
10 other Board members have any questions about standing?

11 JUDGE KENNEDY: I do not.

12 JUDGE SAGER: Yes, just one. This is from
13 the CASE petition, page 4, down about the middle. In
14 a sort of summary, it says, "Further determination of
15 standing is based on three requirements: injury,
16 causation and redressability. CASE hereby requests to
17 be made a party to proceeding because: (1) drawing
18 excessive water from the aquifer presents tangible and
19 particular harm to the health and well-being of the
20 co-petitioners," and then it goes on. And then number
21 2 is about the Commission authorization. Number 3 is
22 about the Commission being a sole agency.

23 So, in the standing, in this paragraph, it
24 says that withdrawal of water is what the argument is
25 about. Would you care to comment on that? Because

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1 what I've heard is a lot of other things.

2 MR. WHITE: As I said, it's all about
3 freshwater. FPL in its reply to CASE never mentioned
4 freshwater except in a footnote to some other
5 reference. They always refer to the water being
6 withdrawn as saltwater. And as I stated in my notes
7 before, by state standards and by Miami Dade County
8 standards, it's freshwater. And that freshwater
9 withdrawal is exactly what is threatening saltwater
10 incursion, in addition, as with their other concerns.

11 So, I'm not sure I answered your question.
12 It's not just the active withdrawing of the water.
13 It's the nature of the Biscayne aquifer, it's the
14 nature of the area. It's the impact which I will
15 relate as we mentioned to the up-rate. And as the
16 charts I handed out will show, there is apparently a
17 causal relationship.

18 JUDGE KENNEDY: Just one follow-up
19 question, and I think I'm losing my way with
20 freshwater, potable water, saltwater. If we look at,
21 staying with the standing argument, the withdrawal
22 that FPL is making, where is that water being, what
23 specific areas is that water being withdrawn from that
24 you're concerned about?

25 MR. WHITE: To my, okay, there was a

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1 withdrawal that's completed, that was authorized of
2 100 million gallons a day. That was an emergency,
3 that was part of the emergency permission they got
4 following their notification, I believe, in June and
5 July that there was a problem. So, that came from the
6 L31E canal. Our contention is that they characterized
7 that as saltwater. We're saying that it was
8 freshwater.

9 The other withdrawals, they are authorized
10 14 million gallons a day withdrawal, and you can
11 correct me if I'm wrong, gentlemen, from the Floridan
12 aquifer. You're familiar, you know, where that is
13 please?

14 JUDGE KENNEDY: Yes, it's in your Exhibit
15 1, I believe.

16 MR. WHITE: Thank you. Okay, that's the
17 second level aquifer separated from the Biscayne
18 aquifer by a confining layer. So, that's one 14
19 million gallons a day they have that they can use.
20 They were authorized another 14 million gallons a day
21 as part of the relief for the current situation. I
22 think they said they haven't used any or much of that,
23 also from the Floridan aquifer.

24 Just to be clear, what they did use, I
25 believe, was 5 million gallons a day from the Floridan

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1 aquifer which was part of their authorization for Unit
2 5. Okay? So, in terms of potable, fresh, and
3 seawater, potable water would have a conductivity of
4 around 250. Freshwater would have a conductivity
5 under 500. And seawater is in the magnitude of
6 35,000. So, the difference between freshwater and,
7 I'll say saltwater, saltwater would be 35,000. So,
8 for FPL to characterize the water that they withdrew
9 as saltwater when saltwater would be 35,000 units and
10 the water they're withdrawing is 500 units or less,
11 that presents a real problem to us because that
12 freshwater is what's holding back the saltwater, the
13 intrusion of water from the canals and from the ocean.

14 You must understand also that nearly part
15 of this last century they cut canals all over this
16 area. And it was the cutting of those canals
17 initially to drain the Everglades so they could build
18 on them which today we're spending tens of billions of
19 dollars to correct. So, that was the real first cause
20 of the problems with freshwater in the area.

21 JUDGE KENNEDY: So, if I understand your
22 causality argument, the drawing of this freshwater is
23 increasing the intrusion of salt into the freshwater?

24 MR. WHITE: Yes. Partly, it's part of our
25 argument.

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1 JUDGE KENNEDY: Part of the, at least the
2 part that we went through.

3 MR. WHITE: Yes, please.

4 JUDGE KENNEDY: All right. Is FP&L the
5 only entity that's drawing water from these freshwater
6 sources?

7 MR. WHITE: For this, for energy
8 production purposes, yes. You should know, as I
9 mentioned before, that if they decide to go into the
10 Floridan aquifer, which I think might have already
11 been approved in the administrative order which just
12 came down within the last month, that statute requires
13 that any further withdrawal from the Floridan aquifer
14 which is the second level does require respecting the
15 rights and prior rights of all parties who are already
16 drawing from that aquifer. For example, you have a
17 coral reef, is it, Michael, to the south?

18 MR. HATCHER: Ocean reef.

19 MR. WHITE: Ocean reef to the south. They
20 withdraw their water from the Floridan aquifer as does
21 the city of Hialeah as I believe. As I understand it,
22 the FPL has been authorized to sink six wells, if
23 that's the number, into the Floridan aquifer for use
24 of that water to mitigate the situation in the canal.
25 The problem with that is the flow of water through the

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1 porous substrate we call oolite down here which is
2 limestone is not confined. The cooling canals were
3 dug into freshwater marsh, 6,100 acres of it.

4 As a compromise, if you remember, when
5 they build the 3 and 4 initially, they said, hey, wait
6 a minute, we killed 500 acres of sea grass, so they
7 came up with a compromise to the other cooling at that
8 time and built the cooling canals about 1973 of 6,100.
9 That seems a little bit of a question to us why you
10 would destroy 6,100 acres to save 500 acres, but
11 that's what they did. And as I'll explain later, that
12 was a great experiment.

13 Does that make any of it clearer?

14 JUDGE KENNEDY: Yes, that's good. Thank
15 you.

16 MR. WHITE: Thank you.

17 JUDGE GIBSON: You mentioned that there
18 were a lot of canals that were dug in the last
19 century, drained the Everglades, developed the area
20 and all that. Obviously, we're not here, you know,
21 that may be a tragic circumstance but there is not a
22 whole lot we can do about what happened then. We are
23 focused on something that is much more narrow here,
24 and you do appreciate that I hope, sir?

25 MR. WHITE: Absolutely. That was just by

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1 way of background.

2 JUDGE GIBSON: Okay, thank you. Anything
3 more on standing?

4 JUDGE SAGER: No.

5 JUDGE GIBSON: Okay. Mr. White, I would
6 like to turn to your contention number 1. And in this
7 contention, you are challenging Florida Power &
8 Light's claim that the rise in the cooling canal
9 system temperature and salinity has been caused by
10 heat and a lack of rainfall. Is that right?

11 MR. WHITE: Exactly. Only by that.

12 JUDGE GIBSON: And contrary to their
13 position, you're claiming that this increased
14 temperature and salinity can be traced to the up-rate
15 for Units 3 and 4 that the NRC approved in 2011 that
16 you did not challenge, is that correct?

17 MR. WHITE: Correct.

18 JUDGE GIBSON: Counsel for Florida Power
19 & Light, in your answer you argue that this contention
20 is untimely because it really is a challenge not to
21 this most recent license amendment but to license
22 amendments issued by the NRC in 2011 that granted up-
23 rate to Unit 3 and 4, is that correct?

24 MR. HAMRICK: That's correct.

25 JUDGE GIBSON: Now, I could understand

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1 your position better if CASE simply said, NRC, you
2 should not have granted this up-rate. That sounds
3 like, oh, gosh, we forgot to do that, we forgot to
4 challenge that and we're going to try to, you know,
5 unscramble the egg now by challenging this now. It
6 sounds to me like what CASE is saying is a little more
7 subtle than that, and we'll flesh out some of Mr.
8 White's arguments in a minute, but I think it's
9 something like this. Significant environmental
10 problems have arisen since the up-rate, no one
11 identified those problems in conjunction with the up-
12 rate, and now that those problems have been
13 identified, the National Environmental Policy Act
14 requires a more robust discussion of them than the NRC
15 has given, and ultimately the license amendment may
16 require modification.

17 So, without getting into the merits of the
18 dispute, do you agree with that characterization?

19 MR. HAMRICK: No, Your Honor, I do not.

20 JUDGE GIBSON: Why?

21 MR. HAMRICK: The first point is that I
22 don't believe anywhere in CASE's petition does it
23 mention the National Environmental Policy Act. I may
24 be incorrect on that, but certainly in contention 1 it
25 does not, there is only one citation to the NRC's

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1 environmental assessment and I believe it's referred
2 to as Docket ID 2014-something. There is no specific
3 citation to the EA, no reference, you know, here is
4 what the EA says and here is why, you know, why the EA
5 is inadequate.

6 So, in order to, their claim is simply the
7 EPU caused problems. What they need to do is to show
8 why that's within the scope of this proceeding, why
9 it's material to this proceeding. Had they said the
10 EA is inadequate because it fails to comply with NEPA
11 by failing to address or failing to adequately address
12 these certain issues, that might be an admissible
13 contention. What they have said is they simply
14 directly challenge that the EPU caused these problems,
15 period.

16 And in addition, going to, you know, the
17 harm caused by the EPU, if you look at this particular
18 chart that Mr. White put up and several of the
19 exhibits to his, you know, this shows saltwater
20 intrusion in 2009 to 2011.

21 JUDGE GIBSON: When you say this, you're
22 referring to the 2011 South Miami Dade Salt Intrusion
23 Map?

24 MR. HAMRICK: Yes, you know, things that
25 show evidence predating these issues, predating the

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1 EPU.

2 JUDGE GIBSON: Hold on. Mr. White, by the
3 way, when this is over, is this ours?

4 MR. WHITE: If you like, sure.

5 JUDGE GIBSON: Okay. We may want to take
6 it just so we can use it for reference. It's a little
7 hard, believe it or not, to make a reference in an
8 order whether we deny or admit the contentions when we
9 are talking about what you said about a map that no
10 one can see who is reading the order.

11 MR. WHITE: I believe I can have that map
12 sent to you by e-mail if you like.

13 JUDGE GIBSON: That's, as long as you send
14 it to the other parties, I'm sure that will be,
15 they'll all appreciate that.

16 MR. WHITE: Yes, we can do that.

17 JUDGE GIBSON: Okay. Finish, I'm sorry.
18 I just wanted to be sure he knew.

19 MR. HAMRICK: Right. Mr. White's exhibits
20 and the ones that he handed out as well, his Exhibit
21 1, a lot of that data, you know, precedes the up-rate.
22 So, it's kind of two different arguments, one is a
23 procedural argument of it doesn't meet the NRC's --

24 JUDGE GIBSON: Contention admissibility
25 standards?

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1 MR. HAMRICK: Right, because of not, you
2 know, referencing the EA and identifying specific
3 issues. The other is just substantively, if you're
4 trying to challenge the EPU which we think you can't
5 do, providing data from before the EPU is not the way
6 to go about doing it.

7 JUDGE GIBSON: Any follow-up on that?

8 JUDGE SAGER: Yes, please. Just because
9 we're talking about that subject, you say in your
10 reply that they did not refer to the EA, and I believe
11 you mean the EA for this amendment, is that correct?

12 MR. HAMRICK: That's correct.

13 JUDGE SAGER: But I believe what they do
14 is refer to it and they say that salinity was not
15 mentioned. Is that correct, Mr. White?

16 MR. HAMRICK: Right, yes. That's the,
17 they didn't refer to NEPA though there is the one
18 citation to the EA where they say that the saltwater
19 intrusion issue is not mentioned. And you know,
20 there's two responses to that. The first is, you
21 know, the EA is focused on the license amendment, the
22 increase from 100 to 104 degrees, there is no evidence
23 that that, you know, caused saltwater intrusion. That
24 preceded 2014 obviously. And the other is that, you
25 know, the issue is addressed in the cumulative impact

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1 section where we talk about other issues unrelated to
2 this license amendment, and that's where the
3 administrative order that Mr. White referenced earlier
4 is discussed and the requirements for FPL to mitigate
5 salinity in the cooling canals. That's where that's
6 discussed in the EA.

7 JUDGE SAGER: Okay, thank you.

8 JUDGE KENNEDY: Maybe this is a good
9 opportunity to address a question to the Staff.
10 Speaking of the EA, and in light of Mr. White's
11 arguments about the drawing away of freshwater from
12 the aquifers having an impact or enhancing saltwater
13 intrusion, does the EA address the impacts on
14 groundwater resources? If that's the appropriate
15 term.

16 MR. HARRIS: The EA does address both the
17 withdrawal of the waters and the chemical treatments
18 that are put into the canal. I believe in CASE's
19 petition, since we are talking a little bit about the
20 citation to it, the one mention is that none of those
21 issues are discussed in the amendment but the EA
22 itself actually went through discussing both the water
23 withdrawals and the chemical treatments that were
24 authorized by the state of Florida, and concluded that
25 there was no environmental impact. There was a

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1 finding of no significant impact as a result of the
2 EA.

3 As a part of that, there is also the
4 biological assessment that was done for the American
5 crocodiles, too, that is, you know, is done in part of
6 consultation with the Fish & Wildlife Service.

7 JUDGE KENNEDY: I'm doing this from memory
8 but it seems to me that the EA credited the aquifer
9 withdrawals as a positive impact on the cooling canal
10 and having no negative impact on groundwater or
11 surficial water resources.

12 MR. HARRIS: Your memory is correct, Your
13 Honor.

14 JUDGE KENNEDY: Well, can you help us
15 understand that issue in light of Mr. Case's long
16 discussion under the standing argument?

17 MR. HARRIS: Well, with the standing
18 argument, and some of this I think goes back to the,
19 in the reply talking about, you know, whether it's
20 freshwater, saltwater, potable water, is I believe
21 we're at the withdrawals are being done and the map is
22 a little small, but sort of the dividing line for
23 where the saltwater is is beyond Turkey Point where
24 those withdrawals are being done. So, you're dealing
25 with the Floridan aquifer which is brackish, so it's,

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1 you know, it's not fresh, it's not salt, it's
2 somewhere in between. And I believe the Biscayne
3 aquifer where the withdrawals are being done actually
4 has salt, really at saltwater at that point.

5 So, they're withdrawing from the salty
6 portion of the aquifer, not from the freshwater
7 portion of the aquifer.

8 JUDGE KENNEDY: I guess, you know, I think
9 Mr. Case would encourage us to try to stay away from
10 this discussion of the type of water. I think what I
11 hear him indicating is that the withdrawal of water
12 from the aquifers, and I believe we're talking about
13 the Biscayne aquifer and the lower Floridan aquifer,
14 is causing a negative impact on saltwater intrusion.
15 But yet the EA makes no, in fact as I understand it,
16 it would indicate there is no impact on groundwater
17 resources which just seems like a big impact.

18 MR. HARRIS: Now, the EA is, there is a
19 finding of no significant impact. It doesn't mean
20 that there is not some small impact.

21 JUDGE KENNEDY: Okay.

22 MR. HARRIS: It's that there is no
23 significant impact on the groundwater resources from
24 that withdrawal at those locations. You know, it did
25 account, it did, you know, look at those withdrawals.

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1 And yes, it did find that that would be beneficial for
2 the cooling canal system, that it would reduce some,
3 you know, some of the temperature and salinity issues
4 that have arisen. I believe Mr. White mentioned a
5 recent order, I think it was towards into December
6 where the state of Florida is mandating this sort of
7 to try to withdraw more water to try to address some
8 of those issues from, and I would have to defer to
9 FPL, but I believe from the Floridan aquifer. I'd
10 have to go double check that, where they're
11 withdrawing from.

12 JUDGE KENNEDY: Let me see if I need to
13 correct my misstatement. Is it your position, is
14 Staff's position that the impacts on groundwater
15 resources were considered, but that there was no
16 significant impacts to the groundwater resources?

17 MR. HARRIS: That's correct, Your Honor.

18 JUDGE KENNEDY: And the groundwater
19 resources we're talking about, and you're going to
20 have to help me here, maybe FP&L will have to help,
21 I'm trying to connect them to the resources that CASE
22 is concerned about and their constituents. I guess
23 I'm struck with trying to make sure we're talking
24 about the same groundwater resources.

25 MR. HARRIS: Let me just look at the EA

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1 for just a second, Your Honor.

2 MR. HAMRICK: I'd happy to assist with
3 that.

4 JUDGE KENNEDY: FP&L?

5 MR. HAMRICK: It's important, I guess for
6 context, to realize what the NRC Staff did in its
7 environmental assessment was to reference the fact
8 that the Florida Department of Environmental
9 Protection I guess is on the case, so to speak.
10 They're looking at this issue and what they described
11 was an anticipated administrative order to address
12 this saltwater intrusion issue. So, and as has been
13 said, on December 23rd, that administrative order was
14 issued. What it does, for your reference, is requires
15 FPL to come up with a salinity management plan that
16 within, I believe it's four years, will return the
17 cooling canal system to the salinity of basically
18 seawater, about 34 ppt.

19 And so, to the extent, the administrative
20 also does not authorize any water withdrawals. It
21 tells us, the FPL, you have to return the water to
22 seawater level, here's a number of ways you can do
23 that, but you have to go get those permits from the
24 appropriate regulatory agencies. So, the FDEP kind of
25 takes the position that these withdrawals will be a

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1 good thing because we're going to order you to do it,
2 but each individual withdrawal, you have to get a
3 permit from the regulatory authority. So, the
4 saltwater intrusion concept is being handled by the
5 local regulator, and the NRC described that in the EA
6 to handle that issue.

7 The particular sources that were described
8 include the Biscayne aquifer which, if you look at the
9 Staff's answer, one of their exhibits is the, I
10 believe it's Attachment B to the Staff's answer,
11 describes the proposed or the authority for the South
12 Florida Water Management District to take water from
13 the Biscayne aquifer. This is, you know, basically on
14 the peninsula at Turkey Point. The Water Management
15 District says basically we don't have jurisdiction
16 over this because it's saltwater, because it meets the
17 definitions of saltwater. So, that, I think
18 unquestionably by the regulator, that would be a
19 saltwater withdrawal.

20 The other withdrawals that have been
21 discussed and were discussed, the Unit 5 allocation
22 from the Upper Floridan aquifer which is brackish has
23 been described, and the proposed additional 14 million
24 gallons a day from new wells into the Upper Floridan
25 aquifer which are also brackish. And the L31 is one

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1 of the options that has been described in the
2 administrative order as an option FPL can seek under
3 the permit, but again we need to seek another permit
4 from the regulator for that.

5 JUDGE KENNEDY: Mr. White, would you care
6 to offer any additional comments to what you've just
7 heard?

8 MR. WHITE: I disagree with Counsel's
9 characterization of the water as I said before. South
10 Florida Water Management District, interestingly,
11 classifies freshwater as under 250 units. But the
12 state and the Miami Dade County have a threshold of
13 500 units. The South Florida Water Management
14 District's characterization of it at 250 is generally
15 accepted as potable water. At 250 microsiemens, you
16 can drink that water. At 500, you can't drink it
17 directly, it needs a little treatment or you're going
18 to have some stomach problems.

19 So, in fact I just saw the chart yesterday
20 that showed that South Florida Water Management
21 District standard is 250. And that surprised me a
22 little bit because, and you can think of the
23 implications of that, I don't want to get into
24 polemics, but it doesn't square with the state or the
25 local. And it's the Miami Dade County people who

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1 would be issuing the permit, and I believe it's their
2 standard that will prevail.

3 JUDGE SAGER: If you don't mind, I had
4 some questions about the aquifers. It seems like an
5 appropriate time to address it unless you're --

6 JUDGE KENNEDY: I guess I want to make
7 sure we come back to the Staff if they were able to
8 find what they were looking for in the EA.

9 MR. HARRIS: The way the EA, you know, is
10 structured, it's really looking at the license
11 amendment that's being done. So, it was concentrating
12 mostly on the CCS and, you know, it didn't go into a
13 lot of details of the surrounding surface waters in a
14 full and complete discussion. It did conclude though
15 that, you know, that there is likely to be very little
16 impact from those withdrawals on the surface waters.
17 It's on page 9 of the EA.

18 JUDGE KENNEDY: Yes, it seems to me that
19 the EA opens the door when it addresses the
20 withdrawals and then counts it as a plus. And I guess
21 I wasn't sure whether --

22 MR. HARRIS: Well, Your Honor, that's part
23 of what the Staff has to do when it looks at any
24 license amendment. It needs to look at all the, you
25 know, the potential environment impacts. I mean, it's

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1 not limited to just, we have to look at all, you know,
2 the environmental impacts that, you know, are
3 currently ongoing, cumulative from other actions,
4 authorized by other agencies.

5 So, that's part of, the Staff is always
6 going to have to look at those particular issues when
7 they do any sort of, when you get to an EIS, you're
8 doing it all at an EA. It's, you know, more short,
9 discreet but you're still trying to, you know, account
10 for those impacts. That's why they addressed the
11 state of Florida's chemical treatments, the
12 authorization for the chemical treatments. That's why
13 they addressed the aquifer withdrawals.

14 JUDGE KENNEDY: So, I'm not wrong in
15 saying that the aquifer withdrawals was viewed as a
16 cumulative effect in the EA?

17 MR. HARRIS: It was considered in the EA
18 in what impact it would have.

19 JUDGE KENNEDY: Thank you.

20 JUDGE GIBSON: Before you ask that
21 question, Judge Sager, I just want one thing to be
22 clarified in the record. I think that Judge Kennedy
23 was asking a question and referred to Mr. Case, I
24 think he meant to refer to Mr. White.

25 JUDGE KENNEDY: Sorry.

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1 JUDGE GIBSON: Of CASE. And I just didn't
2 want to record to be confusing because I don't think
3 there is any Mr. Cases present. Yes, Judge Sager?

4 JUDGE KENNEDY: We just haven't met him
5 yet.

6 JUDGE SAGER: Okay. Thank you, Judge
7 Gibson. I had some questions about the aquifers, and
8 since we've been bandying about some terms about them,
9 I want to try to see if I can get us all on the same
10 page. So, I don't, I know of aquifers but not about
11 this one in particular, and we've heard that the
12 Biscayne aquifer is at the top and the Floridan is
13 somewhere underneath it.

14 Since you have brought up most of the
15 issues, Mr. White, maybe I'll let you explain and then
16 ask the other parties if they have any disagreement
17 about that. Can you tell me about the depth and
18 extent of the Biscayne aquifer? And likewise, of the
19 Floridan aquifer? Do they go on forever? Is it all
20 underneath Florida? Or is it a local area?

21 Also, I think you mentioned at some point
22 in either the, I think it may have been the reply,
23 that if you can see it, it's in the Biscayne aquifer.
24 So, if you could tell us about that? I think it would
25 help us all understand.

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1 MR. WHITE: Okay. Remember, I'm a layman
2 not a scientist, but I will explain as I understand
3 it, and I would ask the other parties to jump in and
4 help with the explanation also.

5 As I understand it, the Biscayne aquifer
6 begins in at least Northern Florida, maybe farther,
7 and extends all the way down the peninsula. In fact,
8 there is some great video of people swimming, God
9 bless them, through the Biscayne aquifer with scuba
10 gear for miles and coming up in a spring in Northern
11 Florida. I wouldn't do that for a million dollars.
12 So, it extends the whole way.

13 And those parts of it are water that you
14 can see, but most of it is contained in porous rock,
15 limestone. And it's that limestone that, there is a
16 surface water, I mean a thin layer that varies from I
17 think 20 to 100 feet, 120 feet, depending on where you
18 are, and then below that you have about 100 average,
19 20 to 130 miles I understand of limestone. And as it
20 flows through that limestone, it's filtered, so when
21 it gets down here, you have freshwater. That's what
22 Marjory Stoneman Douglas referred to as the 'river of
23 grass.' It takes I think about two months for the
24 water to flow down the peninsula and reach the
25 Everglades here with freshwater, and then it used to

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1 flow into the, through the peninsula out into the bay
2 and create the estuary for sea life right off the
3 coast here which is now Biscayne National Park.

4 So, in this area, so you have the Biscayne
5 aquifer simplified like that. Then you have a hard
6 layer, what they call a confining layer and which is
7 about 30 miles, something like that nominally? You
8 don't know, okay. So, and I do have a chart I could
9 show you.

10 But then below that, you have the Floridan
11 aquifer which I explained before has a salinity and a
12 range from 1,000 to 3,000. And remember, compare that
13 to saltwater which is 35,000, so it's slightly
14 brackish. And it's still, for our purposes, the state
15 standard, remember, is 1,275. So, 1,000 is the
16 minimum, a good percentage of that water is freshwater
17 and then some, but for our purposes in terms of the
18 available to hold back saltwater, now the Floridan
19 aquifer is down pretty far and I'm not so sure quite
20 honestly that that is critical to holding back
21 saltwater. But the nature, and what you really, when
22 you ask how far does it extend, I personally don't
23 know, but for our purposes, it's huge. It covers the
24 whole area.

25 And the studies that I've seen, when they

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1 trace the waters flowing through the aquifer, they
2 used to think it was like, it goes everywhere. When
3 you start pulling water out, putting water in, putting
4 water in the bowler zone, we always talk, there is a
5 saying around here, if you want to get rid of the
6 water, put it in the bowler zone which is below the
7 Floridan aquifer. Just you can't see it, so why worry
8 about it? Our joke is it's going to come back, you're
9 going to see that water coming back up somewhere.

10 And so, it's a fluid system. It does have
11 some separations but it is not contained.

12 JUDGE SAGER: Well, so, it would be
13 contained on the sides by saltwater because the
14 saltwater is intruding you're saying?

15 MR. WHITE: Out pretty far, yes, to the
16 east. To the west into here, the Everglades are all
17 freshwater. The average salinity in the Everglades is
18 about 400. So, it's all, by our standards,
19 freshwater. And if you think about it, the wells at
20 my house draw water from the Biscayne aquifer, water
21 my plants. I couldn't do that with saltwater. The
22 water for Mr. Hatcher's crops and trees, they draw it
23 from the Biscayne aquifer. They couldn't do that if
24 it was saltwater.

25 So, it is freshwater.

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1 JUDGE SAGER: Okay. Let me ask for a
2 clarification. So, there is a barrier between the
3 Biscayne and the Floridan aquifer.

4 MR. WHITE: Yes, sir.

5 JUDGE SAGER: But is there a barrier
6 between the surface water and the Biscayne aquifer?
7 Because --

8 MR. WHITE: No. It's all the same.

9 JUDGE SAGER: So, is --

10 MR. WHITE: What you see, you go outside
11 and any water you see here, any canal is Biscayne
12 aquifer, and the average salinity is going to be
13 around 400.

14 JUDGE SAGER: Let me ask Staff and then
15 I'll ask the Applicant if you have any illumination or
16 contradiction or any other comment.

17 MR. HARRIS: Your Honor, I might be able
18 to add to the description and see if I can, you know,
19 the Biscayne aquifer is an unconfined aquifer. It's
20 about, it underlies an area of about 4,000 square
21 miles in Southern Florida. It does contain both fresh
22 and saltwater as any sort of aquifer, especially, you
23 know, around the coastline is that you do get
24 saltwater intrusions. And you know, I don't think
25 that there is any dispute that freshwater, you know,

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1 helps to keep that saltwater from intruding farther
2 inland.

3 But the Biscayne aquifer, there's a lot
4 of, you know, natural discharges and withdrawals, you
5 know, throughout as Mr. White has mentioned. You
6 know, and all those withdrawals, you know, from the
7 freshwater sources are also allowing saltwater to
8 intrude farther, so it's not, you know, withdrawals
9 from the saltwater. I believe, most recently, the US
10 Geological Survey report, you know, has determined
11 about 750 square miles of the Biscayne aquifer
12 contains saltwater. I haven't looked at exactly, I
13 have not looked at how the USGS qualifies saltwater in
14 that, you know, whether or not we're talking about
15 seawater levels or just elevated salt levels.

16 With respect to the Floridan aquifer, just
17 to, you know, have a full description of it, it
18 underlies and area of about 100,000 square miles. It
19 goes up into Georgia, Alabama, South Carolina, and
20 then all of Florida. You have both an upper and lower
21 Floridan aquifers that of course as we talked have the
22 confining unit that keep it away from the Biscayne
23 aquifer. But even with the Floridan aquifer, there
24 are parts of it that contain freshwater, other parts
25 of it that have, you know, saltwater. I believe the

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1 upper aquifer is a principal water source for most of
2 North and Central Florida. It's deeper. Brackish
3 water is really what's underneath the Southern
4 Florida.

5 JUDGE SAGER: And let me clarify that
6 point also. Is the plant currently, underneath the
7 plant it would be saltwater, correct? If I am correct
8 about this map because it looks like the saltwater has
9 intruded beneath the plant?

10 MR. HARRIS: That's my understanding of it
11 is that, you know, withdrawing saltwater from brackish
12 or salt, you know, so not freshwater. Regarding water
13 with elevated, it may not be at seawater levels but
14 it's definitely higher than the freshwater we've been
15 talking about before.

16 JUDGE SAGER: Right, which was another
17 point that I was curious about because withdrawing
18 saltwater to remedy the salinity doesn't seem like a
19 very good idea.

20 MR. HARRIS: For that, the issue is
21 whether or not the water you're withdrawing is less
22 than the salinity that's in there. So, you can still
23 address a lot of the salinity issues even though
24 you're withdrawing water that has elevated salinity.
25 They're trying to get to the Biscayne Bay salinity as,

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1 you know, sort of where they're going to. Of course
2 that's a brackish water, of course, so, you know, you
3 just need to be adding water that's less saline than
4 the water that's currently there.

5 JUDGE SAGER: Applicant, do you have
6 anything to add?

7 MR. HAMRICK: I think that
8 characterization is correct. And again, that's part
9 of the order that we're under from the FDEP. They
10 recognize that you can mitigate a hyper-saline
11 environment with still water that has an elevated
12 saline concentration.

13 JUDGE SAGER: Thank you.

14 JUDGE GIBSON: Judge Kennedy, do you have
15 anything more?

16 JUDGE KENNEDY: No, I'm good.

17 JUDGE GIBSON: Okay. Mr. White, you
18 indicated in response to my question about standing,
19 that it would be, you would have some things you
20 wanted to add when we talked about contention 1 that
21 would have a bearing on the standing of CASE. What
22 else is there that we have not already heard if
23 anything with respect to contention 1 and standing?

24 MR. WHITE: Well, I have a statement on
25 that.

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1 JUDGE GIBSON: If it has to do with
2 standing, I want to hear it. If it doesn't --

3 MR. WHITE: Before I get into this, I'm
4 trying to see if I can, without making a mistake
5 speaking extemporaneously on a complex subject --

6 JUDGE GIBSON: You seem to have done quite
7 well, Mr. White, when you've talked extemporaneously.
8 So, why don't you just tell us?

9 MR. WHITE: The, as we said that there's
10 a financial aspect to this, there's, the concerns
11 would be that it could affect us financially, affect
12 our health, our safety. Nobody in this area thinks
13 that Turkey Point 3 and 4 are going to explode. But
14 it's the operation of the units and the way they
15 impact the area, and that's where our focus is. And
16 to the extent that, in this particular case, FPL has
17 said the only factors that they think are extant are
18 temperature, the ambient temperature and the lack of
19 rainfall.

20 CASE members who are a little more
21 informed say that the up-rate, as I will explain in
22 contention 1, was a major factor in the, remember,
23 we're only, we came into this game, we didn't oppose
24 the up-rate at that time. The only reason we came
25 into that is because there was an emergency, a

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1 declared emergency which the NRC public announcement
2 of it in print said it was due to, what was their
3 phrase? They didn't say environmental, they said --
4 wait, let's see if I can get that term. I had the
5 thing here. But they said it was not related -- I'm
6 sorry, let me see if I can find that exact statement.
7 I printed it out.

8 Well, I'll go on with that, I'll find out
9 later. But my point is --

10 JUDGE GIBSON: You did not challenge the
11 up-rate.

12 MR. WHITE: We did not challenge the up-
13 rate. What we are challenging --

14 JUDGE GIBSON: And what you said, you got
15 into this deal because of a statement that came out
16 from the NRC, that there was some sort of an
17 emergency, is that correct?

18 MR. WHITE: They posed it, yes.

19 JUDGE GIBSON: And that raised concern
20 among CASE members, is that what you're saying?

21 MR. WHITE: Exactly. Exactly.

22 JUDGE GIBSON: Okay. And so, you did some
23 investigation, is that what you're saying?

24 MR. WHITE: Correct.

25 JUDGE GIBSON: Okay. And then you

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1 concluded that this emergency, what?

2 MR. WHITE: Was an event waiting to
3 happen, partly. That, number 1, I'll show in the
4 notes that it had been accumulating as a base since
5 the creation of the canals. I have a chart that shows
6 salinity increasing at a linear rate, started in 1973
7 through 2013.

8 JUDGE GIBSON: And it doesn't sound, by
9 the way, that anyone here is disagreeing with you that
10 there has been an increase in salinity in that canal.
11 I think the question is, and the challenge for you
12 that we're giving you is how do you tie that to what
13 we are here for today, which is a relatively narrow
14 amendment to this license?

15 MR. WHITE: I would submit that by not
16 addressing, by FPL not addressing the situations
17 reflected in our Exhibit 1 which show extraordinary
18 increases in all factors related to the canal
19 following the up-rate to a factor in one case of 1,200
20 times stronger, the salinity, the tritium was 1,000.
21 The tritium level historically was almost at zero.
22 Following the up-rate, the tritium levels went from
23 zero to 400 in June, September they were at 800,
24 December they were at 900, March 13th they were at
25 1,200.

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1 JUDGE GIBSON: And these are post up-rate
2 numbers?

3 MR. WHITE: Exactly.

4 JUDGE GIBSON: Okay. And so, these, are
5 these, now I want to make sure I understand what
6 you're saying, Mr. White, are you saying that these
7 are caused by the increase in temperature? Or are you
8 saying they are environmental issues that were the
9 result of the up-rate but that were not flagged at the
10 time the up-rate occurred? See, what I'm trying to
11 understand is we are here because there is an
12 amendment that would increase the ultimate heat sink
13 from 100 to 104 degrees Fahrenheit. And it sounds
14 sort of the, what I'm kind of hearing you say is, and
15 I don't want to misunderstand you now, Mr. White, but
16 what I'm sort of hearing you say is, you know, when we
17 saw that, when we got, we weren't worried about the
18 up-rate when it came out. It didn't raise any alarms
19 for us. We didn't, it didn't make any big deal. But
20 since that's happened, since the up-rate has happened,
21 there have been some environmental things that have
22 happened and more than just this temperature.

23 And that, and so we're trying to
24 understand. Are you saying that it turns out that the
25 environmental assessment that the Staff made at that

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1 time was lousy, didn't cover the things it should
2 have? Or are you saying that just the temperature
3 itself is causing all these problems? That's what
4 we're wrestling with up here, Mr. White, and that's
5 what we need help from you on.

6 MR. WHITE: I appreciate it. If I may, I
7 have a statement on addressability which might answer
8 why we think --

9 JUDGE GIBSON: Addressability on the?
10 Okay, okay, that's fine. We would like to hear about
11 redressability.

12 MR. WHITE: Regarding the possible effect
13 of any decision or order that may be issued in the
14 proceeding on the requester's/Petitioner's interest,
15 CASE contends that it is possible, as CASE stated in
16 its reply to FPL and the NRC Staff at 25 and 26, and
17 I must say I can skip this, this quotes the final
18 judgment which was denied by, was challenged by FP&L.
19 I can skip that.

20 JUDGE GIBSON: Okay.

21 MR. WHITE: If you prefer.

22 JUDGE GIBSON: That's fine, you don't need
23 to read us a long quote.

24 MR. WHITE: So, CASE contends that the NRC
25 does have the authority and the obligation to assure

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1 that the Turkey Point reactors are not only operated
2 safely in energy production, but that the reactors
3 cause no harm to the land being used or to the
4 population being served. CASE holds that this cannot
5 be delegated or ignored. Ultimate responsibility
6 resides with the NRC. And it was the NRC which sought
7 input from the public in this matter. It does appear
8 that a bifurcated system has evolved where FDEP has
9 responsibility without authority, and the NRC has
10 authority without responsibility.

11 I can explain it further if you like, if
12 it's not clear.

13 JUDGE GIBSON: No, no. I think, no, I'm
14 sorry, I think that is clear. I think that is clear.

15 MR. WHITE: So, and what we're saying is,
16 in their response, FPL and NRC Staff, it's this kind
17 of thing, it's their responsibility while, excuse me,
18 the DEP controls the land and they only can address
19 issues concerning the land. But if it turns out that
20 the problem is being caused by something in the
21 reactors like the up-rate, they don't have the
22 authority, I understand that some way they may have
23 the authority but in practice they don't use that.
24 And the reverse, the NRC controls the reactor and they
25 have delegated their authority to the DEP to look

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1 after how it affects the land and the people.

2 Well, going back to the 1954 and the 1974
3 acts that created the NRC and its predecessors, it's
4 all assigned to the NRC. The DEP didn't exist. So,
5 that final authority, as far as we're concerned, is
6 with the NRC. If you delegated it, then you delegated
7 authority without responsibility, and that is a
8 formula for disaster.

9 JUDGE GIBSON: Mr. White, I appreciate the
10 description you've given. We're going to take a break
11 now, but I just want to say one thing before we do
12 take a break.

13 It is important for the NRC to study
14 environmental impacts. That's one of their things
15 they're responsible for doing under the National
16 Environmental Policy Act. And it's important for them
17 to look at all of the things that may happen, not just
18 the things over which they have responsibility,
19 whether it's, you know, historic sites or whether it's
20 water quality or whatever it is. Even if it may not
21 be their specific responsibility, another agency for
22 example has primary responsibility, they are charged
23 with studying all of those environmental impacts. And
24 so, whether they've done that or not is another
25 matter. But I at least want you to know that that is

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1 the way the process is supposed to work.

2 And so, we're going to take a break now
3 and we will come back in a few minutes. I'm sorry,
4 Judge Sager has something else. I'm sorry.

5 JUDGE SAGER: Yes. Before we do that, you
6 were asking a question and I don't think it was ever
7 directly answered.

8 JUDGE GIBSON: Okay, go ahead.

9 JUDGE SAGER: Let me see if I can rephrase
10 it. We're faced with an issue that the Staff and
11 Applicant claim is very narrow. You claim that it's
12 actually much broader than that. And so, the question
13 I think you were asking is did you have an opportunity
14 to oppose the up-rate? Did you, and if not, why not?

15 MR. WHITE: Quite honestly, it wasn't on
16 --

17 JUDGE SAGER: Quite honestly, yes.

18 JUDGE GIBSON: You're not sworn but we're
19 confident, Mr. White, that you're going to be honest
20 and frank with us.

21 MR. WHITE: It wasn't on my radar. It
22 really wasn't on my radar. We were involved with 6
23 and 7. We haven't actively, we're not so happy with
24 that possible eventuality and we've spoken out on that
25 and we focused on those things. 3 and 4, we just sort

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1 of shrugged our shoulders and said whatever, you know,
2 they extended the life of 40-year-old, aging,
3 sclerotic reactors for, or a sclerotic cooling canal
4 system for another 20 years and, all right, so, you
5 know, grin and bear it. If you live down here, you
6 put up with a lot of anomalies. We get used to it.

7 And so, for them to, the up-rate, yes, we,
8 you know, but what are you going to do? You're not
9 going to stop it. There was no percentage in opposing
10 it.

11 But this, this is a big deal.

12 JUDGE SAGER: Okay, thank you.

13 JUDGE GIBSON: We'll stand in recess for
14 ten minutes.

15 (Off the record.)

16 JUDGE GIBSON: Back on the record. Before
17 we leave Contention One, I think there was one other
18 small matter I wanted to know. Counsel for Florida
19 Power & Light, what specific allegation in CASE's
20 reply regarding Contention One constitute new matter
21 that not was merely a rebuttal to the defenses that
22 you raise to face this contention, if anything?

23 MR. BLAIR: I don't believe we identified
24 anything for Contention One.

25 JUDGE GIBSON: Okay, thank you.

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1 MR. WHITE: Judge, if I may?

2 JUDGE GIBSON: Yes sir.

3 MR. WHITE: Are you saying that we have
4 finished considering Contention One?

5 JUDGE GIBSON: I'm just saying that the
6 Board's concerns about Question One, I think have been
7 addressed. If there's something about Contention One
8 that you feel we really must address that we have not,
9 Mr. White, I certainly don't want us to walk out of
10 here without you feeling that it got addressed.

11 JUDGE SAGER: Actually Judge Gibson, I do
12 have a question.

13 JUDGE GIBSON: Okay.

14 JUDGE SAGER: More questions about
15 Contention One.

16 JUDGE GIBSON: Okay, okay, I'm sorry, I'm
17 sorry. Mr. White, was there something else though
18 that you wanted to say, or have Mr., Judge Sager ask
19 you some questions?

20 MR. WHITE: Well, I will say this, the, on
21 discussion in our solutions of the petition?

22 JUDGE GIBSON: Yes.

23 MR. WHITE: And the reply were pretty
24 exhaustive.

25 JUDGE GIBSON: Yes.

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1 MR. WHITE: And I might, if I read my
2 statement here would be repeating --

3 JUDGE GIBSON: Right, you don't need to do
4 that.

5 MR. WHITE: You've got that.

6 JUDGE GIBSON: We have your pleadings,
7 we've digested them. What we've asked you, what we've
8 been asking you, what we'll be asking you the rest of
9 the day, are not to regurgitate the things that were
10 in your pleadings, Mr. White. There are things, holes
11 that we're trying to fill, things that we didn't have
12 completely answered. And that is the purpose of oral
13 argument. From my standpoint at least, as the
14 Chairman of this Board.

15 MR. WHITE: Okay. Given that, I
16 understand.

17 JUDGE GIBSON: Thank you. Okay, Judge
18 Sager has some more questions.

19 JUDGE SAGER: Okay, thank you. So Mr.
20 White, some of these questions, or many of these
21 questions will come to you and I'm not trying to
22 badger you, it's just that I have to go from the
23 record, and I can't be making assumptions if
24 something's unclear.

25 But that said, my first question, I think,

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1 will be to the Applicant. Why was 100 degrees chosen
2 for the maximum temperature of the hot water outflow
3 at the Turkey Point in the past and what is the
4 significance, if any, of 104 degrees?

5 MR. HAMRICK: I, I don't the precise
6 answer as to why 100 degrees was chosen other than
7 that was what was used for the, the bounding
8 calculations that were performed as part of the, the
9 application and that, or the number that was chosen
10 was, I think it was foreseen to be reasonable upper
11 bound. But then the requisite calculations were
12 performed with that number used and that's why in a
13 test bed, because that was the number that was, there
14 was, you know, calculational confidence that the
15 safety requirements were being met.

16 JUDGE SAGER: And 104 degrees would just
17 be adding a few degrees, that should give a limit that
18 we can work with?

19 MR. HAMRICK: In a sense, yes, but it was
20 much more complicated than that, in that all the
21 appropriate calculations were performed to demonstrate
22 that to the satisfaction of the NRC Staff.

23 JUDGE SAGER: Okay, 100 degrees to me
24 sounded like someone set an arbitrary limit at some
25 time and now found it necessary to go beyond that.

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1 And, just correct me if I'm incorrect about this, but,
2 so I'm thinking that this is the temperature at the
3 outflow of hot water from the cooling system. It then
4 goes into a canal where the temperature goes down with
5 time as it flows, is that correct? I mean the whole
6 thing is not 104 degrees, or 100 degrees?

7 MR. HAMRICK: It's measured prior to entry
8 into the intake, so there certainly is variation in
9 the temperature throughout the cooling canal system,
10 but the measurement is when it's going back into the
11 --

12 JUDGE SAGER: Okay, so this is actually
13 the water temperature in the canal before it goes in,
14 before it's intaken to be used as cooling, is that
15 correct?

16 MR. HAMRICK: For clarification, the tech
17 spec limit is an average of the intake and the outfall
18 so it, these are one plus one divided by two, so it's
19 literally the average CCS temperature.

20 JUDGE SAGER: Okay, so there's probably
21 hotter water coming out of the hot water outflow and
22 cooler water going in, but when you take the average,
23 okay.

24 MR. HAMRICK: Right, and the purpose of
25 the cooling canals is to take advantage of the

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1 radiant, radiative heat effects.

2 JUDGE SAGER: Okay, so then my next
3 question follows on that. I've seen UHS which is the
4 Ultimate Heat Sink and the CCS, the Cooling Canal
5 System are often used as synonyms, but I'm not sure
6 that that's the case. Is there a heat sink that's not
7 part of the canal system? Or is the canal system the
8 only thing that's being used to bring the
9 temperatures, to cool the reactor water?

10 MR. HAMRICK: As far as I know, the
11 Cooling Canal System is the Ultimate Heat Sink.

12 JUDGE SAGER: Okay.

13 MR. HAMRICK: And many other plants may
14 use the ocean or a lake and this is what is used for
15 Turkey Point 3 and 4.

16 JUDGE SAGER: Okay, I thought so, so it,
17 in terms of cooling, it is, it is more or less a
18 synonym.

19 MR. HARRIS: Your Honor, may I interrupt?

20 JUDGE SAGER: Please.

21 MR. HARRIS: Just for one bit on the
22 temperature inlet.

23 JUDGE SAGER: Okay.

24 MR. HARRIS: I believe the two inlet, it's
25 two temperature sensors on the inlet that are

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1 averaged, it's not an average of the inlet and the
2 outlet temperatures.

3 JUDGE SAGER: Okay.

4 MR. HARRIS: So, and of course, if there's
5 one temperature sensor it would just be the one at
6 that time, if there was some reason it was
7 unavailable.

8 JUDGE SAGER: Okay, thank you.

9 JUDGE GIBSON: So you have, what you're
10 looking at is, what is the intake, the temperature of
11 the intake water and you have two separate probes and
12 you're averaging the results of those two probes to
13 get an Ultimate Heat Sink temperature, is that
14 correct?

15 MR. HARRIS: An inlet of the Ultimate Heat
16 Sink temperature, so the, we have to understand, the
17 Ultimate Heat Sink is going to component cooling water
18 heat exchangers. So that's not directly cooling the
19 reactor.

20 JUDGE GIBSON: Right.

21 MR. HARRIS: It's cooling other systems in
22 the reactor, so it's a --

23 JUDGE GIBSON: But it's a, for the intake
24 though?

25 MR. HARRIS: But it's just the temperature

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1 at the intake, it's not an average temperature for the
2 component, the Cooling Canal System. It's not, it's
3 not indicative of the temperature at the outlet,
4 because that's a function of the heat load that would
5 be going, that's actually being expended in through
6 the heat exchanges, so.

7 JUDGE GIBSON: Okay, and, okay, fair
8 enough, so, it's sort of like, for those of us who
9 came up on the Clean Water Act, it would be more of a
10 316(a) than a 316(b) issue.

11 JUDGE SAGER: Okay, following on that, I
12 saw two different figures, 13.2 miles and 168 miles
13 and I think maybe even a third figure at some point,
14 about the, the amount of cooling canal. It's a big
15 thing, you can see if from space over there. Is the
16 whole canal system used for cooling or is it just some
17 portion of it that's used for cooling?

18 MR. HAMRICK: Of the canals, yeah, the
19 water flows back and forth through, through the entire
20 canal system. Yeah and right, it is several hundred
21 miles when you, or not several, it's over a hundred
22 miles when you add it, add them all together.

23 JUDGE SAGER: Okay.

24 MR. WHITE: If I may, Dr. Sager.

25 JUDGE SAGER: Yes, Mr. White.

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1 JUDGE GIBSON: Hold on just a minute, Mr.
2 White, I believe there are --

3 MR. WHITE: Oh, I'm sorry.

4 JUDGE GIBSON: No, it's okay, Florida
5 Power & Light just hasn't had a chance to finish.

6 MR. HAMRICK: Right, and there are,
7 basically it is a 13 mile loop that the water, you
8 know, water, what path that would take. So that's
9 kind of the distinction there.

10 JUDGE GIBSON: Mr. White, did you want to
11 add to that?

12 MR. WHITE: Just on the canals as I
13 understand it. It's 168 miles of canal and you'll
14 see, there's, to the right there was a division there,
15 there's a berm. And it's my understanding that the
16 hot water enters at the top and flows down this way
17 and across the bottom and then moves up the right
18 hand, narrow side there. And the pumps are in the
19 upper right hand corner.

20 If you look at what I handed you there's
21 --

22 JUDGE GIBSON: When you say the pumps are
23 in the right-hand corner, are you talking about the
24 intake pumps?

25 MR. WHITE: Yes, please.

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1 JUDGE GIBSON: Okay.

2 MR. WHITE: And if you look at either I or
3 J, the Tridium map, you'd get a better idea of the, of
4 how it's constructed.

5 JUDGE SAGER: Right, so I think what you
6 just were saying was that the canals are not in
7 series. In other words it doesn't, the water doesn't
8 do that, it flows down this way?

9 MR. WHITE: Exact, that's, yeah, it's my
10 understanding.

11 JUDGE SAGER: Okay, thank I was just, I
12 got a little confused about that. The next question
13 to you, Mr. White, this is in your reply on page 12,
14 you refer to the NRC and its surrogates, and I'm just
15 curious if there's some, some entity there that you
16 had, were specifically trying to mention?

17 MR. WHITE: Well, in that case, we
18 discussed, you delegated to the Florida Department of
19 Environmental Protection, administration of the land.
20 I'm not sure you directly developed, delegated to
21 South Florida Water Management District, but they have
22 administration of this also, so those would be your
23 other.

24 JUDGE SAGER: Okay, I'm just trying to
25 clarify. Let me skip that one. This, this one goes

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1 to the counselor for the Staff, on your reply in page
2 11, you say the licensing board has no jurisdiction to
3 rule on the propriety that a proposed license presents
4 no significant hazards consideration.

5 So I thought the NEPA as one of the things
6 we have to determine. Could you clarify that for me?

7 MR. HARRIS: That was on the State of
8 Florida's, so that was not on just Contention One.
9 That was sort of a overview of the entire --

10 JUDGE SAGER: Right, some of these
11 questions --

12 MR. HARRIS: We were talking really about,
13 you know, that there's no, that the Board has no
14 authority to rule on what the State of Florida has
15 done in terms of water permitting. Is that we don't,
16 the NRC never had authority over the water permitting,
17 we don't have authority over the water permitting, no
18 matter what you find that wouldn't change what the
19 State of Florida has done.

20 JUDGE SAGER: Okay, thank you.

21 JUDGE GIBSON: But it would be true that,
22 under NEPA, you're obligated to evaluate all of the
23 environmental impacts, including environmental impacts
24 of things that other agencies are doing with respect
25 to this facility, correct?

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1 MR. HARRIS: That's correct, Your Honor.

2 JUDGE GIBSON: Okay.

3 MR. HARRIS: But I think, you know, when
4 you look at what Contention One originally said, the
5 only real reference to what the staff did, in terms of
6 the environmental analysis it did is that CASE argued
7 that in reviewing the NRC's document, there does not
8 seem to be any mention of the impact of the matter of
9 salinity in the CCS- or regarding saltwater intrusion
10 into the Florida aquifer.

11 And that's just simply incorrect because
12 the EA did discuss those things. The EA itself
13 referred to other environmental discussions that had
14 been done previously for the site that discussed a lot
15 of those issues, so the extent that CASE was
16 challenging that we didn't actually consider it,
17 that's wrong. And that appears to be what the
18 challenge was.

19 JUDGE GIBSON: No, I appreciate that. But
20 I just wanted to be sure we clarified that point.

21 MR. HARRIS: Yes, Your Honor.

22 JUDGE SAGER: Okay, this goes to the
23 Applicant, counselor for the Applicants. On your
24 reply on page 3, describing the operation of the CCS
25 it says rainfall, storm water run-off and ground water

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1 exchange would replenish evaporative losses. So, to
2 me, ground water exchange means that it's exchange
3 through the sides and bottom? You don't, that, so
4 that is a correct assumption? It is porous?

5 MR. HAMRICK: That is the design, yes.
6 Is, there's not a, you know, a river or canal that,
7 you know, feeds surface water. It's either rainfall
8 or ground water exchange from the neighboring area.

9 JUDGE SAGER: So there is no design to
10 make an impermeable bottom to this system? It's
11 designed to operate sort of in, with the ground water?
12 Okay. And also, on page 4, let's see, the COC, what
13 that, conditions?

14 MR. HAMRICK: Conditions of Certification.

15 JUDGE SAGER: I get lost in the acronym
16 soup by the way. Allows FDEP which is Florida
17 Department of Environmental Protection, if I recall,
18 to impose additional measures to insure that, and then
19 stopping the quote. To insure that the CCS does not
20 unduly affect the environment. Has the Florida
21 Department of Environmental Protection utilized this
22 responsibility?

23 MR. HAMRICK: Absolutely. And that's, we
24 touched on that some earlier. In our answer, we have
25 some citations to the NRC's environmental assessment

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1 for the EPU. And that's where there's discussion of
2 the, at that, by that time the monitoring program that
3 FDEP had mandated, that we install several of these
4 wells that you see here in order to track and gain an
5 understanding of the impact of the Cooling Canal
6 System on the surrounding ground water resources. And
7 the 2009 monitoring program was specific. It said
8 that if we find something we don't like and we think
9 that it's a situation that needs to be remedied, we
10 will order that remedy. And that's, the remedy is
11 what was ordered on December 23rd of this past year
12 telling FPL to reduce the salinity of the CCS in order
13 to address and mitigate this salt, the very issue that
14 the case is concerned about.

15 JUDGE GIBSON: And this is the
16 administrative order of that has been referred to
17 previously?

18 MR. HAMRICK: Correct.

19 JUDGE GIBSON: Is that correct?

20 MR. HAMRICK: Yeah, that was issued after
21 the pleadings in --

22 JUDGE GIBSON: Right, December 23.

23 MR. HAMRICK: Yes.

24 JUDGE GIBSON: Okay. Very well, thank you.

25 JUDGE SAGER: So I think characterizing

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1 that you are in, regularly in communication with the
2 Florida Department of Environmental Protection about
3 these issues?

4 MR. HAMRICK: Correct.

5 JUDGE SAGER: Okay. Mr. White, I think
6 that much of the tone is that, is that nobody's
7 looking at these issues. Are you concerned that
8 Florida Department of Environmental Protection is not
9 doing its job?

10 MR. WHITE: I'm doing, I think they're
11 doing their job as narrowly defined. The, where the
12 rubber hits the road here is they're, not all options
13 are being considered. And when an emergency situation
14 occurred, there were limited options. It, they had
15 two choices that had been considered in all of the
16 prior planning. One was putting more fresh water into
17 the canals. And the other was the use of chemicals.
18 There was no exhaustive analysis of what's going on
19 there.

20 And as I'll contend later, going back to
21 your question about FDEP and their administrative
22 order, if you read it, it's entirely focused on
23 measures, monitoring that they can do. It reminds me
24 a little bit, I have degrees in, in psychology, I do
25 therapy. And B.F. Skinner, when he originally came

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1 out with his self-actualized psychology, where you
2 would just listen to your client speaking. And he
3 would say, you know the client says I have this
4 problem and that problem and I'm depressed and all
5 this. And at the end of the therapy session, the last
6 noise is "plop" as the client jumps out the window
7 because the therapist was simply listening to the
8 patient and not acting.

9 The way the DEP is monitoring and not
10 acting in such a way, in this case, to really solve
11 the problem. Because if, as we contend, and as our
12 exhibits show, with readings after the up-rate, at a
13 45 degree angle in every chart, something's happening.
14 Something happened with that up-rate. And nobody's
15 saying, FPL is not saying what happened. There's no
16 mechanism for looking at it.

17 And as I'll discuss in our other
18 discussions, that's our problem, that's what we're
19 concerned with. That's what the people here are
20 concerned with. Nobody's watching the store. And
21 they can monitor all they want. But there's no, in
22 their thing, there's no, nothing precipitates action
23 that will really affect, it's all bandaids, it's all;
24 how do you correct it? We'll monitor it and then
25 we'll come up with another rule, and we'll come up

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1 with another rule. And we'll do this.

2 And the situation literally just keeps
3 going. So that's, we'll get into that a little bit
4 further. So when you say, FD, I'm not saying FDP is
5 not doing its job, it's doing what it's, we have no
6 problem with that. What we do have a problem with is;
7 what the rules of the game are and how it's played.
8 And how we're losing.

9 JUDGE SAGER: Thank you. My next
10 question, I'm going to direct to the counsel for the
11 Applicant. Primarily because I think you may have the
12 answers. And in the FPL reply at page 5; approval to
13 withdraw 30 million gallons per day from the Biscayne
14 aquifer, I, my question is about the numbers. Because
15 I think that CASE, the Petitioner mentioned 128
16 million gallons per day. And I may have seen some
17 other numbers in there.

18 MR. HATCHER: It's 100 million.

19 JUDGE SAGER: Well, you said 100 and then
20 you said 14, and then another 14, so I have --

21 MR. HATCHER: Well they're, yeah, they're
22 from different areas a little bit. One, one is from
23 the Floridan aquifer. Then the 100 million was from
24 the L31E canal.

25 JUDGE SAGER: Okay. So I'm just trying to

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1 get a handle on the actual numbers. Are there, are
2 there really 100 or 128 millions being drawn from the
3 surrounding area? Or is it the, or is it that 30
4 specific to the Biscayne?

5 MR. HAMRICK: So the 30 that's mentioned
6 on page 5, is in reference to that. That's the, the,
7 in reference to the staff attachment to our B, I
8 mentioned earlier. The letter from the Water
9 Management District. That, there were three wells
10 that were used as part of Turkey Point 6 and 7;
11 exploratory process. And those wells are located on
12 the peninsula and in the Turkey Point 6 and 7 site.
13 And that, that's, we, the Water Management District,
14 you have a temporary authorization for up to 30
15 million gallons a day from the Biscayne aquifer from
16 those wells. I think in our pleading, we indicated
17 that we had not yet turned on those wells. And in the
18 intervening period we have turned on one of the wells,
19 the one on the peninsula. Which is, has been on the
20 order of five to six million gallons a day from the
21 Biscayne aquifer just in the past week or two.

22 So that's the, the one we were referring
23 to. The 100 million gallons a day, and there's been
24 some dispute on this and was, is, the temporary
25 authorization from the L31 canal, and in saying that

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1 that was not water from the aquifer. What we intended
2 to say was that was surface water, as opposed, flowing
3 to the ocean, as opposed to a drill or a well type
4 situation. So that, there, we may not be disagreeing
5 on that as much. So, in other words that's water in
6 a canal. So that's the 100 million gallons a day.

7 JUDGE SAGER: I'm thinking also that there
8 is, there is theoretical water and there's actual
9 water. So there's a 100 million gallon limit to what
10 you can draw, but you may be drawing less than that?

11 MR. HAMRICK: Correct. The authorization
12 was for up to 100 million gallons a day, subject to
13 the Water Management District's restrictions to, that
14 they have in place for environmental, wildlife
15 resources. I believe, you know, that was a temporary,
16 about a 45-day authorization. It was below 50 million
17 gallons a day, for much, if not all of that, of that
18 time. And again, that has since expired.

19 You mentioned the two 14 million gallon a
20 day, there, there is, the first of those was the Unit
21 5 allocation. Back in 2005, when Unit 5 was certified
22 by FDEP, it was, it received an approximate 14 million
23 gallons a day authorization for cooling water. It
24 doesn't use the cooling canals to the same degree that
25 the other four units do. It uses that ground water.

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1 There was five million gallons a day of that
2 allocation that we were not using for Unit 5 and that
3 was again, a temporary authorization to use that five
4 million gallons a day, of the 14. So, it wasn't, that
5 wasn't another 14 million.

6 And finally, the other, the other 14
7 million gallons a day is, was what was referred to in
8 EA as what we expected to receive in the
9 administrative order from FDEP. And that was also
10 from the upper Floridan well, brackish water from the
11 upper Floridan aquifer.

12 JUDGE SAGER: Okay, staff, do you have any
13 comment on that? I mean you might know the numbers,
14 that's why I'm asking.

15 MR. HARRIS: The numbers for how much?

16 JUDGE SAGER: How much water is being,
17 being actually withdrawn?

18 MR. HARRIS: That would actually, FPL
19 would be more --

20 JUDGE SAGER: I'm just asking just in
21 case.

22 MR. HARRIS: But I mean in terms of the
23 descriptions I don't we have any dispute that it's --

24 JUDGE GIBSON: You're not disputing what
25 the Applicant is saying about these withdrawal

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1 numbers?

2 MR. HARRIS: No.

3 JUDGE SAGER: Okay. Sorry, a lot of these
4 questions were just from general, me trying to wrap my
5 head around the picture here. Florida Power & Light,
6 on your replay page 6, it says; no other off-site
7 waters would be affected by proposed UHS temperature
8 increase. So I think that probably goes to your
9 argument on, on basically the admission of whether
10 this is small or large. And, can you explain the
11 rationale on that statement?

12 MR. HAMRICK: Well that was a quote from
13 the NRC's environmental assessment.

14 JUDGE SAGER: Okay.

15 MR. HAMRICK: So that was their ultimate
16 finding with respect to the impact. And again, it's
17 not going to, this particular sentence doesn't go to
18 the aquifer withdrawals, it goes to the proposed
19 Ultimate Heat Sink temperature limit increase.

20 JUDGE SAGER: Right.

21 MR. HAMRICK: And again, all the NRC is
22 approving is that tick from 100 to 104 degrees. It is
23 not approving, and it was not, it's not approving all
24 the other stuff we've been talking about this morning.

25 JUDGE SAGER: Okay, I think this actually

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1 follows-on because I think it's like a statement that
2 comes soon thereafter on page 6; would have no affect
3 on a critical habitat of, it doesn't say, but it means
4 of the American crocodile. So I think that's probably
5 also in the EA. My question is; is this canal system
6 a part of that critical habitat?

7 MR. HAMRICK: Yes it is. And it is an
8 important part of that critical habitat.

9 JUDGE SAGER: Okay, so there are
10 crocodiles living in there?

11 MR. HAMRICK: Yes.

12 JUDGE SAGER: Okay.

13 MR. HAMRICK: And that finding was made
14 under an Endangered Species Act consultation with the,
15 between the NRC and the Fish & Wildlife Service.

16 MR. HARRIS: Your Honor, for that I
17 believe you'll also, you'll find the discussion mostly
18 on the crocodiles, the EA references the biological
19 assessment for the crocodiles.

20 JUDGE SAGER: Thank you.

21 MR. WHITE: The case has comments on that
22 in the, in other contentions. As part of the other
23 contentions.

24 JUDGE SAGER: So I hear you saying you
25 will have, right, I just, it was just something that

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1 came up now and we can address it later I think.
2 Okay. I'm sorry, I'm reading my questions here and
3 then trying to remember what I was asking. Right.
4 So, this goes to CASE, on page 6 of your petition.
5 Let me see, it says, yes, down near the bottom it
6 says; salt water intrusion into the Florida aquifer,
7 previously it's all, always the Biscayne or Floridan.
8 Do you mean the Floridan here? Or do you just mean
9 all Florida aquifers? So this is on the bottom of
10 page 6. One, two, three, four, five lines from the
11 bottom? I don't think you mean a third aquifer.

12 MR. WHITE: Let's see --

13 JUDGE SAGER: Maybe it's only --

14 MR. WHITE: I think, I think at that point
15 I was making a general statement, not, because the
16 statement is; there does not seem to be any mention of
17 the impact, into the, you could just say into the
18 aquifer at that point.

19 JUDGE SAGER: Right.

20 MR. WHITE: Either aquifer.

21 JUDGE SAGER: Right, but it's capitalized
22 Florida Aquifer capitalized, which is, seems it's a
23 proper name.

24 MR. WHITE: I believe, I believe the
25 statement more correct would have been; there was no

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1 statement of, into any aquifer.

2 JUDGE SAGER: Okay. I couldn't tell
3 whether you meant a specific aquifer or a general one.

4 MR. WHITE: No, I don't think so at that
5 point.

6 JUDGE SAGER: Okay, thank you. Okay so,
7 on that same page, but more generally, you say it does
8 not seem to be any mention of the impact on the matter
9 of salinity and the, the counselors for the Applicant
10 say this is a measure about temperature limits. So
11 how do you connect salinity and temperature?

12 MR. WHITE: They connected themselves. We
13 had an emergency situation. And the, temperature, the
14 high, an increase in temperature, by definition, is
15 going to increase the salinity because evaporation is
16 going to increase. You're evaporating 44 million
17 gallons a day of water from that source. It's a giant
18 evaporator. And with the higher temperature, the
19 salinity is increased to three times the salinity of
20 ocean water. The salinity was up at 90, when the goal
21 is 34.

22 Which is one of the problems we have with
23 the administrative order if I, if it's timely to
24 mention that. Because the draft order allowed two
25 years to get back to 34. The final order is giving

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1 them four years. Which means that the average
2 salinity is going to be exorbitant for a much longer
3 period of time. And the impact on the flora and fauna
4 with that decision, now I realize that you're saying
5 that's outside of our purview. But if we link the up-
6 rate to the exigent situation they're trying to
7 resolve, I'll submit later that unless they resolve
8 that, it's going to, it's not going to go away. And
9 the temperatures that we're seeing now, which are up
10 in the 110/115 degree range, are going to get even
11 higher. Because you created, water and salt retain
12 heat. And the more salt you have there, and in that
13 area, the more heat that's going to be retained.

14 They're using salt now to retain heat in
15 renewable energy. So they've created a monster here.
16 But we'll talk about that later.

17 JUDGE SAGER: Okay, I was just clarifying,
18 asking you to clarify the connection. I just wanted
19 to make sure that that was, that, you actually I think
20 said it later, but I wanted to make sure it was at
21 that point. Okay. Let me, on page 7, the next page,
22 let me see where to find this. This is, you're
23 describing the, your exhibits. Okay, so this is where
24 you mention slide 20. And there's a sentence there
25 that I couldn't quite hash out.

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1 So, it says; apparent higher than expected
2 CCS surface water temperatures post up-rate. I think
3 that's the title of the slide. Indicated that,
4 following the up-rate, temperatures went from a two
5 percent level of days for each year that registered
6 the highest temperature compared to this period of
7 record, to levels of 54 percent, 54.5 percent in 2013
8 and 83.8 percent in 2014. There's a lot to get in my
9 head in that one sentence. Could you just restate it
10 in your own words?

11 MR. WHITE: Let me find the --

12 JUDGE SAGER: Well, I guess those were
13 your own words, but I mean, so I think you were saying
14 that prior to the up-rate, only two percent of the
15 time that it reached maximum temperature. But after
16 that it was reaching 100 degrees, would be the maximum
17 temperature for 55 and 84 percent?

18 MR. WHITE: Well no, well CCS is expressed
19 in several ways. The, let's see, the surface water
20 temperature was, I, I'm, let's see, is this the one
21 here? Let me just see.

22 MR. BLAIR: Your Honor, well I wouldn't
23 want to speak for Mr. White as to what is the meaning
24 of the sentence. He's referring to an exhibit that
25 was filed. That I think probably is pretty self-

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1 explanatory.

2 JUDGE GIBSON: Could you identify that
3 exhibit for us please, counsel?

4 MR. BLAIR: Well I'll read the title to
5 it, it's un-numbered. He calls it his slide 21, but
6 it's; "Apparent higher than expected CCS surface water
7 temperatures post up-rate". It's a graph. Again,
8 this was filed with Exhibit --

9 MR. WHITE: Exhibit 1.

10 MR. BLAIR: It's a part of Exhibit 1 that
11 looks like this.

12 JUDGE SAGER: And so what are those bars
13 showing?

14 MR. BLAIR: Well I have my opinion.

15 MR. WHITE: Well, okay, I've got the chart
16 here. Do you have it, sir?

17 JUDGE SAGER: No, actually I don't have it
18 with me.

19
20 JUDGE GIBSON: It's not in this?

21 MR. WHITE: No, in the original, if it.

22 MR. BLAIR: He has it now in front of him,
23 yes sir.

24 MR. WHITE: Okay. So, let's just look at
25 the whole thing. We have a graph here that begins in

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1 2010 and ends in 2014. The up-rate occurred between
2 mid-2012 and early 2013. So when we go down to two
3 percent, possibly the cause was the reactors were
4 down, one or the other, for 17 months. So what,
5 wherever we're mentioning, we're measuring here, was
6 less. When the reactors kicked in, early in 2013, and
7 this over, an average for the year. Then you see the
8 result of the water temperature dramatically.

9 JUDGE SAGER: I do. And I think what,
10 what was confusing me and apparently it's not your
11 fault, because to me this slide is confusing. Because
12 it says percentage of days for each year that
13 registered the highest temperature compared to this
14 period of record. And so, highest temperature is not
15 specified. It could be a degree higher, it could be
16 20 degrees higher, but it's not said what that is.

17 MR. WHITE: I think for our purposes it's
18 to show the trend and what's happening here.

19 JUDGE SAGER: Okay. Thank you. Sorry to
20 belabor that point, it's just a long complicated
21 sentence that's hard to understand. On the next page,
22 you mention increasing tridium concentrations, but
23 this proceeding is about temperature. How would you
24 relate tridium to temperature?

25 MR. WHITE: Tridium, in this case, is only

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1 a marker. We're nowhere near the levels of tridium,
2 the maximum reported here is like 1000/1200. We know
3 that 20,000 is when you begin to worry about it, so as
4 a factor, tridium itself is not, irrelevant. But,
5 looking at slides I and J which I did give you a copy
6 of, shows how the movement of salinity and all the
7 other substances in this canal. This canal has a lot
8 of stuff in it. A lot. And all that stuff is moving
9 out into the aquifer, into the porous, we call it
10 Oolite, limestone here.

11 So that, when you look at that, those
12 slides, it's going out for miles. And it's going to
13 the east too. That's where the estuary is in Biscayne
14 National Park. And that's what they're worried about.
15 They see what the flow of materials into their area
16 and --

17 JUDGE GIBSON: Hold on just a minute.
18 When you say "they", are you referring to Florida
19 Power & Light or someone else?

20 MR. WHITE: No, the people at Biscayne,
21 Superintendent Brian Carlstrom.

22 JUDGE GIBSON: It's fine, it's just you
23 said "they" and we had no context, Mr. White.

24 MR. WHITE: I understand. So, the people
25 at Biscayne National Park and the people in the

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1 fishing industry, are concerned when you see the flow
2 of material, of salinity and just into that area. So
3 that's the mainly, that's why tridium is simply a
4 marker.

5 JUDGE SAGER: Okay. Thank you.

6 JUDGE KENNEDY: Can I follow-up just for
7 one?

8 JUDGE GIBSON: Sure.

9 JUDGE KENNEDY: This tridium thing has got
10 me baffled. I'm not sure how to read these various
11 charts that are in Exhibit 1 pieces. And you have
12 handed them out here today.

13 MR. WHITE: Please.

14 JUDGE KENNEDY: I first was struck by the
15 first chart, which is, appears to be data at various
16 positions, various roles?

17 MR. WHITE: I can explain that if you'd
18 like, sir.

19 JUDGE KENNEDY: Well, first there's three
20 data, there's three locations indicated on this TPGW-
21 10, tridium.

22 MR. WHITE: Exactly. If I may.

23 JUDGE KENNEDY: What are those?

24 MR. WHITE: Okay, the way it works is,
25 they sink a well vertically, all the way down to the

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1 bottom of the aquifer, and they take measures.

2 JUDGE GIBSON: Which aquifer would that be?
3 The Biscayne Bay aquifer?

4 MR. WHITE: It would be, the wells are
5 sunk near the cooling canals, right at, or in, this
6 particular one TPGW, I have a map here. I'll find out
7 where that is, but let me explain the process if I
8 may. They sink a well, and they take measures at
9 different levels in the, in that column. So that, if
10 we go back to 2010 and all those times there. There,
11 there was nothing there. There was no tridium, there
12 was nothing to speak of, at any level. After the up-
13 rate, or even during, in June of '12, 2012, and
14 September, you began to see readings in that column of
15 that well, taken at different levels which reflect
16 that the, at the deepest level, the tridium is
17 increasing. Now what's happening is this, if I may.

18 Where the, as the front of salt water
19 begins to move inland, and it comes in, it begins to
20 intersect the bottom of that column. That's why the
21 reading at the bottom of the column is going up first.
22 Because the sea front, the front is saltwater, is
23 moving inland, or toward that column. And it reached
24 it at an angle, at the bottom first. So that's why
25 the bottom reading goes up first. And then you see,

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1 as it moves further, closer to the column, or through
2 the column, the middle reading in the column begins to
3 increase also. Which means that the front is moving
4 even further into the column. If this is the column
5 that's moving at an angle like this. So as it moves
6 further like this, it begins to intersect the middle
7 reading and later on it would affect the top reading.

8 JUDGE KENNEDY: So this first chart, and
9 again, this TPGW-10, where you labeled it "A" in the
10 handout today. That's a single well, at three
11 different depths?

12 MR. WHITE: Exactly. At one location.

13 JUDGE KENNEDY: And if I correlate that
14 well location to the chart I or J?

15 MR. WHITE: Yes, please.

16 JUDGE KENNEDY: Am I reading that that
17 location is in the Biscayne Bay?

18 MR. WHITE: TPGW --

19 MR. HATCHER: If you go to the last page.
20 If you go to the last page of today's handout? Of the
21 additional, it's called; contour based deep well, and
22 it will show you the locations of the wells. And if
23 you look on the northwest corner, you'll see TPG
24 channel.

25 MR. WHITE: Yeah, it's in the upper, yeah

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1 that's, it's at the upper, let's see ten is, where do
2 you see ten here?

3 JUDGE KENNEDY: It appears to be in the
4 Bay.

5 MR. WHITE: Oh, here it is. TPGW-10.
6 Now, that particular location is also significant,
7 because you can see, if you look at I and J, when I
8 was in 2011, and the pumps were operating. In March
9 of 2013, it's my understanding the pumps shut down.
10 So as the pumps shut down, a natural flow of, when the
11 pumps were operating, it was drawing in some fresh
12 water into the area, from the surrounding area. But
13 when the pumps shut down, that action stopped and the
14 water in the canal started moving away naturally. So
15 you see then, the natural flow of water in the area,
16 out of the canal. And as my friend Mike likes to
17 point out, that a lot of what happens here is informed
18 by the natural pulse? Michael?

19 MR. HATCHER: Yeah it's, because it is a
20 pulse lagoon. This is, this has been, naturally,
21 because of what has happened in, prior to even this
22 being here. This is actually a pulse lagoon. So
23 therefore, when the pumps are not working, and it's in
24 what we call more of a stagnant status, what happens,
25 it goes back. It reverts to being that pulse lagoon

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1 so you get this natural flow of, through the polite
2 because the pumps aren't working. When the pumps are
3 working, you create a draft so to speak that basically
4 your concentrates are going to be less because you're
5 constantly sucking in groundwater. But when that
6 status, when that status is in the mute position that
7 doesn't happen and it reverts back to being a pulse
8 lagoon again.

9 MR. WHITE: Pulse is also, correct me, the
10 natural flow of tidal movement is at play here?

11 MR. HATCHER: Yes, exactly.

12 MR. WHITE: Did that help?

13 JUDGE GIBSON: I think he's still got some
14 more questions.

15 JUDGE KENNEDY: I think the thing, I guess
16 I'll try to be clearer. The thing that struck me is
17 that this is in Biscayne Bay and I was thinking of it
18 very simplistically. What could have happened between
19 2010 and 2013 that could affect the surface waters in
20 the ocean. And the thing that comes to mind is a huge
21 nuclear accident in Japan that put tremendous
22 quantities of tridium into the seas. I just, I guess
23 I may be overusing --

24 MR. WHITE: I think you're, I think
25 you're, yeah there's --

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1 MR. HATCHER: Tridium is only a marker
2 here. We just use it, it's a migration marker.

3 MR. WHITE: As much as I would love --

4 JUDGE KENNEDY: So you would encourage me,
5 I'm thinking, to focus more on the other wells and the
6 gradients that you're exhibiting between 2011 and
7 2013?

8 MR. WHITE: Yes, sir.

9 JUDGE KENNEDY: I mean it was just a
10 coincidence --

11 MR. WHITE: I'd love to bring Fukushima
12 into this.

13 JUDGE KENNEDY: We may have, I mean I
14 asked for 2010.

15 JUDGE GIBSON: And he may love for you to
16 do it, and you may love to do it, but I can assure you
17 that we're going to confine ourselves to what we're,
18 we have on our table right now. And that's enough to
19 get us through the rest of the day.

20 JUDGE KENNEDY: So the tridium is a marker
21 of an outflow from the canals?

22 MR. WHITE: Exactly.

23 JUDGE KENNEDY: Of saltwater?

24 MR. WHITE: Of saltwater and anything else
25 that's in that canal. If you read our filings, we

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1 document in an apocryphoric sense an inadmissable
2 data. It is in there and you can find it anywhere, of
3 the variety of caustic chemicals that are in that
4 canal.

5 JUDGE KENNEDY: I'll take this as a
6 marker, I'll ponder the Biscayne Bay well. I guess I
7 just wanted to go back to saltwater intrusion one,
8 well probably for the, not the last time here.

9 MR. WHITE: No problem.

10 JUDGE KENNEDY: Not only, I took from your
11 opening remarks on redressability that it was the
12 draw-down from the aquifers that was increasing the
13 saltwater intrusion. Are you also suggesting that the
14 salinity, that just the pure salinity in the canals is
15 also a source of saltwater into the freshwater around
16 the site?

17 MR. WHITE: Absolutely. And that's what
18 that, those two photos show. They show that the, the
19 flow of salinity and other elements, out of the canal,
20 into the Biscayne aquifer. That's all the, we're
21 dealing with the Biscayne aquifer at this point. And
22 there is, the canals are unlined, they were dug into
23 pristine freshwater marsh, mangroves. We call it
24 wetlands here. Unlined and the water, so, and there's
25 nothing to prevent the flow of water, materials, in-

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1 and-out of those canals, in the whole area.

2 JUDGE KENNEDY: Are you, and this may be
3 a, I guess what comes to mind is, are you more
4 concerned about the withdrawal of water from the
5 aquifers to reduce the temperature and the salinity?
6 Or are you more concerned about the presence of
7 salinity in the canals migrating to the freshwater?

8 MR. WHITE: I would say that our, the
9 former would be our more concern. The, from an
10 ecological --

11 JUDGE KENNEDY: The salinity in the
12 canals?

13 MR. WHITE: No.

14 JUDGE KENNEDY: No?

15 MR. WHITE: The other.

16 JUDGE KENNEDY: Okay, the former?

17 MR. WHITE: Yeah, in other words --

18 JUDGE KENNEDY: I got latter and former
19 backwards.

20 MR. WHITE: But the, the impact of the
21 reduction of fresh water is the real actor here. And
22 again, FP&L limited the possible causes to two.
23 Temperature and lack of rainfall, which we address
24 further on.

25 JUDGE GIBSON: And when you say

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1 temperature, you're talking about ambient temperature,
2 right?

3 MR. WHITE: Ambient temperature, right.
4 So that we're saying it's much more than that.
5 There's more at play here. And the authorities, all
6 authorities are not taking the time to define what's
7 really going on. Pure science, that's all we're
8 really about. We're asking that pure science be at
9 play here and not, I don't mean to get to polemic, an
10 economic imperative which might be at play. We want
11 to see pure science prevail.

12 JUDGE GIBSON: I think, Judge, did you --

13 JUDGE KENNEDY: I'm good, thank you.

14 JUDGE GIBSON: You're good? Okay, Judge,
15 I believe Judge Sager has some more questions. Two
16 more.

17 MR. BLAIR: I'm sorry, I hate to
18 interject, if I may, Judge Sager, I would like to just
19 follow-up, clarify a couple brief technical issues.
20 The wells --

21 JUDGE GIBSON: You could. Your mic, I
22 want to be sure you're heard.

23 MR. BLAIR: I'm sorry. Well TPGW-10,
24 right? As Mr. White indicated, does takes
25 measurements at three depths, but it's three depths

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1 below the bottom of Biscayne Bay. With the deep well
2 at approximately 118 feet. So, with all due respect
3 to the science of Fukushima, I don't think tridium
4 from Fukushima made it 118 feet below Biscayne Bay.
5 And as Mr. White indicated, this particular
6 measurement is only for tridium, and is only a proxy,
7 right? For potential migration outward. That's, in
8 our view, the only potential significance of that, of
9 that chart. And, as Mr. White noted, this is, you
10 know, two, not two orders of magnitude, but twice an
11 order of magnitude below any applicable regulatory
12 limit. It's simply a marker that says, that some,
13 some water may be migrating from the canals this
14 direction, at this depth. That's simply all that data
15 could be read to say.

16 JUDGE KENNEDY: Thank you.

17 JUDGE GIBSON: Judge Sager?

18 JUDGE SAGER: Okay thank you. This, this
19 question goes to Mr. White. This goes on your, I
20 think is related to timeliness, it's in your reply,
21 but it was in the section on Contention One, that's
22 why I bring it up now. It says; regarding the
23 timeliness of CASE's petition, this would seem to be
24 dictated by the placement of the request for input in
25 the Federal Register, on August 14, 2014. By

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1 definition, any comment is beyond whatever previous
2 time limits were set. Could you explain that?

3 MR. WHITE: Well I think FPL contended
4 that there was a time period, earlier they had placed,
5 I believe, two other notifications about the up-rate
6 and, even about this, and I'm not sure if it was about
7 this. But what I'm saying is that, if there were time
8 limits related to those earlier postings on
9 notifications, the fact that they now filed a new
10 notification at a new date, then it starts a new ball
11 game and my filing is in relationship to, and within
12 the time limit provided by the posting in the Federal
13 Register, with a limit of October 14th. As to a limit
14 to make any comments on any of this that might have
15 obtain with the earlier requests for input, or any
16 other request. I think by definition, putting this
17 out now, asking for public comment, says hey, bring it
18 on, what do you got?

19 JUDGE SAGER: I, well I think argument
20 they were making, and I'll ask Staff and Applicant to,
21 to correct me if I'm wrong. Is that it's untimely to
22 question the up-rate because the time for that, that
23 comment had passed. And I gather what you are saying
24 is that you're taking this commentary period as a, as
25 a opportunity to raise issues more broadly?

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1 MR. WHITE: More broadly and in the quest
2 of truth. I mean what was, what's the cause? All I'm
3 saying is the data, their own data by the way, this is
4 FPL data that's been analyzed by Miami-Dade County, so
5 it's their own data. By the way which they had and
6 could have analyzed and didn't.

7 JUDGE SAGER: Staff, would you have a
8 comment on that?

9 MR. HARRIS: I mean, I think you addressed
10 it pretty well, that to the extent that you wanted to
11 now argue about the, whether or not the EPU should
12 have been granted is that those should have been filed
13 earlier. Is that this is not just because there was
14 a Federal Register notice about this license
15 amendment, you know, doesn't give you an opportunity
16 to reopen settled issues that have already passed.
17 So, yes you could provide, you know, environmental
18 comments on, comments on the environmental analysis
19 that's addressed. But it still has to be within the
20 scope of the issues that we're looking at, you know,
21 with the discussions we've talked about, that you do
22 have to look at all the, you know, potential
23 environmental impacts have cumulative impacts, so.

24 MR. WHITE: If I may, what I would contend
25 is that, our position is, we're not challenging the

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1 up-rate. What we're saying is, you must look at the
2 consequences and what it's causing, what's happening.

3 JUDGE GIBSON: Is it fair to say that you
4 looked, you know, at the time the up-rate occurred,
5 you looked at the up-rate, I think your words were
6 there wasn't anything we could do about it anyway.
7 There was nothing that, you know, jumped out at you
8 and said; oh my gosh, you know, the world's going to
9 end if this up-rate goes forward. But that since that
10 time, the problems, these environmental problems have
11 arisen, that were not flagged in the environmental
12 assessment associated with the up-rate. Is that a
13 fair statement?

14 MR. WHITE: Exactly.

15 JUDGE GIBSON: Okay. Now, what is it
16 about the up-rate that, I mean what is it about, what
17 is it now that you know, that you didn't know at the
18 time of the up-rate about the intrusion of saltwater
19 into these freshwater areas?

20 MR. WHITE: What we didn't know, you know,
21 what we didn't know at the time of the up-rate? What
22 wasn't predicted was an emergency situation and how it
23 would be handled.

24 JUDGE GIBSON: You mentioned emergency
25 situation earlier.

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1 MR. WHITE: They said exigent.

2 JUDGE GIBSON: And exigent, that does, I'm
3 with you. Exigent, emergency, I won't hold you to
4 emergency or exigent. The point is, you were saying
5 something really big happened, okay? And what is it
6 about that really big thing that happened, whether we
7 call it an emergency or an exigent circumstance, that,
8 you know, made you aware? Because see, it sounds like
9 a lot of what you're saying is that since the 1800's,
10 there's been saltwater that's come in here. And
11 Turkey Point has been there for what? Since '73 you
12 all have been operating? So they've obviously been --

13 MR. WHITE: Well --

14 JUDGE GIBSON: Well no, hold on, just bear
15 with me a second, because I want you to answer my
16 question, and I want to give you an opportunity. But
17 I want to make sure you understand what we're
18 wrestling with up here. Because what you're saying
19 is, okay, there's been saltwater intrusion that
20 started when they started draining the swamps. And
21 then Turkey Point came along in '73 and they started,
22 you know, causing more saltwater intrusion by their
23 operations and yet the up-rate comes along, you don't
24 challenge it. And then after this exigent, or
25 emergency situation occurs, then it like turns on a

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1 lightbulb and there's some really big deal. And we're
2 trying to understand what is it that is so significant
3 about this temperature increase that would, that would
4 have caused all of these, you know, bells to go off,
5 there's a big problem here.

6 MR. WHITE: I would say angst, excuse me.
7 Their solution, their solution scared the hell out of
8 us.

9 JUDGE GIBSON: Their solution being to
10 increase the temperature in the canal?

11 MR. WHITE: Their solution to use five
12 billion gallons of fresh water.

13 JUDGE GIBSON: To reduce the --

14 MR. WHITE: Yes, to mitigate. And --

15 JUDGE GIBSON: Thank you.

16 MR. WHITE: And to putting copper sulfate,
17 which is, as you'll, as I'll explain later.

18 JUDGE GIBSON: We'll talk about that
19 later.

20 MR. WHITE: Is a poison.

21 JUDGE GIBSON: Okay. Okay, so that's what
22 it is?

23 MR. WHITE: Exactly.

24 JUDGE GIBSON: That's what it is.

25 MR. WHITE: Their solution was, I don't

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1 remember what, the words I used was unacceptable.

2 JUDGE GIBSON: Okay, so the, when they
3 said okay, we're going to have to increase the
4 temperature in the Ultimate Heat Sink, and the way
5 we're going to do that, the way that the Applicant is
6 going to do that is, they're going to increase the
7 amount of water they withdraw. That's what set off
8 the alarm for you because that meant there was going
9 to be a whole lot more saltwater intrusion? I just
10 want to make sure I understand that's what you're
11 saying, is that right?

12 MR. WHITE: That's what I'm saying. The
13 way they were going to increase the --

14 JUDGE GIBSON: Decrease the water
15 temperature?

16 MR. WHITE: No, let me, let me rephrase
17 your question. The increase in temperature of the
18 reactor, the adding more rods to the reactor,
19 increasing the output of the, they increased the
20 operating temperature, if I'm not mistaken, of the
21 reactor itself. Which meant to us that --

22 JUDGE GIBSON: Which we both, I think can
23 agree, you did not challenge at the time that they
24 requested the up-rate?

25 MR. WHITE: Right.

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1 JUDGE GIBSON: Okay, and I'm assuming that
2 the fact that there was going to be increased heat
3 load from that up-rate, was addressed in the
4 environmental impact statement. And when you looked
5 at it, at that time, it was like, or I'm sorry, not
6 environmental impact statement, they didn't do one.
7 But the environmental assessment at, for the up-rate,
8 and it was sort of like, okay, well that's just not
9 that big a deal, it's not worth challenging, we can't
10 do anything about it anyway. But then when they
11 wanted to increase the Ultimate Heat Sink temperature
12 to 104 degrees, what was it then about that, that
13 raised all these other questions?

14 MR. WHITE: Again, it was only when this
15 emergency occurred and the, we saw two things. We saw
16 the solutions to mitigate the problem which we
17 considered evasive and problematic. And their failure
18 to consider other options as causes. They said all
19 parties, authorities said, these are the causes, this
20 all, this is all we're going to look at.

21 JUDGE GIBSON: Okay.

22 MR. WHITE: There are other causes that,
23 possible causes as to what's going on. We contend in
24 our filing, for example, that there was a progressive
25 increase in salinity, and then these temperatures that

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1 was going on along pretty well.

2 JUDGE GIBSON: And I think we'll get into
3 that with Contingent Two and some of these other
4 things. What I just want to focus on is, what was it
5 about that, why this license amendment, this exigent
6 circumstance, that set off all these alarms for you?

7 MR. WHITE: Again, it was the solution and
8 the causes that they, limited number of causes that
9 they addressed.

10 JUDGE GIBSON: Okay, I think that takes
11 care of my concern. Do you have some more questions
12 that you needed to ask, Judge Sager?

13 JUDGE SAGER: You'll be happy to know only
14 a couple more.

15 JUDGE GIBSON: Okay. Okay, good.

16 JUDGE SAGER: I'm almost to the end.
17 Okay, so this question goes to the Applicant,
18 basically you say in your reply, that the higher
19 temperature limit could result in higher salinity
20 levels, you admit that. But say that it's, this
21 effect is only temporary. So, can you give me an idea
22 of what you mean by temporary? Hours? Days? Months?
23 How much time is expected that we'll be in this above
24 100 degree state?

25 MR. HAMRICK: That depends to a, I can't

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1 tell you that. That depends to a large degree, on,
2 you know, other, what kind of rainfall we have, what
3 kind withdrawals are there, these withdrawals, are
4 they, are they utilized. And you know, the 100 to 104
5 degree range is the, what's temporary is the number of
6 days, you know, we're in that narrow band between 100
7 and 104, in, like right now, and I haven't, don't have
8 the measurement. But I'm pretty sure it's not over
9 100 degrees in the cooling canal. So it's a limited
10 number of days in the summer when we're going to even
11 get in that band and then it will drop back down. And
12 so whatever salinity increase there would be, would be
13 limited to that, when we're in that band, until that
14 dissipates.

15 JUDGE SAGER: Okay, thank you, I was just
16 clarifying the --

17 JUDGE GIBSON: Excuse me, could I follow-
18 up on that Judge Sager? So, I just want to make sure
19 I understand this. So what you're saying is, for my
20 own edification, that you will only be doing this
21 remedy that would increase the salinity, for a brief
22 period of time in the summer when the temperature
23 would be approaching 104?

24 MR. HAMRICK: I think we need to separate
25 the concept of remedies versus the challenge to the

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1 license amendment. The license amendment is just a,
2 you know, you stick a thermometer in the water and see
3 what it is.

4 JUDGE GIBSON: Right.

5 MR. HAMRICK: If it's over 100, you've got
6 to shut down, right?

7 JUDGE GIBSON: Sure.

8 MR. HAMRICK: That, so that's the license.
9 The change is do you shut down or not.

10 JUDGE GIBSON: 100 or say it's 104?

11 MR. HAMRICK: Right.

12 JUDGE GIBSON: Okay.

13 MR. HAMRICK: The remedies, you know,
14 potential aquifer withdrawals, or L31 water, whatever
15 it may be. That may happen, you know, on a continuous
16 year, you know, in any month, in order to add water.
17 So that when, you know, when summer comes that would
18 be less of an issue.

19 JUDGE GIBSON: So it takes a while to get
20 that, enough water in there that you, from other
21 sources, that you will be dissipating the potential
22 temperature when it might spike. Is that fair?

23 MR. HAMRICK: Right, yes. And again, it's
24 important to note that, you know, the administrative
25 order isn't focused on temperature.

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1 JUDGE GIBSON: Sure.

2 MR. HAMRICK: So we're responding to our
3 environmental regulator for salinity and we'll be
4 addressing that, you know, on a year-round basis.

5 JUDGE GIBSON: Right. Okay.

6 MR. WHITE: If I may, I have a question on
7 that, but I need five minutes.

8 JUDGE GIBSON: Five minutes? You know,
9 we're probably getting pretty close to lunch.

10 MR. WHITE: No, I mean to walk down the
11 hall.

12 JUDGE GIBSON: Oh, well we all need that.
13 Actually, we're all going to take a break. So, I was
14 hoping we'd get finished with Contention One it sounds
15 like we're going to have to --

16 MR. WHITE: I just have a point on
17 salinity when we come back.

18 JUDGE GIBSON: Finish, we'll have to
19 finish all, finish this up, okay? Let's, let us take
20 a recess. Can, can we, is 1:30 enough time? Does
21 anybody need more time than until 1:30? Hearing no
22 objection. We will reconvene at 1:30 and take our
23 lunch recess now. Thank you.

24 (Off the record.)

25 JUDGE GIBSON: Good afternoon. Please be

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1 seated. Somehow Contention 1 seems, are we back on
2 the record? Somehow Contention 1 seems to have
3 dragged on here for a while. But I believe when we
4 were ready to recess, Mr. White indicated that he had
5 something else he needed to say, and --

6 MR. WHITE: Oh, I'll yield on that. I
7 realized I'd made that point. Thank you.

8 JUDGE GIBSON: Okay, so you've already
9 made the point. Okay. And I believe Judge Sager had
10 something to say. Hold on one second. Are these's
11 lights? Should these lights be on over here? The
12 shade's down, okay, that's what it is. Can you all
13 see okay over there? Okay. I believe Judge Sager had
14 a few additional things.

15 JUDGE SAGER: Right, thank you. I just
16 had one additional question. So this is a question
17 for the Applicant. On your reply on Page 23, you
18 assert that the rainfall data shows severe shortfall
19 in 2013 and 2014, and that the failure of the
20 Petitioner to challenge this information is a failure
21 to show a genuine dispute. I think I'm just asking
22 you to sort of summarize that argument. I believe
23 what you're saying is that because they did not
24 reference the biological assessment which was in the
25 environmental assessment. Is that correct?

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1 MR. HAMRICK: That's part of it. The
2 other part is that the Petitioners go, I forget what
3 the source is, but a local weather station for
4 Homestead and provided data for a local weather
5 station in Homestead. And the point we're making is,
6 you know, this is data that was publicly available.

7 And from, you know, a rain gauge that's in
8 the middle of the canal system. So it's, you know,
9 hyper local to use it. So right, if you're going to
10 challenge based on rain data, and that there is
11 publicly available, you know, data for the CCS, then
12 that should be used.

13 JUDGE SAGER: Okay. I think, though, that
14 in my reading that there's really no dispute about the
15 rainfall. I believe that the Petitioner, in their
16 petition, gave a table. And it shows basically the
17 same; that 2012 was a wet year, and 2014 a very dry
18 year. So I don't think there's really any dispute
19 there. I think the dispute is about what the cause of
20 the things that are happening in the canal. Is that
21 a fair statement, Mr. White?

22 MR. WHITE: What I would say at that
23 point, our point was looking at the rainfall over
24 time, and also on another graph, that conditions had
25 obtained before that were also dry, but didn't

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1 precipitate an emergency situation. Therefore,
2 another cause should be sought.

3 JUDGE SAGER: Right. I was looking for
4 that table. Do you remember what page?

5 MR. WHITE: There's one table on page 8,
6 and there's a larger table on page --

7 JUDGE SAGER: There it is. Yeah, on page
8 12.

9 MR. WHITE: -- 12.

10 JUDGE SAGER: Right. So your position is
11 that you had dry years in 2010 and 2011. 2012 was
12 actually a wet year. But during those other dry years
13 we didn't have the same thing occurring.

14 MR. WHITE: And you can see a similar
15 thing if you look at the handouts. When there were
16 times, I'm not sure exactly which, when things
17 obtained --

18 JUDGE GIBSON: Could you let us know which
19 particular chart on the handout you are referring.

20 MR. WHITE: Well, generally on all these
21 things, if you look at the, say H for example, back in
22 2011 there was a period of time from May through
23 October when the temperatures were above 100 degrees
24 on that parameter. And nothing happened of note that
25 wound up in the Federal Register.

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1 But if you look at the period after the
2 up-rate, beginning immediately after the up-rate, May
3 23, and you see the temperatures begin to rise. Well
4 the exigent situation began, was it, let's see, this
5 goes through May 28th. If it was extended, our point
6 is that looking just at this, going back a few years
7 when there were also high temperatures, nothing seemed
8 to happen there.

9 And then in 2014, when we had high
10 temperatures, there were problems. And the only
11 thing, or one thing that seems to have changed is the
12 installation of two uprights on 3 and 4. So I realize
13 that concurrency is not causality. But there is,
14 something happened after the upright that, in a
15 similar situation, did not happen before.

16 And that raises a question that I think,
17 scientifically, should be examined. And I think it's
18 behooves FPL to explain why it happened at one point
19 in time, and it didn't happen at another point in
20 time. Not just for this graph, but for the others in
21 the whole Exhibit 1.

22 MR. HAMRICK: If I could interject just
23 for a moment on the issue. Mr. White has repeatedly
24 said that FPL has stated that only cause was the lack
25 of involvement. That's just simply not correct.

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1 There would have been a number of factors. The
2 rainfall was certainly one of them. The algae bloom
3 certainly affected the thermodynamic properties of the
4 cooling canal.

5 And there's been some impacts on the
6 ability of the ground water recharge, as well. So
7 it's, basically, it's the reduction in water in the
8 cooling canal, which is rainfall recharge. Those, you
9 know, a confluence of those factors.

10 JUDGE SAGER: All right, thank you. I'm
11 done for now.

12 JUDGE GIBSON: Judge Kennedy.

13 JUDGE KENNEDY: I'm good.

14 JUDGE GIBSON: Okay. Believe it or not,
15 I think we're ready to move to Contention 2. Mr.
16 White, in this contention, you challenge the need to
17 issue the license amendments in an exigent manner. Is
18 that correct?

19 MR. WHITE: Yes sir.

20 JUDGE GIBSON: And, by this, you are
21 asserting that the circumstances that precipitated the
22 Nuclear Regulatory Commission's need to approve an
23 increase in the heat load had been building and
24 growing since 2012, when Turkey Point Units 3 and 4
25 were uprighted. Is that correct?

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1 MR. WHITE: Actually, before that, if I
2 may.

3 JUDGE GIBSON: Okay. So that's not what
4 you said in your pleading, or what you said in your
5 pleading was incomplete, or you're correcting what you
6 said in your pleading? I'm just trying to understand,
7 sir.

8 MR. WHITE: I don't have perfect recall.

9 JUDGE GIBSON: That's okay. You can look
10 at your pleading if you want. It's, I believe it's on
11 page 10 and 12, isn't it; 10 to 12.

12 MR. WHITE: Okay. And you're looking at
13 exactly which statement, please?

14 JUDGE GIBSON: You said the need to
15 approve an increase in the heat load had been building
16 and growing since 2012 when Turkey Point Units 3 and
17 4 were uprighted.

18 MR. WHITE: Okay, I'll --

19 JUDGE GIBSON: That is what you said,
20 correct?

21 MR. WHITE: That's fine. I'm not saying
22 that's all that was, the only time period, but I'll
23 say I'll agree with that.

24 JUDGE GIBSON: Okay, thank you. Now, to
25 substantiate your argument on page 10 to 12 of your

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1 petition, you assert that there have been a series of
2 remedial measure that Florida Power and Light took
3 over the past year. And that these measures establish
4 that the problems leading to increased temperatures
5 have existed for some time. Is that correct?

6 MR. WHITE: Yes sir.

7 JUDGE GIBSON: At page 26 of your answer,
8 counsel for Florida and Light, you maintain that the
9 problems leading to the cooling canal system
10 temperature and salinity increase have been known for
11 some time, but that there was no reason to request an
12 amendment from the Nuclear Regulatory Commission,
13 exigent or otherwise, until it became clear that the
14 ultimate heat sink was in danger of approaching the
15 100 degree Fahrenheit limit. Is that correct?

16 MR. HAMRICK: Yes. The background that
17 CASE went through discusses the concerns about
18 salinity, which have been ongoing for a while. It was
19 the temperature concern, not it was the, amendment is
20 about a temperature limit. And temperature did not
21 become a concern with respect to crossing that limit
22 until the summer of 2014.

23 JUDGE GIBSON: So it would be fair to say
24 that salinity, the salinity increases had been known
25 for sometime, but the temperature issue was not known

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1 until after you had some experience after the upright.
2 And I know you're asserting that the upright had
3 little, if anything, to do with it. But I'm just
4 saying that is what you're saying. Is that correct?

5 MR. HAMRICK: Right, the salinity issues
6 have been ongoing. The temperature issues were raised
7 in the summery of 2014.

8 JUDGE GIBSON: And were, essentially,
9 novel at that point, correct?

10 MR. HAMRICK: Yes.

11 JUDGE GIBSON: Okay. So with respect, I
12 mean, I realize you don't agree on the cause. But do
13 CASE and you basically agree on the basic facts, then?
14 That these, the temperature, that there was, the
15 remedial measures that you took over the past year
16 indicated that there was some kind of a temperature
17 problem?

18 MR. HAMRICK: There were a number of
19 factors that became known in 2014, you know, the algae
20 and things like that. And we took action towards
21 those in the spring and summer and the temperature,
22 but the fact that we might hit the 100 degree
23 threshold is, that was new in the, you know, in the
24 early summer of 2014.

25 JUDGE GIBSON: Now, do I understand that

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1 you're asserting that CASE can't challenge the NRC's
2 determination that the circumstances were so pressing
3 that it went straight to an amendment of the license
4 before these people were afforded an opportunity for
5 hearing?

6 MR. HAMRICK: That's correct.

7 JUDGE GIBSON: Okay. What is the legal
8 basis for your position?

9 MR. HAMRICK: There's several reasons.
10 The clear reason is that 10 CFR 50.58 states clearly
11 that the NRC staff's no significant hazards
12 consideration determination can't be challenged by a
13 board or the commission. The relevance of the NRC's
14 exigency determination is to shorten the time period
15 for public comment on the staff's no significant
16 hazards consideration determination.

17 So it's, basically, it's a procedural
18 decision that, affecting the time period for comment
19 on a substantive decision that itself cannot be
20 challenged. So that's kind of the big picture reason.

21 More importantly, I think, the
22 Commission's contention admissibility standards 2.309
23 say that contentions must be within the scope of a
24 proceeding and material to the proceeding. And here
25 the scope is limited to the license amendment itself,

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1 the safety, the staff's safety review, the staff's
2 environmental review. The timing of the public
3 comment period is not germane to the substance of the
4 staff's review, not is it material.

5 Regardless of the decision on exigency,
6 that doesn't change the fact that, you know, here
7 we're having an opportunity for a hearing. So the
8 ultimate outcome of the proceeding, the staff's
9 review, and this hearing are not affected one way or
10 the other by the length of time for public comment on
11 the no significant hazards consideration
12 determination.

13 JUDGE GIBSON: Okay. Mr. White, you
14 disagree with his statement of the legal position that
15 you face? Yes you agree with him?

16 MR. WHITE: No.

17 JUDGE GIBSON: No, you disagree with.
18 Okay. Tell me, tell us why you disagree with him on
19 the, on his statement of what the legal situation you
20 face is.

21 MR. BLAIR: We're talking about the time
22 limit to file. Is that right? Let me understand the
23 question.

24 JUDGE GIBSON: Yes. We're talking about
25 the shortening of the time to comment, and what is the

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1 permissible scope. I believe that's, essentially, the
2 essence of what he said. And it's very narrow. And
3 then he said, but we're having an oral argument today
4 anyway, so sort of no harm, no foul.

5 MR. WHITE: I would contend that there was
6 one.

7 JUDGE GIBSON: Okay.

8 MR. WHITE: Because by declaring an
9 emergency, the question becomes was it an emergency,
10 and was it something that the should have know, the
11 could have know, they could have prepared for had then
12 been watching for it? Some of our evidence shows that
13 there was notable. So that, and secondly, by creating
14 an emergency situation, it sort of gave them license
15 to do things that they might not be able to do, like
16 really examine, they could have shut down a reactor,
17 I guess.

18 They shut down the reactors to upright
19 them, and the world didn't come to an end. They shut
20 them down for 17 months, one at a time. And they have
21 plenty of power in their system. And, as I'll contend
22 later, they had re-purposed one and two so they
23 weren't available as backups.

24 So they've got themselves in a box, and
25 they said hey, we have an emergency. So we got to do

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1 this and this and this and this. And so the
2 shortening of the time, I don't think, was justified.
3 And, I'm sorry short-term memory, the second point
4 was?

5 JUDGE GIBSON: Well, essentially that once
6 the staff makes this no hazards determination it can't
7 be challenged. That you can shorten the time period,
8 and that the scope of what we're here for is limited.
9 But, essentially, we are here so what's the big deal?
10 I don't mean to say your claims aren't justified, nor
11 does he. He's not being disparaging of that. It's
12 just we're here.

13 MR. WHITE: In fact, on the 8th of August,
14 '14, when they posted the event notification, they
15 called it a natural event. They operating two
16 reactors, a cooling canal system, and they're saying
17 it was a natural event. I assume they mean because of
18 the ambient temperature, and because of the lack of
19 rainfall.

20 We'll show that, for example, let me enter
21 this in, if I may now. If I may, can I enter into
22 evidence --

23 JUDGE GIBSON: Well actually, we're not
24 taking evidence at this stage. But you're welcome to
25 provide us with a demonstrative that you think may

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1 assist us in our reaching an appropriate decision
2 about the contentions.

3 MR. WHITE: What you're going to see here
4 is an analysis of salinity beginning in 1973.
5 Probably on the day before the reactors, the cooling
6 canal was, started to be used, going through March of
7 '13. Now as you can see, first of all, there was an
8 immediate jump in salinity from 25 parts per 1,000 to
9 about 37. And there has been an increase, steadily,
10 consistently, uniformly up to 55 parts per 1,000 over
11 the time period; the 40 years of the life of these
12 cooling canals.

13 So anybody looking at this has to say, you
14 know, there's something at play here. What's going
15 on? Why is this happening? And that's 60 right now
16 reached 90. So one of the statements I do recall,
17 memory isn't totally gone, is that given this
18 increasing base of challenge to the system in terms of
19 salinity and temperature, forget about temperature.

20 Let's talk about salinity, if I may.
21 Considering that the system was becoming increasingly
22 saline, when the system was challenged, let's, our
23 windows say that it's the case. They had lack of
24 rainfall, high temperature. They had those same
25 conditions earlier in the lifetime of the canals. And

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1 an emergency situation did not occur.

2 Now, when you take the gradual increase in
3 salinity over time, and the inability of the canals to
4 handle it, plus the upright which occurred, and then
5 you have an, a challenging situation for the canals,
6 they couldn't handle it. It over-taxed the system.

7 So our, that's, I don't know if that
8 speaks to, so yes, as Mike says, it becomes an
9 operational issue. And that's our problem with the
10 bifurcation of the agencies. Because you have a
11 possible explanation of what happened, which is
12 operational at the plant, that you're trying to solve
13 with band-aids to fix the result of the operation.

14 There has to be some treatment of
15 consequences of the operation of the reactors, and an
16 analysis of what's going on. And they had their own,
17 they had the data. This data was, those charts that
18 you have, all Miami-Dade County did was take their own
19 data and plot it to see what was happening.

20 And on, when that exigent situation came
21 up, their response was it's an emergency. We have to
22 treat it quickly. We have to put in five billion
23 gallons of water from a fresh water source. We have
24 to put in copper sulfate, which I'll describe --

25 JUDGE GIBSON: We'll get to that later.

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1 We'll get to copper sulfate in the law.

2 MR. WHITE: So whatever it is, my, I hope
3 that answered --

4 JUDGE GIBSON: Well, you know, I think I
5 see where you're going here. But I guess part of my
6 confusion is that the salinity has been increasing
7 over time. I think we can see that. This is a nice
8 demonstration of that. But I think what we're talking
9 about here is that the Applicant realized, perhaps it
10 should have realized sooner, but it realized that the
11 temperature, not the salinity, but the temperature in
12 this canal was going up.

13 They were limited by 100 degrees
14 Fahrenheit. And they went to the Agency and said hey,
15 you know, we've got a 100 degree limit, we've got a
16 problem here. And at that point, perhaps for others
17 as well, the Agency said okay, we'll need to do a no
18 hazards determination and move this along fast, as
19 we're allowed to do.

20 Now, what you're showing me with this
21 graph, on the other hand, is an increase in salinity
22 since 1973. And it's a little difficult to see what
23 the connection is between this and the, and the
24 concern you're raising that they shouldn't have said
25 this was an urgent situation. Because this is, if

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1 you're talking about this, this is something that's
2 been going on since '73. Am I just being thick? Is
3 there something you're not saying that I'm just not
4 getting there?

5 MR. WHITE: Can I ask a question?

6 JUDGE GIBSON: You sure can. I'm not the
7 only one that can ask them. I'm not always obligated,
8 however, to answer.

9 MR. WHITE: If they had shut down one of
10 the reactors, could that have mitigated the problem?

11 JUDGE GIBSON: I really don't know.
12 According to the Applicant, at least, that wouldn't
13 have made a difference because the problems were
14 external to the reactor. They were not caused by the
15 upright, okay.

16 MR. WHITE: But --

17 JUDGE GIBSON: They were saying there's
18 other stuff going on out there. There's not enough
19 rainfall. There's more intrusion. There's, you know,
20 increased temperatures that are causing these things
21 to consolidate. And, as a result of that, all those
22 things combined, are causing the temperature to go up,
23 and we need to get our limit raised. Now that's what
24 they're saying the situation is.

25 MR. WHITE: But if, if one or both of the

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1 reactors were shut down, in other words, you could
2 have all that going on in the canal, but unless the
3 reactors are operating, what's the difference what the
4 temperature is?

5 JUDGE GIBSON: Well, I'm sure it would
6 make a difference to the Applicant if they shut one of
7 those, one of those reactors down.

8 MR. WHITE: So --

9 JUDGE GIBSON: Well no, I'm just saying
10 you saying what's the big deal. I'm saying that would
11 really be a big deal, you know.

12 MR. WHITE: Of course it would be a big
13 deal. But what imperative are we dealing with if we
14 don't consider that option?

15 JUDGE GIBSON: Okay.

16 MR. WHITE: Are we dealing with an
17 operation imperative, an economic imperative. In
18 other words, what imperative is in play if we don't
19 consider an option as an alternative to taking five
20 billion gallons of fresh water from the aquifer, to
21 putting copper sulfate, which is a poison, into the
22 thing. I mean, I don't, at levels that had probably
23 not been anticipated earlier on when they had the BA
24 and the other analyses. They're considering normal
25 operation.

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1 JUDGE GIBSON: So essentially what you're
2 saying is, in addition to the remedy that was
3 ultimately put in this amendment, they should have
4 considered another alternative, which was to shut down
5 one of these reactors. Is that, essentially, what
6 you're saying?

7 MR. WHITE: Shut down, maybe reduce the
8 level. But what I'm saying is if the car is running
9 off the road, you can always shut the engine off.

10 JUDGE GIBSON: Okay. Now, I believe the
11 Applicant wanted to say something, so I'm sorry.

12 MR. BLAIR: Your Honor, thank you for
13 that. Several things all at once. Fundamentally, the
14 tech spec at issue here required, in fact, a dual unit
15 shutdown; both Units 3 and 4 be shutdown once
16 temperature exceeded the 100 degree limit. That is
17 what, at issue, my bedrock issue here, we were seeking
18 to have modified.

19 And in fact, at various points during
20 this, we either initiated a shutdown or at least
21 partially reduced power to exceed, to avoid exceeding
22 either the tech spec limit or the interim guidance
23 limit during the pendency of the review as promulgated
24 in the Notice of Enforcement Discretion.

25 But more importantly for these purposes,

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1 as part of our license amendment, right, we had to
2 show the exigency. And to directly answer, right,
3 Petitioner's question as to why we, why shutting down
4 was not the best option. We submitted the affidavit,
5 the sworn testimony of the electric system operator,
6 I believe it was Mr. Sanchez, explaining that the
7 removal of 2200 megawatts of power from the end of a
8 peninsula during peak summer load would actually
9 create a hazard to the public, right, more severe,
10 than allowing the units to remain online during the
11 pendency of the Commission's review.

12 So that material, that evidence is part of
13 the amendment that's before the board now. And was
14 completely unchallenged by Petitioner at any point in
15 the proceeding.

16 JUDGE GIBSON: Thank you, thank you for
17 that clarification.

18 MR. WHITE: I would just ask, the reactors
19 were shut down on at a time for 17 months. By
20 definition, those 17 months would have covered some
21 hot months. FPL found the power from their vast
22 system to keep things moving at an even keel, and I
23 doubt if they dropped a stitch. So I find it hard to
24 understand why it would obtain at one point in time
25 and not at another.

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1 JUDGE GIBSON: Good. I thought you were
2 going to address it to him, which I didn't want you to
3 do. If you could address your comments to me, not to
4 each other. Is there anything more we need to say on
5 this?

6 MR. BLAIR: Simply I would, obviously
7 there is resource planning involved. If we know that
8 we're going to take one unit offline for an extended
9 period of time, we have the ability to plan sequence
10 outages and repairs at other units, that you don't
11 have under an exigency circumstance.

12 JUDGE GIBSON: Okay. Do any, either of
13 you have any other questions on Contention 2? One
14 more thing on Contention 2. Was there any new matter
15 that was not merely a rebuttal to your defenses that
16 was raised in CASE's petition on Contention 2?

17 MR. WHITE: Not on Contention 2.

18 JUDGE GIBSON: Okay. Thank you. Let's go
19 to Contention 3. Mr. White, in Contention 3 you are
20 challenging whether the steps Florida Power and Light
21 took to control temperature increases and algae blooms
22 in the cooling system are sufficient. Is that
23 correct?

24 MR. WHITE: Are sufficient?

25 JUDGE GIBSON: Yes sir.

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1 MR. WHITE: The question is yes sir.

2 JUDGE GIBSON: Okay. And this is where
3 we'll get a chance to talk about copper sulfate, okay.
4 So let's just take these one at time. You are
5 faulting, if I understand correctly, you're faulting
6 Florida Power and Light for three separate things; for
7 using copper sulfate to control algae blooms. Is that
8 correct? For not preventing saline and toxic algae
9 from escaping the cooling canal system. Is that
10 correct? And for using water from the Biscayne
11 Aquifer. Is that correct?

12 MR. WHITE: Yes sir.

13 JUDGE GIBSON: Okay. Now, I appreciate
14 that both Florida Power and Light and the NRC staff
15 maintain that increases in salinity, temperature and
16 algae blooms have resulted not from the upright, but
17 from ambient temperature increases and from decreased
18 rainfall. And that we have a dispute about that
19 between the parties. Did the upright cause these
20 things, or would they have happened independent of the
21 upright. That's a dispute we have.

22 Set that aside for a minute. I want to
23 start with counsel for the NRC staff. And ask when
24 the upright was approved through the amendment in
25 2011, you conducted an environmental assessment under

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1 the National Environmental Police Act then, correct?

2 MR HARRIS: Yes.

3 JUDGE GIBSON: And you calculated that the
4 maximum change in water temperature due to the
5 proposed EPU would be approximately 2 to 2.5 degrees
6 Fahrenheit, correct?

7 MR. HARRIS: Yes, Your Honor.

8 JUDGE GIBSON: For water entering the
9 canal and a 0.9 degree Fahrenheit increase for water
10 returning to the power plant. Is that correct?

11 MR. HARRIS: Yes, Your Honor.

12 JUDGE GIBSON: And at that time, you
13 concluded in the environmental assessment that these
14 changes would not be significant. Is that right?

15 MR. HARRIS: Yes, Your Honor.

16 JUDGE GIBSON: So I take it that a maximum
17 change in water temperature that has occurred is more
18 than this 2 to 2.5 degrees Fahrenheit for water
19 entering the canal, and 0.9 degrees Fahrenheit for
20 water returning to the plant. Is that correct?

21 MR. HARRIS: I don't know that I would
22 describe it quite that way. Because that's, you're
23 looking at the average, you know, when you're looking
24 at something like that, you're looking sort of at the
25 average temperatures, you know, rather than a specific

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1 temperature. So those temperatures are going to
2 adjust.

3 You can't, you can't decouple the ambient
4 from the heat load. So some of the temperatures
5 you're seeing could be results of environmental
6 factors, including the algae bloom, that are not
7 necessarily related to the EPU. Because, of course,
8 algae has a darker color, absorbs more heat than a
9 clear canal system.

10 So I don't, I'm not necessarily disputing
11 what you're saying, but you're, you can't fully
12 decouple \
13 those --

14 JUDGE GIBSON: You're saying, essentially,
15 that there was a maximum change in water temperature
16 more than you'd predicted. But that you can't say
17 that that was caused by the power upright.

18 MR. HARRIS: That's correct, Your Honor.

19 JUDGE GIBSON: Okay?

20 MR. HARRIS: Yes.

21 JUDGE GIBSON: Yeah, I understand you to
22 be saying that. I do. And you conducted the EA for
23 the power upright, anticipated that these water
24 temperatures would lead to evaporation of an
25 additional two to three million gallons of water per

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1 day. Is that right?

2 MR. HARRIS: It sounds right, Your Honor.

3 JUDGE GIBSON: And that would cause a
4 slight increase in salinity of approximately 2 to 3
5 parts per 1,000. Is that correct?

6 MR. HARRIS: Yes, yes Your Honor.

7 JUDGE GIBSON: Okay. Now you indicated,
8 in the environmental assessment for the upright, that
9 you would rely on Florida Power and Light and the
10 Florida Department of Environmental Protection for
11 monitoring these increases in water temperature to
12 determine if a future environmental problem will
13 arise. Is that correct?

14 MR. HARRIS: Yes, Your Honor.

15 JUDGE GIBSON: With respect to this new
16 amendment that CASE is challenging in this proceeding
17 with regard to the increase in temperature in the
18 ultimate heat sink, you plan to continue to rely on
19 Florida Power and Light and the Florida Department of
20 Environmental Protection for monitoring these
21 increases in water temperature to determine if a
22 future environmental problem will arise. Is that
23 correct?

24 MR. HARRIS: Yes, Your Honor. It's within
25 their authority to control. So for our purposes you

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1 need, you know, an ultimate heat sink that's capable
2 of, you know, providing necessary coolant for the
3 reactor for accident scenarios. In terms of how the
4 State of Florida wants to manage its water, it would,
5 you know, I can't say they're in agreement with the
6 State EPA.

7 But they have the authority from the Clean
8 Water Act permitting process, and the water
9 withdrawals to manage their water, so they're the ones
10 who are going to be managing the water table, not us.
11 For us, it's the purpose of providing sufficient
12 cooling for the reactor for operations and access.

13 JUDGE GIBSON: I think the State of
14 Florida has received NPDS delegation from the State
15 of, from the EPA. I think it did many years ago. So
16 I don't want to put words in your mouth, counsel, but
17 are you saying that your concern at the Nuclear
18 Regulatory Commission is with the water coming into
19 the plant for purposes of the safety of the reactor,
20 and not with the temperature of the water leaving the
21 plant?

22 MR. HARRIS: That is, well, there are, no,
23 but, what's the, the best way to describe this is
24 we're concerned about there being, you know, from a
25 radiological safety perspective and safe operations of

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1 the plant, that there is sufficient cooling capacity
2 in the ultimate heat sink which is tied to the inlet
3 temperature, the heat, you know of course, you know,
4 particular fouling and ability to discharge the heat,
5 both in an accident condition and under normal
6 operation.

7 So from a radiological safety perspective,
8 that's what you're looking at. Can the plant operate
9 safely given the conditions that it has been now
10 approved for, or the conditions that they're proposing
11 to change? From an environmental standpoint, that
12 change we look at from an environmental impact.

13 But in terms of the staff being able to
14 tell FPL that salinity is too high in the canal, and
15 you need to do something to reduce the salinity in the
16 canal, that would be something that the State of
17 Florida would have authority over, as long as that
18 salinity was not impacting the operation of the
19 reactor.

20 So increased corrosion, fouling, kind of
21 issues that would reduce the efficiency of the heat
22 exchanger. And that's part of the license amendment
23 itself; was to increase the surveillance frequencies
24 once you got above 100 degrees to make sure that that
25 efficiency was maintained.

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1 JUDGE GIBSON: So you, you have a
2 relatively specific idea, then, about what your
3 responsibilities are under NEPA, huh? That you just
4 look at these impacts, but if anybody wants to do
5 anything about them, it's not you. It is the State of
6 Florida.

7 MR. HARRIS: We have no authority to
8 regulate the ground water or, you know, the
9 withdrawals of waters, or even the discharge into the
10 cooling canals. Though, in this particular case, I
11 believe it's a no discharge, the cooling canals aren't
12 considered part of the ground waters in the way that
13 it's produced, the permits done.

14 JUDGE GIBSON: Fine, we'll, that's fine.
15 In the environmental assessment for the upright, the
16 NRC staff asserted that the Florida Department of
17 Environmental Protection could impose additional
18 requirements if the monitoring was insufficient or
19 revealed unacceptable environmental impacts. Is that
20 correct?

21 MR. HARRIS: That's correct, Your Honor.
22 And they still can impose those kind of requirements.
23 And to the extent that it would affect reactor safety,
24 you know, then we would have to look at those, what
25 the State of, you know, how that would impact the

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1 operation of the reactor should additional, should
2 they somehow change the operation of the cooling canal
3 system and it's ability to absorb the heat.

4 JUDGE GIBSON: Are you familiar with the
5 recent decision of the board in Fermi 3 regarding a
6 sua sponte review of this very matter? Not with
7 respect to Florida Power and Light, but with respect
8 to relying, in the future, on another agency to
9 determine if additional requirements for monitoring
10 are needed?

11 MR. HARRIS: I'm not familiar with it. I
12 can --

13 JUDGE GIBSON: It might be a good idea to
14 do that. And when you do it, you might also look at
15 Calvert Cliffs Coordinating Committee and NRC versus,
16 New York versus NRC, both of which are referenced in
17 that opinion.

18 MR. HARRIS: Yes, Your Honor.

19 JUDGE GIBSON: Has the Florida Department
20 of Environmental Protection imposed additional
21 requirements on the Turkey Point facility as a result
22 of increases in water temperature and salinity?

23 MR. HARRIS: I believe that they just did
24 on December 23rd in terms of --

25 JUDGE GIBSON: This was the order on

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1 December 23?

2 MR. HAMRICK: Correct.

3 MR. HARRIS: I believe it's related to
4 salinity not temperature, but --

5 JUDGE GIBSON: So it's your view, I take
6 it, that monitoring by the Florida Department of, by
7 Florida Power and Light and the Florida Department
8 Environmental Protection is adequate to meet the hard
9 look that NEPA requires the NRC make.

10 MR. HARRIS: Well, the NRC looked at the
11 impacts of the addition of water to the cooling canal
12 system and the chemical treatment. You know, those
13 are discussed in the EA, and in the biological
14 assessment. So we did do an analysis of that.

15 JUDGE GIBSON: Did the monitoring that was
16 done prevent a significant increase in salinity above
17 that which the NRC staff anticipated when it approved
18 the upright?

19 MR. HARRIS: I believe it is different
20 than what was discussed in the EA for the upright.
21 But you have to use the best information available at
22 the time. At the time, there had been no algae blooms
23 like this that would have, that, you know, created a
24 situation where you could absorb significantly more
25 heat into the cooling canal system. So it was --

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1 JUDGE GIBSON: The monitoring didn't
2 prevent the algae bloom, either then, did it?

3 MR. HARRIS: No, Your Honor.

4 JUDGE GIBSON: Did the monitoring prevent
5 a significant draw down of water from Biscayne
6 Aquifer?

7 MR. HARRIS: What would you define as a
8 significant draw down of water, Your Honor? I mean --

9 JUDGE GIBSON: Did you even address it in
10 the environmental assessment?

11 MR. HARRIS: For the EPU or for this one?

12 JUDGE GIBSON: Yes, for this.

13 MR. HARRIS: For this one, the draw down
14 of water from the Biscayne Bay Aquifer and the
15 Floridan aquifer were both addressed in the EA.

16 JUDGE GIBSON: But not for the upright?

17 MR. HARRIS: Not for the upright.

18 JUDGE GIBSON: Okay. It seems that your
19 defense of this contention centers on the notion that
20 increased ambient temperatures and decreased rainfall
21 are the real culprits with the increase in water
22 temperature and salinity. Is that correct?

23 MR. HARRIS: Our, the, no, it's a
24 combination of both the decrease in rainfall, so the
25 decrease in replenishment of the cooling canal system

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1 from where it had been traditionally getting it. But
2 also a combination with the algae bloom which was
3 aggravating the issues at that time in terms of its
4 ability to absorb, you know, create solar heating in
5 the water itself. So you were getting elevated
6 temperatures from the algae bloom.

7 Our defense of this contention is it
8 appears that the contention itself is challenging that
9 we, the NRC should have precluded them, precluded FPL
10 and the State of Florida from authorizing and treating
11 the canals with copper sulfate, hydrogen peroxide and
12 a bio-stimulant, and withdrawing water to deal with
13 the salinity.

14 And whether we issued this amendment,
15 there's nothing we can do about that decision. That
16 decision was made separately. The State of Florida
17 has its own administrative procedures where, you know,
18 Petitioners could have challenged those issues before
19 the State of Florida.

20 JUDGE GIBSON: There was no mention in the
21 environmental assessment for the upright about
22 increased ambient temperatures or decreased rainfall
23 as possible contributors to an increase in water
24 temperature or salinity. Is that correct?

25 MR. HARRIS: I'd have to verify it, Your

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1 Honor, and review it to see whether or not that was
2 mentioned.

3 JUDGE GIBSON: Okay.

4 MR. HARRIS: I mean, it will take me a
5 little bit to go through that if you want to go --

6 JUDGE GIBSON: Okay, what we'll do, you
7 can, we'll take a break. And when we do, you can
8 check that out during the break, okay, ad let us know.

9 MR. HARRIS: Yes, Your Honor.

10 JUDGE GIBSON: Let's turn to ground water.
11 On page 7 of the environmental assessment issued in
12 support of the 2014 license amendments, the staff
13 states that the proposed action would result in no
14 significant impact on ground water resources.
15 Therefore, this assessment does not present any
16 further evaluation of the operational impacts on these
17 environmental resources. Did I read that correctly?

18 MR. HARRIS: I believe so, Your Honor.
19 Yes, Your Honor.

20 JUDGE GIBSON: And on page 13, the EA
21 states that the proposed action would have no effect
22 on the remaining resources, i.e., several things,
23 including ground water resources. And, thus,
24 cumulative impacts would not occur for these
25 environmental resources. Did I read that correctly?

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1 MR. HARRIS: Yes, Your Honor.

2 JUDGE GIBSON: So, is it the position of
3 the staff that water contained in the canal cannot
4 migrate into the ground water beneath?

5 MR. HARRIS: No, Your Honor. But there
6 is, but there is, you know, some limited exchange of
7 that. It's something that came up earlier when we
8 were talking about tritium and being a way to use it
9 as --

10 JUDGE GIBSON: Indicator, I believe you
11 said.

12 MR. HARRIS: -- a marker, a marker of
13 where the migration is. You have to understand
14 there's a difference between tritium which is being
15 incorporated as the water. So it's moving as the
16 water molecules itself, rather than a contaminant in
17 the water which, you know, could be being filtered
18 through the ground, you know, through it's migration.

19 So the tritium is going to be more freely
20 moving in the water than the majority of the
21 contaminants that are in the water. But that's not
22 true of all, but sort of as a general description.
23 Tritium doesn't show exactly where all the solvents
24 are going.

25 JUDGE GIBSON: Tritium doesn't show where

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1 all the what are going?

2 MR. HARRIS: Solvents. So when you have
3 a solution, you have solute and a solvent. And the,
4 I sometimes mix them up. So the --

5 JUDGE GIBSON: The material that
6 dissolved.

7 MR. HARRIS: The material that's
8 dissolved.

9 JUDGE GIBSON: Fair enough.

10 MR. HARRIS: You know, is not necessarily
11 moving with the water itself in the same way. So it's
12 not, I'm not disputing it's not a marker, but it
13 doesn't necessarily show the, what we'll call the
14 contaminants in the water.

15 JUDGE GIBSON: Some of us that have worked
16 around the oil field in the past think of solvents in
17 a little different way than that. But that's okay.

18 MR. HARRIS: I should know better.

19 JUDGE GIBSON: That's all right. On page
20 10 of the environmental assessment, it states that
21 because the proposed action would only affect the CCS,
22 and the CCS is a man-made closed cycle cooling system,
23 the NRC concludes that the proposed action would not
24 result in significant impacts to surface water
25 resources.

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1 MR. HARRIS: We need to clarify. So the
2 proposed action is the license amendment to increase
3 the temperature, okay. The other things, you know,
4 for you know, the treatment authorized by the state,
5 the water withdrawal --

6 JUDGE GIBSON: Which happened after this
7 was issued, correct, December of, December 23?

8 MR. HARRIS: The most recent one was
9 December 23rd. There were, actually, an emergency
10 order that, I want to double check the date. I
11 thought the emergency order for the initial water
12 withdrawals was before we issued the amendment --

13 JUDGE GIBSON: I bet you Florida Power and
14 Light knows. The initial approval that he's talking
15 about.

16 MR. HAMRICK: The initial approval for
17 which, which --

18 MR. BLAIR: Your Honor, while my counsel
19 looks for the dates, right, conceptually, Florida
20 Power and Light begun to address, right, the algaecide
21 which began in the spring. Some of the salinity
22 issues that were being monitored, right, that needed
23 to be addressed, and these pre-date the license
24 amendment at issue here.

25 So, and that's somewhat confusing when we

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1 talk about how much is being withdrawn where. You
2 have to place it in time, right, to know, so we did
3 have temporary authority to do certain things we had,
4 right, of the Commission to add biocides for a period
5 of time. These all pre-date the license amendment.

6 Which is why they are discussed in the
7 cumulative effects of the environmental assessment.
8 Because they had already occurred, and now I'm asking
9 to raise the temperature of the canals. So, in
10 parallel with that, we have the administrative order
11 that's out in draft form that's being, you know,
12 promulgated and commented on. And it allows, in fact
13 mandates certain future actions.

14 So the potential to withdraw water from
15 the various sources had been the subject of public
16 proceedings pre-dating the license amendment. The use
17 of the biocide was the subject of a separate public
18 proceeding that pre-dated the license amendment. Then
19 we have the license amendment.

20 And concurrent with that, overlaying all
21 of that, was the end product of this data monitoring,
22 which is the administrative order that attempts,
23 fundamentally, to address salinity. And counsel has
24 the dates for these things.

25 MR. HAMRICK: I don't have the dates for

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1 the biocides, but that was in the spring. The South
2 Florida Management District authorizations for the
3 Unit 5 well authorization was June 27th. The Unit 6
4 and 7 wells was July 1st. And the L31 canal temporary
5 emergency relief was August 28th. And that was the
6 one that was after, after the EA.

7 JUDGE GIBSON: The first two were 14 each,
8 and the last one was 100. Is that right?

9 MR. HAMRICK: The first two, the first one
10 was five, five of the existing 14 million gallon
11 allocation.

12 JUDGE GIBSON: Okay.

13 MR. HAMRICK: That goes to Unit 5. The
14 second one was up to 30, 10 from each of the three
15 different wells. That was the Unit 6 and 7 wells.
16 And the last one was up to 100 from the L31 canal,
17 subject to the limitations in place for protection of
18 wildlife and environmental purposes. So again, we
19 didn't get up to 100. So it was up to 100.

20 JUDGE GIBSON: You were authorized, but
21 you didn't do it, right?

22 MR. HAMRICK: Right.

23 JUDGE GIBSON: Fair enough, okay.

24 MR. HARRIS: Your Honor, I don't know if
25 I finished completing, you know, the thought, but the

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1 proposed action that is talked about there is the
2 proposed action before the NRC. Those other actions
3 are discussed as a cumulative. So you're, that
4 proposed action is the change in temperature; how that
5 would affect the ground water resources, not, you
6 know, that four degrees, you know.

7 JUDGE GIBSON: The other things that
8 happened that you never addressed in the upright, and
9 that weren't part of this amendment, then, were not of
10 any concern to you. Is that right?

11 MR. HARRIS: No, they're addressed,
12 they're addressed in the cumulative. You know, the EA
13 goes through those treatments, but they're not the
14 proposed action. So when you hear the proposed
15 action, it's the license amendment before the NRC, not
16 all of the different changes that are being authorized
17 by somewhere else. But those, the treatment of the
18 biocide of the canal and the withdrawals were
19 discussed in the EA.

20 But when you're looking at that particular
21 portion where it's talking about the proposed action,
22 you're really talking about the very narrow license
23 amendment that we're discussing here.

24 JUDGE GIBSON: Okay. Do you discuss
25 saltwater intrusion in the environmental assessment?

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1 MR. HARRIS: In this one, I don't think,
2 I don't believe it's discussed in great, in great
3 detail. It does refer to what was done with the EPU.
4 You know, there is, the assessment was done there.
5 And there's a much more full discussion of the
6 aquifers and the EPU environmental assessment than
7 what was done here. But you were just looking at this
8 EA, you're not going to really see that saltwater
9 intrusion.

10 MR. HAMRICK: Yeah, except to the extent
11 that there's a discussion of the administrative order
12 that FDEP is looking at. And the purpose of the
13 administrative order is to addresses saltwater
14 intrusion. And the EA does say that the
15 administrative order is intended to reduce the CCS to
16 approximately 34 EPT. So it's, which is all intended
17 to address saltwater intrusion.

18 JUDGE GIBSON: That is the extent of it,
19 however, is referencing the administrative order.

20 MR. HAMRICK: That and --

21 JUDGE GIBSON: That the Florida
22 Department, whatever it is, water, whatever this water
23 entity has, was going, was in the process of preparing
24 and probably would be issuing, right? Which it did,
25 in fact, issue December 23. Is that correct?

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1 MR. HAMRICK: That and the reference to
2 the earlier EPU EA, which we've already gone through
3 just --

4 JUDGE GIBSON: Right, okay. I think my
5 colleagues probably have a few questions, but before
6 I turn the floor over to them, I just want to ask you,
7 are there any specific allegations in CASE's reply
8 regarding Contention No. 3 that constitute new matter
9 that was not merely a rebuttal to defenses that you
10 raised to CASE's petition?

11 MR. HAMRICK: Yes there were.

12 JUDGE GIBSON: Would you please tell us
13 what those are.

14 MR. HAMRICK: Sure. On pages 20 and 21 of
15 the reply, CASE cites to a new reference that was not
16 included in the petition. And that's a reference to
17 the Everglades Restoration Plan, Indicator 4.4, and
18 that's to address the issue of impacts on crocodiles.

19 JUDGE GIBSON: Yes.

20 MR. HAMRICK: And the issue was raised,
21 but this is just simply a new reference to support the
22 claim on that issue. Further, there is, there was an
23 entirely new claim that was raised in the reply on
24 page 21 regarding, and we've heard some of this today,
25 regarding contaminants in the CCS, other than

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1 salinity, including hydrazine and low level
2 radioactive waste. And that was, again, not in the
3 initial petition.

4 JUDGE GIBSON: And those things are, this
5 sentence, then, that says: And where did the EA or
6 the BA address other contaminants? Is that the
7 sentence that's, you want stricken, or is there more?

8 MR. HAMRICK: Yeah right, exactly. The
9 one that ends with the Adams citation.

10 JUDGE GIBSON: Correct.

11 MR. HAMRICK: Correct.

12 JUDGE GIBSON: Okay, got it.

13 MR. HAMRICK: And then next is the Miami
14 Herald article on pages 22 and 23. That was presented
15 to present a new argument that, basically, the NRC
16 needs to have a hearing because FDEP is going to lift
17 the monitoring requirements and, you know, they're not
18 doing the job. That was a new argument that was not
19 presented in the petition.

20 JUDGE GIBSON: Okay.

21 MR. HAMRICK: And finally, on pages 23 and
22 24 are references to the 1971 final judgment.

23 JUDGE GIBSON: Okay.

24 MR. HAMRICK: Those, those, I can identify
25 the particular sentence if you would like.

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1 JUDGE GIBSON: Okay.

2 MR. HAMRICK: It's the last paragraph on
3 page 23 beginning with regarding.

4 JUDGE GIBSON: Yes.

5 MR. HAMRICK: Going through that next
6 quotation paragraph.

7 JUDGE GIBSON: Yes.

8 MR. HAMRICK: And then the next, the
9 entire next paragraph on page 24. It begins with the
10 chapters referenced.

11 JUDGE GIBSON: Okay. Thank you. Okay.
12 All right. Gentleman, Judge Sager, Judge Kennedy, do
13 you have any questions on Contention 3?

14 JUDGE SAGER: All right, sorry, so I have
15 to catch up here. So now we have algae and
16 cyanobacteria, so let's see. This goes to CASE. In
17 your petition on page 11 you say: One could assume
18 that factors other than warm weather were causing the
19 heavy algae bloom. Unit 3 came back online on October
20 1, 2012. Unit 4 came back online in May, 2013. So my
21 question to you is are you saying that the upright
22 caused the algal bloom?

23 MR. WHITE: Concurrence is not causality.

24 JUDGE SAGER: Because my next question
25 would be, would be how? Algal blooms happen all the

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1 time, but they don't happen by nuclear reactors.

2 MR. WHITE: That's our question. It's,
3 we're contending that FPL should answer that question.
4 Scientists should answer that question. Engineers
5 should answer that question. But the question should
6 be asked and answered.

7 JUDGE SAGER: Okay. A little bit farther
8 on, on page 14 of the petition, you say that
9 cyanobacteria species that grows in hot saline, I
10 think you mean hot saline water, produces
11 microcystins. And so, what are microcystins? That's
12 my first question. What are microcystins?

13 MR. WHITE: Microcystins are toxins that
14 are bad stuff. And there's actually, there are
15 several. We don't know, to my knowledge, exactly;
16 they may know. I don't know if FPL knows exactly the
17 cyanobacteria that's there. Because there are some
18 that have different levels of toxicity.

19 Cyanobacteria can produce several kinds of
20 cyanotoxins. They reproduce explosively under certain
21 conditions. The results, and that results in that
22 algae bloom. The algae bloom is not a, is a result of
23 operations, and becomes the cause. But the algae
24 blooms, themselves, the cause of the algae bloom must
25 be addressed.

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1 And so it's not that they have
2 temperature, salinity and algae bloom as three
3 separate problems. The algae bloom is the result of
4 the first two problems, of the first two factors. So
5 it's not, and then so when you address the algae bloom
6 itself by dumping harsh chemicals in there, you're
7 addressing the algae bloom, but not the cause of the
8 algae bloom.

9 JUDGE SAGER: The follow-up question would
10 be, and I'm not a biologist, but I think bacteria and
11 algae are different, I was going to say different
12 animals, but they're, neither are animals.

13 MR. WHITE: Well, cyanobacteria, if I may.

14 JUDGE SAGER: Right.

15 MR. WHITE: Results in the algae bloom,
16 which can become harmful to other species, and pose a
17 danger to humans and animals if the cyanobacteria
18 involved produced toxins. Several cases of human
19 poisoning have been documented. Recent studies
20 suggest that significant exposure to high levels of
21 some species of cyanobacteria producing toxins such as
22 DMAA can cause amyotrophic lateral sclerosis, ALS,
23 also known as Lou Gehrig's Disease. So these
24 cyanobacteria is bad stuff.

25 JUDGE SAGER: Okay. Let me ask the

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1 Applicant. Have there been serious problems with
2 algae before? Is it a routine occurrence?

3 MR. BLAIR: There have been algae blooms.
4 This is a, it's the extent of this algae bloom, I
5 think, is what's unusual.

6 JUDGE SAGER: Back to CASE. On page 15 of
7 your petition, there is a section in small print
8 there, and at the top it says: On August 6, 2014,
9 Miami Channel 10 reported, and there's a bunch of
10 material in there. You didn't say where that comes
11 from, so my first question will be, first question,
12 where does that come from? Is that a quote? There
13 are quote marks here and there, but it's hard for me
14 to follow them.

15 MR. WHITE: Well, this is actually from
16 Channel 10's own website.

17 JUDGE SAGER: From their website.

18 MR. WHITE: Yes.

19 JUDGE SAGER: So it's copied, copied
20 material. The reason, another reason I asked that was
21 it's going along and, for example, in the first
22 sentence it quotes FPL spokeswoman, Bianca Cruz, said,
23 and then it says FPL built the canals after pressure
24 from environmentalists to avoid dumping hot water into
25 Biscayne Bay. Now the hot, the hot water is

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1 threatening FPL's equipment efficiency. And I didn't
2 know whether that was your statement, or that was
3 Channel 10's statement.

4 MR. WHITE: It was lifted directly --

5 JUDGE SAGER: This is all Channel 10.

6 MR. WHITE: -- from their website.

7 JUDGE SAGER: Okay, because I was going to
8 ask about, I didn't think equipment efficiency was the
9 issue here. Okay, right.

10 MR. WHITE: I didn't agree with anything
11 else she said anyway, so --

12 JUDGE SAGER: Right. The other thing I
13 was going to ask what was the purpose of putting that
14 in there, because it didn't really directly support
15 anything, the argument you were making. I mean,
16 you're just trying to say that you don't --

17 MR. WHITE: Well, I --

18 JUDGE SAGER: You don't think anything
19 that Cruz was saying was correct?

20 MR. WHITE: Well, she was minimizing the,
21 as I read, the problem, and the things she said in
22 there, Matthew Schwartz made the observation saying,
23 they paraphrase it, saying some fear the pollution
24 from Turkey Point could be hurting surrounding marine
25 life, and making it into highly permeable Biscayne

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1 Aquifer, where Miami-Dade gets most of their water.

2 Matt Schwartz says it's not good. The
3 limestone is porous. Saltwater is heavier, and sinks
4 down into the aquifer. Hot water evaporates. Can't
5 isolate systems like that. And her response is that
6 government officials have monitored the canals, which
7 are closed to the public, and don't interact with
8 Biscayne Bay or with the fresh water aquifer. I'm not
9 so sure that everyone would agree with that.

10 JUDGE SAGER: So I'm trying to find where
11 I found this. I think somewhere in there it says
12 based on our analysis, an increase in the amount of
13 algae at Turkey Point's cooling canals was caused by
14 low amounts of rainfall in 2013, coupled with an
15 increased nutrient content in the canal system. So
16 you've been saying there's something else. There's
17 something else. Do you dispute that nutrient content
18 as having an affect?

19 MR. WHITE: Not at all. And if you want
20 to talk about nitrogen, you're handout, the bottom
21 graph on page 1, Number B documents the increase in
22 nitrogen over time at several locations in the area.
23 And I could give you a comprehensive statement on
24 nitrogen, but I'm sure that you --

25 JUDGE SAGER: It's really not necessary.

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1 I was just pointing out that there is another factor
2 there, and it's probably not coming from the plant.
3 It's probably coming from the lawns that are being
4 watered up here.

5 MR. WHITE: I wonder about that. It may,
6 but that's not the general thought. But I would
7 contend that in the realm of where I said other
8 factors were at play, the same way they didn't
9 monitor, or at least use the information on salinity,
10 clearly here, if they were looking at the trend in
11 nitrogen, they could have seen a logical cause for the
12 algae bloom, other than, and it follows the period of
13 the upright.

14 The upright was in mid-2012 to early 2013.
15 And looking at that trend line, it's apparent that
16 something is happening there. The same way with,
17 well, if you want to talk about chloride, I have a
18 chart on chloride that shows what's happening there.
19 Chloride, and this is dated 2013, is far, far above
20 the amount permitted by Miami-Dade County standards.

21 JUDGE SAGER: Okay, let me move on to
22 other areas. Further down on that same page, you
23 state that in speaking with scientists in South
24 Florida, as well as government and NGO staff, and then
25 a little bit farther down these same people, who I

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1 think you're referring to those same people, but you
2 don't say who or when. Can you, you don't give any
3 substantiation. Who were you talking to?

4 MR. WHITE: I sorry, what page are we on,
5 sir?

6 JUDGE SAGER: I'm sorry, bottom of page
7 15, that lower paragraph. It says: In speaking with
8 scientists in South Florida, as well as governmental
9 and NGO staff, but then you don't give any attribution
10 for that. So who were you talking to?

11 MR. WHITE: I've had conversation, if I
12 may, off the record with staff members at different
13 governmental agencies that for their privacy --

14 JUDGE GIBSON: Well, you may well have had
15 that conversation, and this is not an evidentiary
16 hearing. But that probably is the rankest form of
17 hearsay there is. So you probably, if you want to
18 ever try to get something like that in evidence, sir,
19 you probably need to work on that a little bit.

20 Merely saying that you talked to some
21 folks about something, but you can't say who it was,
22 you know, as we used to say back home, that dog don't
23 hunt.

24 MR. WHITE: It's not the strongest
25 statement I might add.

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1 JUDGE GIBSON: All right.

2 JUDGE SAGER: Okay, so let me move on,
3 then. On page 18 you talk about saltwater intrusion,
4 and you reference a publication whose title is
5 saltwater intrusion in the surficial aquifer system of
6 the Big Cypress Basin, southwest Florida. So Big
7 Cypress is northwest of the Everglades. So how does
8 this apply to South Florida?

9 MR. WHITE: The installation of drainage
10 canals, well, can I show you? There's another map
11 here.

12 JUDGE SAGER: Sure. Is that okay with
13 you?

14 JUDGE GIBSON: Oh yeah, absolutely,
15 absolutely. You know, we're all for demonstratives
16 here.

17 MR. WHITE: So it doesn't go all the way
18 over there, but well, this only goes out to here.
19 Maybe this isn't the best, all right this is just in
20 the eastern side. What this does show is that the
21 remedies for correcting the flow of fresh water into
22 this area, or to put structures on the canals
23 throughout Florida, almost up to Lake Okeechobee,
24 that's a \$12 million project.

25 And I think what I was trying to show

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1 here, an example of how they're correctly the problem;
2 what it takes to correct the problems and the flow.
3 For example, they just started a project in Naples to
4 correct the flow of fresh water mixed with sea water
5 over there. So that the work to restore the flow of
6 fresh water, which is critical, critical, it's a major
7 effort, I think that was my point.

8 JUDGE SAGER: And I think you're also
9 saying, correct me if I'm wrong, that saltwater
10 intrusion is a big problem everywhere in South
11 Florida,
12 and --

13 MR. WHITE: Especially --

14 JUDGE SAGER: -- so it's being caused by
15 a lot of things.

16 MR. WHITE: -- I'm not so, I, personally,
17 I'm only familiar with South Florida. Whether that's
18 a problem on the other coast, I'm not familiar with
19 that.

20 JUDGE SAGER: Thank you. All right, so
21 you mentioned chloride just a minute ago. And on page
22 18 you also highlight the chloride concentration in
23 the abstract. So chloride, forgive me, I think it's
24 part of salt. So what is the problem with chloride?

25 MR. WHITE: In this particular analysis,

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1 it has to do with chloride concentration at specific
2 points. Mike, would you pass these out, please. And
3 what you're going to see, do you have enough there?
4 We didn't make that many, three up on there. What
5 you're looking at there, that first box on the left,
6 is the seawater, I mean the chloride at those wells
7 attributable to seawater.

8 JUDGE SAGER: That's the lower part of the
9 column?

10 MR. WHITE: Yes.

11 JUDGE SAGER: Okay.

12 MR. WHITE: Then the statutes permit a
13 factor 10 percent above that level for the operation.
14 But then, and the reason they did this analysis was to
15 see what percentage of chloride was attributable to
16 the operation itself. And that's where you see that
17 box on top. That number of 12,976 milligrams per
18 liter. That 12,096 is in violation of Miami-Dade
19 County code.

20 JUDGE SAGER: Okay, I guess I understand
21 I think. But I think what I was trying to get at was
22 I was trying to establish whether you're mentioning
23 chloride because it's a pollutant. But I think it's
24 just you measure chloride in order to determine
25 salinity. So, in essence, this is just part of the

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1 salinity argument, I think. Unless I, unless there's
2 something that I --

3 MR. WHITE: It's a, it's a way of defining
4 the depth of the problem at those particular wells.

5 JUDGE GIBSON: Are you suggesting that,
6 from this chart, that the sole cause of this chloride
7 increase is the operation of the facility, Turkey
8 Point?

9 MR. WHITE: I was advised by Durham that
10 that's their contention.

11 JUDGE GIBSON: Okay, fine. I just wanted
12 to know. Thank you.

13 JUDGE SAGER: Okay, and also with respect
14 to chloride, let me see if I can find it. It says on,
15 I think your page 18 of your petition, and I realize
16 that you're not a scientist. It says slide 18, down
17 at the bottom paragraph, slide 18 shows that chloride
18 concentration is 100 percent at one well, and 69
19 percent at another.

20 I find that hard to believe. I think
21 maybe you meant to say something else. Because I
22 don't think there it was 100 percent chloride. But
23 maybe it was 100 percent of something, but not the
24 total --

25 MR. WHITE: Let --

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1 JUDGE SAGER: Yeah, it says slide 17 shows
2 that, I'm sorry, slide 18 shows the chloride
3 concentration is 100 percent at one well, and 69
4 percent at another. I don't know how important that
5 is, but it's, the numbers didn't seem right.

6 MR. WHITE: I'll look at the slides and
7 see if I can identify what I --

8 JUDGE GIBSON: Good. The staff is going
9 to be looking at something at a break. You can look
10 at that at the break, and try to give us an answer
11 when we're done so we won't have to continue to
12 prolong this unnecessarily. Okay, go ahead, Judge
13 Sager.

14 JUDGE SAGER: On page 20, now I think
15 we're talking about, right, radiological impacts. And
16 it says, in the upper paragraph: Since the upright
17 approve seems to have missed the mark on so many
18 factors, one could ask if something was missed
19 regarding radiological concern. So does this
20 statement imply that you're radiological concerns are
21 based solely just because you don't trust these guys,
22 as opposed to having some evidence?

23 MR. WHITE: I must tell you, I'm not going
24 to go to the mat on that area. It was actually
25 suggested by a CASE member, and I put it in as a

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1 courtesy. I'm going to run it up the flagpole. If
2 you salute, fine; if not, no problem.

3 JUDGE SAGER: Page 20, in the upper
4 paragraph it says: There are some concerns relating
5 to increasing reactor operating temperatures. So I
6 think previously you stated the issue wasn't plant
7 operations, but the canal temperatures. Are you,
8 here, trying to say that you also have a problem with
9 the reactor operating temperature?

10 MR. WHITE: This is, again, in the
11 radiology area.

12 JUDGE SAGER: Yes.

13 MR. WHITE: I'm not going to defend that.
14 I have, quite honestly, I have no feel for it, and you
15 can just strike it if you'd like. I don't think it's
16 relevant to our argument.

17 JUDGE SAGER: Right. I mean, it's
18 contradictory to what you said before, which is you're
19 not dealing with the operations; you're concentrating
20 on the canal. Okay. Now this goes to your reply.

21 You have a paragraph in here to state,
22 basically, it's stating that the U.S. Department of
23 the Interior, it's indicating a U.S. Department of
24 Interior report. And the text indicates that many
25 stakeholders, among them the South Florida Water

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1 Management District, Miami-Dade Department of
2 Planning, Environmental and Regulatory Affairs,
3 Biscayne National Park are working together, aware of
4 the problem in these canals.

5 And the third paragraph says the same
6 thing. Yet you describe elsewhere that Federal
7 agencies are, basically, sweeping the problems under
8 the rug. It doesn't give you any, you don't feel that
9 it's enough that these agencies are looking after the
10 situation?

11 MR. WHITE: The local agencies that you
12 describe are involved on a day-to-day basis with these
13 concerns. The, overlooking the fact of the moment
14 that Biscayne National Park is a Federal agency, I was
15 referring to the dynamic that we discussed earlier as
16 to NRC, FDEP and authority versus responsibility. EPA
17 also, EPA.

18 So that those organizations, and I've
19 experienced this. I sent a memo to the EPA in
20 Atlanta, Federal EPA. They kicked it back to the DEP
21 in Florida. So, again, it is this kind of thing.
22 That's really what I'm talking about.

23 JUDGE SAGER: So it's a case of, as you
24 mentioned before, each agency pointing at the others,
25 and so you're not getting cooperation.

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1 MR. WHITE: It's not only that I'm not
2 getting cooperation; problems that should be addressed
3 in an exhaustive and comprehensive manner are not, or
4 don't seem to be.

5 JUDGE SAGER: Okay. So moving on, this
6 specifically that this is in your reply on page 20 to
7 21, but that's not important, because it's in several
8 places. Where you were answering about the crocodile
9 habitat, and you were complaining that they're going
10 to take all this ground water and dump it into the CCS
11 to mitigate the salinity. But isn't that, isn't that
12 exactly, isn't that a good remedy? Because you take,
13 you're taking fresh water, and you're putting it here
14 where you have saltwater, and you're making it fresh
15 water. So, therefore, it's not going to migrate; it's
16 not going to hurt the crocodiles.

17 MR. WHITE: You're relating this to the
18 crocodiles?

19 JUDGE SAGER: Well, there was a specific
20 argument that high salinity would hurt, I think, the
21 juvenile crocodiles, if I remember correctly. But
22 also, in just general, if you're replacing the saline
23 water with fresh water, and making it less salty, then
24 you're actually helping to keep ground water from,
25 saltwater from intruding.

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1 MR. WHITE: I believe the situation is a
2 little broader than that, sir.

3 JUDGE GIBSON: Can you speak into the mic.
4 I don't know if our court reporter can get everything.
5 Thank you.

6 MR. WHITE: I'm sorry. The adjustment
7 within the cooling canals of the salinity and the
8 fresh water, in the cooling canals themselves, the
9 juvenile crocodiles, well, the problem in the cooling
10 canals with the crocodiles was the copper sulfate.
11 Copper sulfate interrupts the reproductive cycle of
12 the females. Okay, that was our, as I recall, that is
13 our main concern with crocodiles within the canals.

14 Now, in terms of, I don't know
15 specifically that the crocodile, the juvenile
16 crocodile requires fresh water. I have no knowledge
17 of that. I do know that in the estuary, which at one
18 time was totally fresh water, is being contaminated by
19 the saltwater flowing into the estuary.

20 And that is interrupting the, well, I say
21 salinity, there's where the fresh water, the lack of
22 fresh water, I'm sorry, is critical. And is impacting
23 the hatchlings and the juveniles. So those are our
24 concerns with fresh water on the one hand, copper
25 sulfate on the other. Okay? Does that answer your

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1 question?

2 JUDGE SAGER: I think so. Thank you.
3 Okay, at one point here, I'm not going to read the
4 whole thing, the hour is moving on. So you say: Such
5 a position by the Florida State regulatory, this is in
6 regards to, basically, the whole review and
7 everything, begs for judicial review. And you've made
8 some other statements in the reply, in particular,
9 begging for some sort of review.

10 Assuming that such matters are within the
11 ASLBP, that's us, within our purview, what is that you
12 want from this judicial review? What is it you think
13 is the bottom line here? What should happen?

14 MR. WHITE: There are many things that
15 could be done. The, number one, we'd love to see an
16 independent, scientific and engineering review of all
17 factors related to the operation of the, of 3 and 4 in
18 relationship to how the operation of the reactors
19 might have contributed to the problems in the canals.

20 I'd like to see that the option of
21 reducing the operation or shutdown of a reactor was on
22 the table. If that is, if that would be, at least for
23 a short time. I can, if I were doing things right
24 now, if you made me czar of all this, I'd probably
25 shut down the reactors right now, or reduce them to

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1 where that it no longer a problem, if that can be
2 done. I'm not a scientist.

3 Let's say you can reduce it to where
4 what's going on in the canals is benign; it's not
5 going to affect it. You're not operating at a
6 temperature that's so high that it's going to, and
7 then use that time to analyze and see what's going on.
8 And then, once reasonable analysis has been made, come
9 up with an informed course of action, put it into
10 effect, and see if it works.

11 Short of aggressive chemicals and things,
12 and things that will not reduce salinity over time.
13 I know that they're talking about dredging the canals
14 because there's, right now they're dead. The matter
15 in there is just dead. And there are other theories
16 as to what happened. That the dead matter in there,
17 itself, might have been cooking and creating a
18 nutrient for the algae bloom.

19 There's so many theories that are going on
20 as to what went on, what could be going on, how you
21 would correct it. But our position is, and it's the
22 main reason we came, remember I said it's all about
23 fresh water. They're fighting over the fresh water.
24 They can't just count on it forever to keep correcting
25 this problem.

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1 And I must tell you if, if something is
2 done like this, terrific. But I would suggest that if
3 nothing is done, the system's going to shut itself
4 down. Because if you look at the graphs and the way
5 things are progressing, and you let them go as they
6 are, they're going to reach a point soon where
7 whatever is irreversible, and then they'll have to
8 shut down the reactors because the temperatures will
9 be so high they can't function.

10 Remember, as I mentioned before, salt and
11 water retain heat. And you create a situation here
12 where the heat's just going to continue to build as
13 the demand from that demand from that reactor is so
14 great, and the operation of it. So it's in that realm
15 that we think that a remedy should be found. You've
16 got to do something different. I mean, that's our
17 main position.

18 JUDGE GIBSON: Thank you. If that wasn't
19 your closing argument, it was part of it. Okay, Judge
20 Kennedy, did you have something you wanted to say?

21 MR. WHITE: It's my, I'm a one-trick pony

22 JUDGE KENNEDY: I've just got one question
23 that goes back to the beginning. And it's directed to
24 the NRC staff, and it goes to the environmental
25 assessment. The, if I understand what you said

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1 earlier, that there was no significant impact on
2 ground water resources, would that no significant
3 analysis, and you may have said this and I can't
4 remember it, include the impact of saltwater intrusion
5 as a potential impact; that analysis I mean?

6 MR. HARRIS: It's designed to capture all
7 those issues. When we were talking before, we were
8 talking what the, we were talking about a statement
9 where we were talking about the proposed action and
10 its impact. So when you talk about the proposed
11 action, you're talking about the specific issue for
12 the NRC, which is the license amendment, and the
13 changes resulting from the license amendment.

14 In the cumulative impact section, you
15 addressed those other issues. So yes, but you have to
16 look at the whole thing. So if you're only looking at
17 that proposed action part, it's talking about the
18 license amendment.

19 JUDGE KENNEDY: Right. Yeah, I think
20 that's why we're back here is it struck me as I wasn't
21 sure how this was conducted. Was any ground water
22 resource impacts looked at as part of cumulative
23 effects, or had that already been excluded?

24 MR. HARRIS: I don't believe it was
25 excluded. It was, they looked at those withdrawals,

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1 and they didn't see that those would have, you know,
2 a significant impact on the ground water effects, you
3 know, from the cumulative analysis. So they looked at
4 the fact that you're going to be withdrawing water
5 from the Biscayne Aquifer and the Floridan aquifer.

6 And in the staff's analysis from a
7 cumulative aspect, is there wouldn't be any real
8 environmental impact from, such that, because you have
9 to look at that in an EA you're trying to determine do
10 I go further and do an EIS, or can I make a finding of
11 no significant impact.

12 And so the determination was that this was
13 sufficient, a sufficient analysis that there was no
14 significant impact that needed a more full discussion
15 in a EIS. I might be able to go back to Fermi. I
16 still haven't had a chance to look at the climate
17 change. But just to distinguish a little bit of
18 Fermi.

19 When you look, I believe the Fermi order
20 related to Contention 23, which was dealing with the
21 transmission corridor for Fermi 3, and how that
22 analysis was done. So they were building two new
23 plants that needed that transmission corridor to be
24 done to be actual, to supply power. So it was
25 actually tied to the action; is you couldn't have

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1 built the plants without having to build the
2 transmission corridor.

3 And so the sua sponte reviewed to make
4 sure that that was fully analyzed. Here the
5 withdrawal of water, although beneficial to the
6 cooling system, is not necessary for the license
7 amendment itself, in terms of being able to issue it.
8 The two things don't necessarily require one, you
9 know, to be done, or the other. They could be done
10 independently.

11 Just because the NRC issued a license
12 amendment to 104 degrees doesn't mean that Florida had
13 to issue an order to correct the salinity. It's that
14 they're not, you know, they do have some mutual
15 benefit together. But one does not necessarily
16 require the other.

17 JUDGE KENNEDY: That is a long round about
18 way of telling me it wasn't looked at again?

19 MR. HARRIS: Oh, no, no, no.

20 JUDGE KENNEDY: It was looked at, right?

21 MR. HAMRICK: That was a separate
22 question, judge Kennedy.

23 MR. HARRIS: I was trying to get back to
24 the Fermi 3 response. Yeah, the Fermi 3 re-issue --

25 JUDGE KENNEDY: Okay. See how easily

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1 confused I am. The saltwater thing's got me crazy.
2 So, as part of cumulative effects, it would be your
3 testimony or your opinion that it was looked at. And
4 that --

5 MR. HARRIS: It was. We did, it was
6 addressed in the EA. It was even addressed in the
7 biological assessment in terms of its impact on the
8 American crocodile. Both the withdrawal and the
9 chemical treatments were both discussed in both of
10 those documents.

11 The EA, from a cumulative aspect, you
12 know, it did not think that there was, there was
13 nothing that came as a result of that that would
14 suggest you needed to do an EIS; that there was some,
15 you know, environmental impact statement that needed
16 to be prepared.

17 JUDGE KENNEDY: Would it be fair to say at
18 some level if there was a large enough withdrawal from
19 the aquifer that the saltwater intrusion would have
20 been significant enough that it could have been a
21 significant impact?

22 MR. HARRIS: That's true. I mean, that
23 could still be true now as, you know, Miami's, you
24 know, growing in population. You know, South Florida's
25 growing population; the more people use water, at some

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1 point, you know, that you would probably expect that
2 there would be some aspect of that, yes.

3 JUDGE KENNEDY: Okay, thank you.

4 JUDGE GIBSON: I know you all probably
5 want to take a break. We're going to take a break and
6 we've just got a few questions about Contention 4, and
7 then we'll be, take our recess. Then you all can
8 decide if you all want to do your closing, or whether
9 Mr. White's closing was enough for everybody.

10 But I do need to ask one more question on
11 Contention 3. It's for the NRC staff. In developing
12 the environmental assessment, did the Nuclear
13 Regulatory Commission staff consult with the Federal,
14 the Florida Department of Environmental Protection
15 about whether temperature increases in the canal would
16 lead to environmental impacts?

17 MR. HARRIS: The staff consulted with the
18 State of Florida, and I believe the State of Florida
19 had no comment on the amendment. I believe, and I can
20 probably check after the break, too.

21 JUDGE GIBSON: That would be great.

22 MR. HARRIS: But I believe the State of
23 Florida doesn't normally want, you know, that they
24 sort of reiterate to us that they don't necessarily
25 want us to tell them about every amendment. But in

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1 this case, we did ask them about the amendment, and
2 they had no comments on it.

3 JUDGE GIBSON: Did they, did you consult
4 with them about whether allowing temperatures to
5 increase to 104 degrees Fahrenheit will lead to
6 additional environmental impacts?

7 MR. HARRIS: We told them what the
8 amendment was, what we were considering authorizing.
9 And they had no comment. So --

10 JUDGE GIBSON: So the answer is you asked
11 them and they said no comment, and that was the extent
12 of the consultation. Is that a fair statement?

13 MR. HARRIS: Yes.

14 JUDGE GIBSON: Mr. White, let's turn to
15 Contention 4. In this contention you suggest that the
16 canal has outlived its usefulness and functionality,
17 and your fault Florida Power and Light for failing to
18 provide enough backup power generation so that a
19 situation where Units 3 and 4 might need to reduce
20 power output or be shut down even temporarily becomes
21 an exigent situation requiring immediate NRC action.
22 Is that correct?

23 MR. WHITE: Yes sir.

24 JUDGE GIBSON: The staff and the Applicant
25 argue that this contention, effectively, is a

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1 challenge to the design and function of the coastal
2 canal system, and so is outside the scope of this
3 proceeding. Tell me why the Applicant and the staff
4 are wrong.

5 MR. WHITE: Again, for our purposes, it
6 comes in the realm of considering all options as
7 causes solutions. And we feel that FPL has limited
8 its options by shutting down, or re-purposing one and
9 two, which it's their privilege to do. But if
10 they're, when a problem arises, if they're operational
11 solution is to declare an emergency, as opposed to
12 starting up other reactors or bringing in energy from
13 somewhere else, I've made this argument several times;
14 is that the only solution? What they did; is that the
15 best solution?

16 And I think, by definition, we're seeing
17 that we may be reaching the limit of the capacity of
18 this canal system. Remember, when they built these in
19 '73, this was a great experiment. This was not proven
20 technology. And this is one of the real problems that
21 many of the scientists, I know particularly Mr.
22 Carlstrom at Biscayne National Park, he told me, he
23 said you can't do it all off modeling. At some point
24 you've got to test your hypothesis real time.

25 And you just can't keep doing what they

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1 do. And they predicted that everything would be
2 benign. But to stick to this point here about the old
3 technology, no redundancy, limiting corrective
4 actions, these are big boys. This is a big operation.
5 The largest corporation, second largest employer in
6 the state. They have all kind of options, all kinds
7 of resources, and this is the best they can do?

8 They're charged with producing energy in
9 most of this state, and I think we expect more. They
10 should be able to do more.

11 JUDGE GIBSON: Okay, thank you. Staff, on
12 page 22 of your answer, you say that the design and
13 operate, any challenge to the design and operation
14 should be pursued through a 10 CFR 2.206 petition.
15 And you also refer to a petition that has been filed
16 by Mr. Thomas Saparino. What does the filing and
17 partial acceptance of Mr. Saparino's 2.206 petition
18 relating to root causes of the temperature increases
19 in the CCS impact this proceeding?

20 MR. ROTH: This is David Roth for the
21 staff. A reference to a demonstration of how someone
22 can use a 2.206 is for demonstrating that fact. In
23 fact, the Commission has repeatedly held in, for
24 example SONGS, if there's a concern with current
25 operations, the 2.206 proceeding is the proper

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1 proceeding for a person to request and enforcement
2 action or other order to remedy the issue of concern.

3 JUDGE GIBSON: So it was just simply to
4 use as an example; this is what you can do if you want
5 to go this route. Is that a fair statement?

6 MR. ROTH: Yes.

7 JUDGE GIBSON: Anything else?

8 MR. ROTH: Yes, Your Honor --

9 JUDGE GIBSON: Okay, fair enough. Just to
10 close the loop, is there anything with respect to
11 Contention 4 that's the subject of your Motion to
12 Strike?

13 MR. HAMRICK: Yes. The final reference to
14 the 1971 final judgment. On pages 25, the paragraph
15 beginning with FPL's foregoing statement.

16 JUDGE GIBSON: Yes.

17 MR. HAMRICK: And through the bottom of
18 the page. And the clearly paragraph on the next page
19 with reference to final judgment.

20 JUDGE GIBSON: So those are new matter,
21 and are not merely rebuttal to what you raised in your
22 answer. Is that a fair statement?

23 MR. HAMRICK: Yes.

24 JUDGE GIBSON: Anything else, Judge Sager?

25 JUDGE SAGER: Just one question about

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1 contention.

2 JUDGE GIBSON: Okay, please.

3 JUDGE SAGER: So, Mr. White in case, on
4 your petition on page 22 you mention canal failure,
5 okay. You use it, I think, in two different ways, and
6 I'm curious whether you mean both or either or exactly
7 what you're saying here. One is you say: Not unlike
8 the berms holding Lake Okeechobee in place, which are
9 failing. And then you also say: In this case if
10 FPL's back-up plan of canals failed was to draw
11 hundreds of millions of gallons.

12 So two things come to mind; one is
13 structural failure. I think maybe that's what you're
14 saying with the Okeechobee, as it just falls apart.
15 And the other one is failure to operate as a cooling
16 system, which you mentioned before. Do you mean one
17 or the other, or do you mean both?

18 MR. WHITE: Well, let's see what the
19 similarities are. In Okeechobee you have a berm
20 system that was built to hold water in place, and it's
21 been functioning for 50 years or more, 50, 60 years,
22 and it's failing. And --

23 JUDGE SAGER: So it's allowing water to
24 migrate laterally out of Lake Okeechobee.

25 MR. WHITE: Yeah, they cannot take that

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1 body of water above 13-1/2 feet, even though we need
2 that extra water. So that, again, that was a solution
3 to a problem 50 years ago. Seemed like a good idea at
4 the time. The cooling canal system, as I explained,
5 was a solution to killing sea grass. We'll build
6 these canals. It sounded like a good idea at the
7 time. Now, in both cases, we've outlived their
8 usefulness and their ability to handle the job.

9 JUDGE SAGER: But I think your statement,
10 correct me if I'm wrong, I'm sorry. Do you have any
11 actual evidence that there is structural failure going
12 on with the CCS?

13 MR. WHITE: Structural?

14 JUDGE SAGER: I mean, you've pointed to
15 Okeechobee, and you said that there is, basically,
16 structural failure going on.

17 MR. WHITE: I'd say here it's operational,
18 and the demands they're placing on the system have
19 exceeded its capacity. The same way the --

20 JUDGE SAGER: That's the cooling aspect.
21 In other words, you think it's, it's not actually --

22 MR. WHITE: It's not only cooling. It's
23 the, the increased temperatures are increasing
24 evaporation, which is increasing salinity, which is
25 increasing, I don't know all the links there, but

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1 possibly some nutrient, I guess, for the algae. And
2 so you have a system that is, where the energy is
3 creating the problem, and at this level.

4 Now, if they cut back the operation and
5 the demands on the canal, will that correct the
6 situation? Maybe. Would FPL be able to operate it at
7 maximum output, at maximum revenue? Probably not. So
8 those are the, as we see it, the factors at play.

9 JUDGE GIBSON: Okay, let's take a
10 10-minute recess. You all can confer among
11 yourselves. Decide if we really need to have any
12 closing argument from you. If there's some matters we
13 just didn't get addressed here today. We'll be back
14 in 10 minutes. You all can inform us, and then we'll
15 hear that. If not, we will adjourn.

16 (Off the record.)

17 JUDGE GIBSON: Please be seated. So what's
18 verdict here are you all going to need to be doing
19 closings? And if so, for how long? Counsel for the
20 Staff?

21 MR. HARRIS: Your Honor, and I'm speaking
22 for all the parties, is that we think that only a
23 couple of sentences that each of the parties want to
24 address. And that's not minutes.

25 JUDGE GIBSON: Great. Great.

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1 MR. HARRIS: And then of course have our
2 things that we owe you.

3 JUDGE GIBSON: That's correct, that's
4 correct. Okay. Mr. White, would you like to go
5 first, since you're the Petitioner, or do you want to
6 go last? I'll let you have your choice.

7 MR. WHITE: I'll go first.

8 JUDGE GIBSON: Okay, great.

9 MR. WHITE: Oh, I'm sorry. As regards to
10 the item that Mr. Sager questioned, on page 18, slide
11 18. This is the, this, it's an exhibit in the package
12 for the petition. I don't know if you have this copy
13 here. But basically, I think I misinterpreted this
14 thing. The first one, it's actually zero because that
15 whole, there's nothing above it. So that all of that
16 is non, is background, non-CCS sources for that well.
17 The other well is, is the area above, on the top would
18 be contributable to the CCS. That's the way, because
19 that's the one, the way the other graph is
20 constructed, okay? So I think that's it.

21 What I'd like to say, is, I'd like to
22 thank the panel for the patience and fairness they
23 have afforded us, CASE, and the opportunity to express
24 our concerns. Regardless of the outcome, I don't
25 think we could have had a fairer, or more receptive

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1 hearing and we thank you for that.

2 And I'd also like to thank counsel for the
3 FPL and NRC for your cooperation and the pleasant way
4 this was all conducted. The motto on the masthead of
5 the NRC website reads: "Protecting people and the
6 environment". CASE members are counting on the NRC to
7 live up to it. At Turkey Point it's all about fresh
8 water. And there just is not enough for these
9 reactors and for all those in the area with legitimate
10 needs and priority. It's all about fresh water.
11 Thank you.

12 JUDGE GIBSON: Thank you. Counsel for the
13 Staff?

14 MR. HARRIS: Thank you, Your Honor. I had
15 a couple of items that I think that you wanted me to
16 address.

17 JUDGE GIBSON: Yes.

18 MR. HARRIS: The first is, just to, in
19 terms of the consultation that went on with the State
20 of Florida agency with respect to the current, the
21 license amendment that's at issue here. We contacted
22 Cindy Becker is the Florida state official for us to
23 interact with who's the Chief of Bureau of the
24 Radiation Control for the Florida Department of
25 Health. And explained to her about the license

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1 amendment and the environmental impacts and they had
2 no comment. That's actually part of the environmental
3 assessment that's documented in the environmental
4 assessment that, and of course we also had consulted
5 with the Fish & Wildlife about the American crocodile.

6 JUDGE GIBSON: Just, following up on that
7 point, she is in radiation health? Did you consult
8 with her about the increase in temperature?

9 MR. HARRIS: We explained the
10 environmental impact that, you know, we explained to
11 her the license amendment and we explained the
12 environmental impact that we were, we were seeing, so
13 we, she had, we gave her the EA and what you are
14 seeing in the license amendment and everything that
15 was going on. And there was no comments. I can't, I,
16 it's just hard for me to say what did she get out of
17 how we explained that, so.

18 JUDGE GIBSON: You gave her the EA and
19 then she could reach whatever conclusion she reached
20 about it?

21 MR. HARRIS: Right.

22 JUDGE GIBSON: Is that right?

23 MR. HARRIS: That's correct.

24 JUDGE GIBSON: You didn't specifically get
25 on the phone with her and say what do you think about

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1 this temperature increase, then?

2 MR. HARRIS: I don't believe that's the
3 normal practice of how we would do that.

4 JUDGE GIBSON: Okay. Sure.

5 MR. HARRIS: They might be, if someone, if
6 a state official had a comment you might then interact
7 with them on the particular issue. But that's not the
8 normal, you wouldn't normally be trying to interact on
9 a no comment.

10 JUDGE GIBSON: Okay. Okay.

11 MR. HARRIS: And then, with respect to the
12 EPU EA, you had asked me about whether or not, how we,
13 whether or not we had considered, you know, these kind
14 of sort of temperature changes and how that might
15 affect the CCS temperature and salinity?

16 JUDGE GIBSON: Yes.

17 MR. HARRIS: I believe that was, there's
18 nothing that I would, could directly point you in the
19 EPU EA that really goes into that detail. The things
20 I would tend to point you to, is that we did address,
21 and you went over it a little bit. The temperatures
22 that we expected, and that there is seasonal variation
23 associated with those temperatures. So there is,
24 there is some expectation that as the, in the summer,
25 the temperatures are going to be hotter and in the,

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1 you know, cooler months, those temperatures would be
2 colder. But they're not the temperatures that, the
3 temperatures we referenced were not the temperatures
4 that we were seeing this year, in 2014.

5 JUDGE GIBSON: Let me ask, when the
6 temperature for the Ultimate Heat Sink, was set at 100
7 in that EPU, and then it was increased to 104
8 recently, had it always been 100 before the EPU? Or
9 was it increased for the EPU?

10 MR. HARRIS: It was not increased for the
11 EPU.

12 JUDGE GIBSON: So it was 100 from, since
13 the memory of man as not to the contrary?

14 MR. HARRIS: I don't want to say it was
15 100 in 1973 when we --

16 JUDGE GIBSON: Okay.

17 MR. HARRIS: Because I haven't traced it
18 back that far, but it was an increase for the EPU.

19 JUDGE GIBSON: Okay. Thank you.

20 MR. HARRIS: And then the only other thing
21 I would comment on that is that, you know, the
22 licensee, when we were doing the EPU, they had
23 indicated that they didn't expect to have any
24 additional kind of water withdrawals from the aquifers
25 as a result of the EPU, so that's why that at that

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1 point you wouldn't normally analyze something where,
2 you know, there's a clear indication that they weren't
3 planning on actually taking those activities. It
4 would be sort of speculation on our part to, to try to
5 analyze something that wasn't proposed at the time and
6 there was no, you know, imminence of that actually
7 occurring.

8 With that I'd just like to thank the Board
9 for their time and the, listening to all the
10 arguments, and supporting argument down here. Thank
11 you.

12 JUDGE GIBSON: Thank you. Yes, counsel
13 for the Applicant.

14 MR. HAMRICK: Thank you, Judge Gibson.
15 And again, thank you for holding this today. I just
16 have a couple of points I want to clear up. First,
17 there's been some indication today that FPL requested
18 the amendment for the EPU and went into the EPU
19 process, you know, without any analysis of the cooling
20 canal system or without any analysis of the heat
21 loading and that's just not correct. In fact, the
22 retirement of Unit 2 was roughly coincident with the
23 completion of the EPU's in order to maintain that the
24 heat loads into the cooling canals roughly equivalent.
25 In fact it's slightly lower today than it was prior to

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1 the EPU thanks to the retirement of Unit 2. So this
2 isn't, this wasn't something that we went into without
3 thought and without consequence.

4 In addition, I just want to reiterate
5 that, you know, what we're looking at here is limited
6 to the proposed action of a tech spec limit going from
7 100 degrees to 104 degrees. And CASE has really
8 failed to identify any, any support for an assertion
9 that that, you know, limited increase during the
10 summer for a few days, going from 100 to 104, would
11 have any noticeable or measurable impact on salinity
12 or saltwater intrusion beyond, you know, the pre-
13 existing status. You know, that issue at least all
14 from the handout, has been going on since 1973, it was
15 a fairly straight line that was drawn on CASE's
16 exhibit going from 1973. And of course now it's being
17 handled directly by the Florida Department of
18 Environmental Protection and they've, the very issues
19 about withdrawals that CASE has complained about are,
20 you know, we're being ordered to do them in order to
21 address the other concerns that CASE, you know, has
22 with the saltwater intrusion. So, it's, we're trying
23 to resolve this issue and the out, we need to get
24 water from somewhere in order to, to reduce that
25 salinity in the canals and those are, that's the water

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1 that is available is what is being used. So with
2 that, that's what happened there. Thank you.

3 JUDGE GIBSON: Thank you. Mr. White you,
4 you had something else you needed to say, sir?

5 MR. WHITE: Could I just say a word of
6 rebuttal?

7 JUDGE GIBSON: Go ahead, it's fine, go
8 ahead Mr. White.

9 MR. WHITE: I, with all due respect, I
10 think counsel mis-characterized our position and our
11 argument and we'll stand with our argument as
12 presented.

13 JUDGE GIBSON: Okay. Well, you probably
14 won't be the only person that thinks that their
15 position hasn't been adequately characterized, sir.
16 That is, seems to be the essence of litigation at
17 least in my experience.

18 I want to thank the parties, and their
19 counsel for their participation in oral argument
20 today. We will be issuing an order on Standing and
21 Contention Admissibility soon, and with that we stand
22 adjourned.

23 Thank you so much.

24 (Whereupon, at 3:55 p.m., the above-
25 entitled matter was adjourned.)

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