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Turkey Point Units 6 and 7

Docket Number: 52-040-COL and 52-041-COL

ASLBP Number: 10-903-02-COL-BD01

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1 UNITED STATES OF AMERICA

2 NUCLEAR REGULATORY COMMISSION

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4 ATOMIC SAFETY AND LICENSING BOARD PANEL

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6 HEARING

7 -----x Docket Nos.

8 In the Matter of: : 52-040-COL

9 FLORIDA POWER & LIGHT : 52-041-COL

10 COMPANY : ASLBP No.

11 (Turkey Point Units 6 and 7): 10-903-02-COL-BD01

12 -----x

13 Tuesday, April 5, 2016

14
15 Nuclear Regulatory Commission

16 Hearing Room T-3 B45

17 11545 Rockville Pike

18 Rockville, Maryland

19
20 BEFORE:

21 E. ROY HAWKENS, Chair

22 MICHAEL F. KENNEDY, Administrative Judge

23 WILLIAM C. BURNETT, Administrative Judge

24

25

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

(10:00 a.m.)

CHAIR HAWKENS: Please be seated. Good morning. My name is Roy Hawkens. We're here for an oral argument in the case entitled Florida Power and Light Company, Turkey Point, Units 6 and 7, Docket Numbers 52-040-COL and 52-041-COL.

I'm chairman of the Licensing Board. I'm joined on my right by Dr. Mike Kennedy who's a nuclear engineer, on my left by Dr. Bill Burnett who's an oceanographer and an environmental scientist.

I'd also like to acknowledge also the support of our administrative assistant, Karen Valloch, our IT expert, Andy Welkie, and our court reporter, Dan Michon.

For the benefit of individuals who are not with us in Rockville this morning, we have a listen only telephone line. And we're also broadcasting the argument on the internal agency television. An electronic transcript of this proceeding should be available on the Agency's website later this week.

Three parties are participating in today's oral argument. The license applicant, Florida Power and Light, the NRC staff, and the Joint Intervenors who consist of two individuals and two organizations,

1 Mark Oncavage, Dan Kipnis, the National Parks
2 Conservation Association, and the Southern Alliance
3 for Clean Energy.

4 Would Counsel for the parties please
5 introduce themselves, starting with Joint Intervenors?

6 MR. TOTOIU: Good morning, Jason Totiu
7 appearing on behalf of the Joint Intervenors.

8 CHAIR HAWKENS: Welcome, Mr. Totiu. Good
9 to see you again.

10 MR. TOTOIU: Good to see you.

11 MS. GOLDSTEIN: Mindy Goldstein, director
12 of the Turner Environmental Law Clinic.

13 CHAIR HAWKENS: Good to see you.

14 MS. BARCZAK: And I'm Sara Barczak with
15 Southern Alliance for Clean Energy. Good morning.

16 CHAIR HAWKENS: Thank you. Good morning,
17 welcome. Kim?

18 MS. HARSHAW: Kim Harshaw. I work for the
19 law firm of Pillsbury, Winthrop, Shaw, Pittman,
20 representing the Applicant, Florida Power and Light.

21 MR. HAMRICK: And Steven Hamrick, Counsel
22 for Florida Power and Light.

23 CHAIR HAWKENS: Thank you, welcome. NRC
24 staff?

25 MS. MIKULA: Olivia Mikula, Counsel for

1 NRC staff.

2 MR. WEISMAN: Robert Weisman, Counsel for
3 the staff.

4 CHAIR HAWKENS: Thank you, welcome. This
5 proceeding involves an application by Florida Power
6 and Light for a combined license to construct and
7 operate two nuclear power plants near Homestead,
8 Florida, Turkey Point Unit 6 and Turkey Point Unit 7.

9 Today's argument concerns a motion filed
10 by FPL seeking summary disposition of a single
11 contention that's pending before this Board. It's an
12 environmental contention that includes two components
13 or two challenges to the draft environmental impact
14 statement.

15 One component challenges the accuracy of
16 the concentrations of four chemicals in the waste
17 water that FPL plans to discharge into the Boulder
18 Zone which is about 3,000 feet below the surface.

19 The second component challenges the
20 conclusion that the waste water will not migrate from
21 the Boulder Zone and adversely affect the underground
22 source of drinking water which is about 1,500 feet
23 from the surface.

24 The NRC staff supports FPL's motion. The
25 Joint Intervenors oppose it.

1 After studying the parties' pleadings,
2 this Board determined that oral argument would assist
3 us in resolving the issues presented. On March 1st,
4 we issued an order that scheduled today's argument,
5 identified the topics we wish the parties to address,
6 and set out the procedures we'll follow today.

7 We'll first hear from the moving party,
8 Florida Power and Light, who will have up to 30
9 minutes of argument time and may reserve a portion of
10 that for rebuttal.

11 We'll next hear from the staff in support
12 of FPL's motion who will likewise have up to 30
13 minutes of argument time and may also reserve a time
14 for rebuttal. And last, we will hear from Joint
15 Intervenors who may have up to 60 minutes of argument
16 time.

17 We contemplate, between the main
18 presentation of arguments and the rebuttal, taking a
19 brief recess, probably no more than ten minutes, which
20 will be then followed by the rebuttal. FPL as the
21 moving party, will have the final word. So the staff,
22 assuming they reserve time for rebuttal, will go first
23 followed by FPL.

24 Our law clerk will keep track of time.
25 And I can't recall earlier if I introduced our law

1 clerks, Nicole Pepperl, who's out in the audience, and
2 Jennifer Scro. Jennifer will be keeping track of
3 time, assisting you in keeping track of time. When
4 five minutes are left, in either your main
5 presentation or your rebuttals, she will raise the
6 amber light. And when time is up, she will raise the
7 red sign.

8 For purposes of today's argument, Counsel
9 may remain seated at their tables. I would ask them
10 to speak directly into the mic for the benefit of our
11 audience here as well as our audiences on the
12 telephone line and watching the television.

13 Before proceeding, do Counsel have any
14 questions?

15 MR. TOTOU: I do not, Your Honor.

16 MS. HARSHAW: I do not.

17 MR. WEISMAN: None from the staff. Thank
18 you, Your Honor.

19 CHAIR HAWKENS: Ms. Harshaw, will you wish
20 to reserve rebuttal time?

21 MS. HARSHAW: I do.

22 CHAIR HAWKENS: How much?

23 MS. HARSHAW: Ten minutes.

24 CHAIR HAWKENS: Ten minutes, all right.
25 Thank you. When you're ready, you may proceed.

1 MS. HARSHAW: Good morning. Joint
2 Intervenors Contention 2.1 states, "The ER is
3 deficient in concluding that the environmental impacts
4 from FPL's proposed deep injection well will be small,
5 because the chemical concentrations in ER Revision 3,
6 Table 3.6.2. for ethylbenzene, heptachlor,
7 tetrachloroethylene, and tolulene may be inaccurate
8 and unreliable.

9 "Accurate and reliable calculations of
10 those chemicals in the wastewater are necessary so it
11 might reasonably be concluded that those chemicals
12 will not adversely impact the ground water should they
13 migrate from the Boulder Zone into the Upper Floridan
14 aquifer."

15 This contention challenged the reliability
16 and accuracy of four constituents in the ER which are
17 now in the DEIS.

18 FTL has demonstrated, that with additional
19 testing, that the concentrations for those chemicals
20 are reasonably reliable and accurate for the purposes
21 of NEPA. And Joint Intervenors have provided no
22 additional data or facts to suggest otherwise. The
23 Intervenors raised no material dispute with that data.
24 This really ends the summary judgement discussion.

25 As an alternative argument, FPL identified

1 that the DEIS has made clear that these concentrations
2 are not an issue in any event due to a number of
3 factors, including the confining characteristics of
4 the site, the design of the wells, the comprehensive
5 state regulatory requirement governing that design
6 operation and monitoring --

7 CHAIR HAWKENS: Ms. Harshaw, did you
8 receive the letter from the NRC staff discussing the
9 concentrations of the chemicals?

10 MS. HARSHAW: I did.

11 CHAIR HAWKENS: I'm looking forward to
12 your having the staff shed light on that. But can you
13 give us your perspective of what it says and its
14 impact on the argument?

15 MS. HARSHAW: Sure. That letter sets
16 forth that --

17 CHAIR HAWKENS: And may I interrupt? I
18 want to ensure that Mr. Totiu and the Joint
19 Intervenors received a copy of that letter also that
20 we received this morning.

21 MR. TOTIU: We did, Your Honor.

22 CHAIR HAWKENS: All right. Thank you.

23 MS. HARSHAW: Well, the values in the DEIS
24 and the ER for tetrachloroethylene are based on data
25 from reports that FPL received from 2007 to 2011.

1 As we pointed out in our November
2 2011/2012 letter to the Board and the parties, the
3 staff had requested reports from the DEP for that same
4 time period. And one of the reports that they had was
5 different than the report we had. And that was for
6 2007.

7 So the 2007 report that FPL relied on was
8 for reuse data. And that data, as we pointed out in
9 our letter from November 12th, that reuse data is more
10 representative of the data that FPL will receive from
11 the South District Wastewater Treatment Plant. So in
12 our letter from November 12th, we notified the Board
13 of that.

14 And based on the fact that we have cycled
15 up the values from those reports to begin with, when
16 in fact that volatile organic compound would not be
17 cycled up as much as that, we said there was no
18 material impact on the data in the DEIS. And the
19 staff agreed.

20 CHAIR HAWKENS: You talk about you use a
21 concentration of 1.1 as the highest?

22 MS. HARSHAW: That's correct.

23 CHAIR HAWKENS: And Table 3.5 has a
24 different value. Does that reflect being cycled up?

25 MS. HARSHAW: That is correct.

1 CHAIR HAWKENS: And again, the distinction
2 between the 2.0 that the staff represented they
3 originally relied upon and used for the DEIS analysis
4 as opposed to the 1.1, what is your understanding why
5 that is no longer appropriate to rely upon?

6 MS. HARSHAW: They did not rely upon that.
7 They stated in their -- and I'll let them speak for
8 themselves, but they stated in Mr. Barnhurst's
9 affidavit that they had indeed relied on that 2.0.
10 But they didn't rely on that. They relied on the
11 value that FPL had relied on, which was the 1.1, which
12 was based on a 2007 report of reuse data from the
13 South District Wastewater Treatment Plant.

14 CHAIR HAWKENS: All right. Thank you.

15 JUDGE KENNEDY: This is Judge Kennedy. I
16 guess I'm still not sure what the cycled up value and
17 where that plays in the analysis.

18 MS. HARSHAW: So FPL assumes, when they
19 come up with the values that are in the -- inject a --
20 they assume that the blow down from the cooling tower
21 is cycled up four times.

22 So it multiplies the concentration of the
23 values that we got from the data from the South
24 District Wastewater Treatment Plant by four. It also
25 accounts for dilution from the other streams of water.

1 So it's actually the values from the data is
2 multiplied by 3.3. And that's how you get the data in
3 the DEIS.

4 JUDGE KENNEDY: So the 3.5 is the 1.1
5 value cycled up --

6 MS. HARSHAW: Cycled up and diluted.

7 JUDGE KENNEDY: -- and diluted.

8 MS. HARSHAW: Yes. And as I mentioned,
9 that tetrachloroethylene is a volatile organic
10 compound. So cycling it up is beyond conservative.

11 JUDGE KENNEDY: All right. Thank you.

12 MS. HARSHAW: So as I mentioned, as an
13 alternative argument, FPL identified that the DEIS has
14 made clear that mitigation, that migration and any
15 impact of migration would be small.

16 On this point, the Joint Intervenor are
17 asking the Board to conduct a research project which
18 is not required by NEPA. NEPA does not require
19 endless study but requires a rule of reason.

20 The DEIS reasonably analyzed the potential
21 for migration as it was required to do under NEPA and
22 concluded that the Upper Floridan aquifer would be
23 protected from degradation.

24 But again, the Court not even need reach
25 this issue, because recent data has shown that the

1 concentrations relied on in the DEIS are reasonably
2 accurate and reliable. And Joint Intervenors have
3 never provided any data showing that this is not the
4 case.

5 Summary disposition is appropriate where
6 relevant documents and affidavits show that there is
7 no genuine issue as to any material fact and that the
8 moving party is entitled to a decision as a matter of
9 law. The party opposing the motion may not rest upon
10 mere allegations or denials but must state specific
11 facts showing that there remains a genuine dispute of
12 fact for hearing.

13 While the licensing Board should not
14 conduct a trial on the affidavit, conflicting opinions
15 do not necessarily preclude some redistribution. That
16 expert opinion cannot be based on subjective belief
17 and unsupported speculation, rather methods and
18 procedure of science must be provided.

19 Now the motion for summary disposition
20 standards must be applied in light of the requirements
21 for NEPA. NEPA imposes on a federal agency the
22 obligation to consider significant aspects of the
23 environmental impact of a proposed statement.

24 And the legal adequacy of an EIS is based
25 on a rule of reason. An EIS is only required to

1 furnish such information as appears reasonably
2 necessary under the circumstances. It does not
3 require an FEIS to be a PhD dissertation on a project.

4 There is no genuine dispute that the
5 constituent concentrations in the DEIS are reasonably
6 accurate and reliable. Joint Intervenorors have
7 previously raised a number of issues regarding the
8 data relied on in the EIS, originally in the ER and
9 now in the EIS, to develop the concentration for the
10 constituents of interest.

11 The data on which the DIES relied came
12 from the state entity that will supply FPL the
13 reclaimed water, the South District Wastewater
14 Treatment Plant. This is the data that that plant
15 relies on to comply with their own injection permit.

16 Joint Intervenorors criticized that data,
17 and so FPL completed additional testing. Joint
18 Intervenorors do not identify a single issue with the
19 quality and reliability of that new data, which found
20 that none of the four constituents were present above
21 their method detection limit and therefore that the
22 values in the DEIS are conservative or consistent with
23 that data. This should be end of it.

24 Joint Intervenorors do not even dispute that
25 the values in the DEIS are extremely conservative.

1 Joint Intervenors continue to argue that the
2 wastewater --

3 CHAIR HAWKENS: Ms. Harshaw, based on
4 their failure to dispute your statement of undisputed
5 material, Fact 41, where you represented the
6 concentration values of the constituents are
7 conservative and reliable, isn't that under our
8 regulations authorizing us to admit that?

9 MS. HARSHAW: Yes. Yes, Your Honor, it
10 does.

11 CHAIR HAWKENS: Standing alone?

12 MS. HARSHAW: Standing alone.

13 Joint Intervenors continue to argue that
14 the wastewater exhibits variability. However, they
15 have not once, in the years this contention has been
16 admitted, identified data showing that the
17 concentration of the constituents in the waste stream,
18 from the reports relied on by FPL and the NRC, are not
19 reasonable.

20 Mere allegations and speculation, even by
21 an expert, are not sufficient to overcome our motion
22 for summary disposition.

23 Furthermore, FPL gathered that data over
24 a period of time to account for that variability. And
25 the Joint Intervenors do not provide any material

1 reason why that data is insufficient to capture the
2 variability.

3 The only report for their argument is
4 citing back to the 2007 to 2011 data. But again, they
5 haven't provided any data showing that that data is
6 not reasonable. And furthermore, that data was
7 captured before the South District Wastewater
8 Treatment Plant instituted improved treatment. They
9 simply allege variability without more. And that's
10 not sufficient to overcome summary disposition.

11 Rather than challenge the undisputed data
12 upon which FPL relies, they challenged the findings of
13 Mr. Powell's review of that data. And I understand
14 that Mr. Powell was simply stating that he found that
15 data reliable based on the treatment processes in
16 place. But the results that were obtained speak for
17 themselves. And the Joint Intervenors have not
18 challenged those results.

19 For example, the Joint Intervenors argue
20 that the presence of constituents in the 2007 to 2011
21 report show that the treatment process at the South
22 District Wastewater Treatment Plant can't always
23 remove those constituents.

24 But that fact in and of itself is not
25 material. Because effective treatment does not equate

1 to not detecting those constituents at all. Even
2 drinking water can have detectable levels of those
3 constituents, as previously provided by Joint
4 Intervenors' expert, Mr. Quarles.

5 There are minimum contaminate levels even
6 allowed in drinking water. And the values that were
7 found in the South District Wastewater Treatment Plant
8 were below those values. And again, as I said, that
9 data was taken from before the improved treatment
10 process at the South District Wastewater Treatment
11 Plant.

12 There is also no genuine dispute regarding
13 whether there is a sampling program in place to detect
14 heptachlor and other volatile organic compounds. Mr.
15 Powell simply stated the DEP's regulations requiring
16 regular sampling and that that sampling would tell you
17 whether or not the plant was operating properly.

18 Joint Intervenors do not raise any
19 material dispute with this statement. Instead, they
20 assert that this implies some additional fact that
21 there would be additional sampling to test for it but
22 cannot create additional facts to dispute, to raise a
23 material dispute.

24 CHAIR HAWKENS: Let me interrupt and ask
25 a quick question of Joint Intervenors. Based on the

1 fact that you did not dispute FPL's statement of
2 undisputed material, Fact 41, are you effectively
3 conceding that as admitted, in other words, that these
4 chemical concentrations are reasonable, conservative
5 and reliable so that that component to the contention
6 can be disposed with?

7 MR. TOTOU: No, Your Honor. I believe,
8 you know, our position relative to accuracy and
9 reliability is, in this instance, one of variability.

10 CHAIR HAWKENS: All right.

11 MR. TOTOU: Okay. So that's --

12 CHAIR HAWKENS: Thank you. That clarifies
13 what they're dealing with. Thank you.

14 MS. HARSHAW: Next they argue that it's
15 not clear that the water will be tested before being
16 discharged to Turkey Point. But they do not state why
17 that fact is material to whether the data used in the
18 DEIS is reasonably accurate and reliable.

19 Again, the data speaks for itself. The
20 DEIS used the actual data that is required to be
21 submitted by the South District Waste Water Treatment
22 Plant to demonstrate compliance with its permit. And
23 our new data shows that that data is reasonably
24 reliable.

25 Joint Intervenors also dispute how long

1 heptachlor has been used in the US. But this is also
2 not material. Mr. Powell agreed that there was an
3 exception for limited use of stock to treat fire ants.
4 Thus, there's no material dispute there.

5 And this is not material, because that use
6 is not going to result in heptachlor being in the
7 wastewater. If they were treating fire ants, that's
8 going to be in the storm water. And that's not the
9 water we're getting for reclaimed water.

10 And Joint Intervenors have provided no
11 evidence that the value in the DEIS is not reasonable
12 in light of the new unchallenged data.

13 NEPA does not require a research project.
14 Together, the data that was obtained from 2007 to 2011
15 and the eight additional sampling points that we
16 gathered in 2013 show that, for the purposes of NEPA,
17 the values in the DEIS are indeed reliable. And that
18 should be dispositive of our motion. There is no --

19 CHAIR HAWKENS: For one component?

20 MS. HARSHAW: Well, Your Honor, our
21 position is if those values are reasonably reliable
22 and as low as they are, the second component is not
23 material.

24 There's no genuine dispute that the NRC
25 staff met its NEPA obligation in evaluating the impact

1 of migration, nonetheless. The NRC staff completed an
2 extensive review of the studies of the geology and the
3 hydrology in the Turkey Point area, including local
4 studies, regional studies, and site specific studies,
5 including the study cited by Joint Intervenors.

6 The DEIS included consideration of faults
7 and karst collapse structures identified by Mr.
8 Quarles. The DEIS acknowledges the potential for
9 those karst collapse structures and identified that
10 those structures have been implicated in prior
11 migration incidents.

12 The DEIS discloses and reviews the
13 incidents where migration has occurred, identified the
14 causes, the potential causes being hydraulic
15 connections and well construction failures. The NRC
16 staff then reviewed the construction of the well, the
17 testing of the well, the regulatory requirements, the
18 testing and monitoring.

19 The DEP has a comprehensive regulatory
20 process for permitting each of these injection wells.
21 And the NRC staff can reasonably rely on that
22 regulatory process and FPL complying with it.

23 Permitting of the EW1 followed that
24 process, and the DEP has approved converting that well
25 into an injection well on the basis of the data

1 supplied from EW1, a permit that would not have been
2 issued if the experts at DEP questioned confinement at
3 the site.

4 Each subsequent well will also have to go
5 through that same permitting process where confinement
6 must be demonstrated.

7 The DEIS states that the results from EW1
8 are preliminary results, and it identifies that the
9 data likely provides a barrier to vertical groundwater
10 flow. While the DEIS acknowledges that there is
11 currently no evidence of similar features at the
12 Turkey Point site, it still acknowledged the potential
13 for hydraulic connections.

14 Thus, in support of its safety review and
15 relied on in the DEIS, the staff requested that FPL
16 perform various groundwater migration scenarios. And
17 then the staff performed its own review of these
18 scenarios. So there is no basis for requesting
19 additional studies.

20 NEPA requires that an EIS furnish only
21 such information as reasonably appears necessary under
22 the circumstances. And here, in light of the very low
23 concentrations of the four constituents of concern,
24 there is no reasonable basis to continue studying this
25 issue.

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1 The information in the DEIS far exceeds
2 the standards. As the DEIS points out, because of the
3 relatively low concentrations of contaminants and the
4 monitoring requirements of the DEP underground
5 injection control program, the impacts of upward
6 migration that could occur before detection would be
7 minor.

8 As provided in the Levy case, while
9 additional data and additional study might promote an
10 improved understanding of the geologic and hydrologic
11 characteristics of the proposed site, this does not
12 mean that additional data and study are required in
13 this instance to make this EIS reasonable.

14 In conclusion, FPL has met its burden of
15 bringing forth sufficient evidence to demonstrate that
16 the constituent concentrations relied on in the DEIS
17 are sufficiently reliable under NEPA.

18 Joint Intervenors have raised no genuine
19 dispute with that data or brought forth any other data
20 suggesting that the values in the ER are not
21 sufficiently accurate and reliable. Thus, FPL is
22 entitled to summary judgement.

23 Furthermore, the NRC staff has --

24 CHAIR HAWKENS: Ms. Harshaw, how do you
25 deal with the case law which says summary disposition

1 or summary judgement is simply not appropriate when
2 you have competing experts with supporting facts on
3 both sides?

4 MS. HARSHAW: I would say that I've
5 demonstrated that the Joint Intervenors have not --
6 their supporting facts cannot be simply speculative.
7 They have to be material, and they have to be
8 supported by methods of science. And Joint
9 Intervenors have provided no material facts.

10 CHAIR HAWKENS: What about the, was it the
11 2012 study which was not addressed in the DEIS or by
12 FPL but which discovered tectonic faults and karst
13 caverns in the very area or very near the area we're
14 dealing with here?

15 MS. HARSHAW: First, Your Honor, it is
16 incorrect to say that FPL did not address that study.
17 That study is cited in the FSAR. That study was
18 supplied to the NRC.

19 CHAIR HAWKENS: What page is that in the
20 FSAR?

21 MS. HARSHAW: It is Reference 989 in the
22 FSAR.

23 CHAIR HAWKENS: And is it referenced or
24 discussed?

25 MS. HARSHAW: It is discussed. And it's

1 also discussed --

2 CHAIR HAWKENS: Interesting, what page?

3 MS. HARSHAW: I believe it's at 2.5.1-381.

4 But I will verify that for you. And it is also
5 discussed in RAI responses to the NRC staff. And NRC
6 staff also asked about it in --

7 CHAIR HAWKENS: Which RAI response,
8 please?

9 MS. HARSHAW: It's in RAI that was in
10 October, 2014. And I can get that for you. And
11 furthermore, the 2012 Cunningham Report, the 2014
12 Cunningham Report that is cited in the ER by the NRC
13 staff is a cumulative of that study and prior studies.
14 It's cited in there. So it's incorrect to say that it
15 was not considered. The ER relies on the geologic and
16 hydrologic studies that are discussed in the FSAR.

17 But furthermore, back to my original
18 point, with the reliability of the constituents and
19 the very low values of those constituents, the
20 evaluation of migration is reasonable in any event.

21 CHAIR HAWKENS: Does FPL adhere to its
22 position that it's unlikely that the wastewater will
23 even leave the Boulder Zone?

24 MS. HARSHAW: FPL believes that there's
25 reasonable assurance that the inject table not leave

1 the Boulder Zone. NEPA does not require absolute
2 certainty, but FPL believes there is reasonable
3 assurance --

4 CHAIR HAWKENS: So there's a genuine
5 dispute there, you would agree?

6 MS. HARSHAW: Oh --

7 CHAIR HAWKENS: Even the staff disagrees
8 with that.

9 MS. HARSHAW: And actually what's
10 important at this point is what the staff put in the
11 DEIS. It's the staff's obligation to evaluate this.
12 And while FPL believes there is reasonable assurance
13 that the inject table not migrate, what's important is
14 that this is what the staff evaluated in the EIS.

15 CHAIR HAWKENS: All right. Anything else?

16 MS. HARSHAW: No.

17 CHAIR HAWKENS: Thank you.

18 JUDGE BURNETT: Oh, I --

19 CHAIR HAWKENS: Oh, I'm sorry.

20 JUDGE BURNETT: Yes. Excuse me. I have
21 a question concerning -- The Florida DEP requires
22 monitoring after a well is approved to be an injection
23 well. And as I understand it, they require weekly
24 monitoring for the first six months or up to two
25 years. But it's not clear to me how that

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1 determination is made. Is it weekly monitoring for
2 how long? Who makes that call?

3 MS. HARSHAW: That should be specified in
4 the permit from the DEP. Right now, the ER says that
5 the plan is that, the expectation is we would monitor
6 weekly.

7 And when we talk about monitoring, we
8 monitor continuously other variables. So if we're
9 concerned about the immediate, some immediate failure,
10 we monitor the pressure and level at the dual zone
11 monitor well continuously. So that would give an
12 immediate indication.

13 JUDGE BURNETT: So you mentioned that
14 you've received a permit --

15 MS. HARSHAW: Yes.

16 JUDGE BURNETT: -- for the exploratory
17 well to be converted --

18 MS. HARSHAW: Yes.

19 JUDGE BURNETT: -- to injection well.

20 MS. HARSHAW: Yes.

21 JUDGE BURNETT: And so is it already
22 determined how long the water quality monitoring will
23 continue on a weekly basis?

24 (Off the record comments)

25 MS. HARSHAW: Okay.

1 JUDGE BURNETT: So it's a one year?

2 MS. HARSHAW: Yes. So based on our
3 experience, it would be for a year that you would do
4 the weekly sampling. And that's the sampling, that's
5 not the continuous monitoring.

6 JUDGE BURNETT: Yes, I understand.

7 MS. HARSHAW: That's the weekly sampling.

8 And furthermore, before you are actually
9 issued a permit to operate -- so first you get a
10 permit where you can -- the permit we have is to do
11 the testing. So it's converted to, the injection well
12 has been converted to an underground -- the
13 exploratory well has been converted to an injection
14 well.

15 And now we can do the operational testing,
16 and that goes on for two years. So we'll be not
17 injecting the -- we'll be injecting something else,
18 and we'll be testing for two years before we're even
19 able to operate those injection wells.

20 (Audio feedback)

21 JUDGE BURNETT: Thank you very much.

22 CHAIR HAWKENS: Can I follow-up on that
23 also please? This is your, Mr. McNabb's declaration
24 or affidavit, Paragraph 39, he talks about the ground
25 water samples being collected and analyzed on a weekly

1 basis during the first six months to two years of
2 operation and monthly thereafter. And I'm wondering
3 is that based on the -- are those Florida
4 administrative code requirements?

5 MS. HARSHAW: The code doesn't specify
6 precisely, it doesn't specify that. It says it's what
7 would be reasonable, what is put in the permit. But
8 that is generally what is put in the permit.

9 CHAIR HAWKENS: All right. Thank you.
10 You will have ten minutes for rebuttal. Mr. Weisman,
11 do you care for rebuttal time?

12 MR. WEISMAN: Yes, Your Honor. The staff
13 would request five minutes for rebuttal.

14 CHAIR HAWKENS: Five minutes.

15 MR. WEISMAN: Before I begin, Your Honor,
16 I beg your indulgence and request a short recess. I
17 apologize.

18 CHAIR HAWKENS: No, that's all right.
19 Five or ten minutes, what would you prefer?

20 MR. WEISMAN: Why don't we say ten
21 minutes.

22 CHAIR HAWKENS: Ten minutes. We'll
23 reconvene at about quarter 'til. We're in recess.
24 Thank you.

25 (Whereupon, the above-entitled matter went

1 off the record at 10:34 a.m. and resumed at 10:44
2 a.m.)

3 MS. MIKULA: If we could just have a few
4 more moments before Mr. Weisman returns. I apologize.
5 Thank you.

6 MR. WEISMAN: Thank you, Your Honor. Good
7 morning. The staff thanks the Board for the
8 opportunity to present arguments on FPL's motion for
9 summary disposition. And I'd like to make a brief
10 opening statement.

11 In short, the Joint Intervenors'
12 contention has always been about concentrations of
13 chemicals in the treated wastewater used to remove
14 waste heat from the reactors.

15 As initially admitted, Contention NEPA 2.1
16 focused on the omission of the chemicals and their
17 concentrations from the ER and whether the chemicals
18 could affect the Upper Floridan aquifer. And that's
19 all discussed in your decision in LBP-11-6.

20 Similarly, as first amended, the
21 contention focused on the omission of the source of
22 the concentration data as discussed in LBP-12-9. And
23 as currently admitted, the contention focuses on the
24 reliability and accuracy of the concentration data,
25 and to refer to the Board order of August 30th, 2012.

1 But the Joint Intervenors, in their
2 answer to the FPL motion for summary disposition, did
3 not raise a genuine dispute in regard to the
4 reliability and accuracy of the concentration data of
5 the four chemical species in question. It's all
6 discussed in more detail in answering the Board's
7 questions.

8 And because this failure to raise a
9 genuine dispute regarding the reliability and accuracy
10 of the concentration data is dispositive, the Board
11 should grant the motion.

12 In particular, further consideration of
13 the "migration argument" is ultimately not material to
14 the summary disposition motion.

15 The Board's previous decision in May 2012
16 in LBP-12-9 confirmed that the contention, as
17 primarily focused on the concentrations of the four
18 identified chemicals in the injected water -- the
19 Board, in that decision, specified that it made no
20 judgement as to whether the migration component of the
21 amended contention would continue to support a
22 litigable issue if FPL provided accurate and reliable
23 concentration data. Nor did the Board make such a
24 judgement in its August 2012 order reformulating the
25 contention as currently admitted.

1 In other words, the Board has long
2 recognized that the chemicals in the injected water
3 could not affect the underground source of drinking
4 water unless the injected water could migrate from the
5 injection zone in the Boulder Zone to that underground
6 source of drinking water.

7 Accordingly, it's apparent that if upward
8 migration were ruled out, that would be dispositive of
9 the contention as the chemicals of interest could not
10 have any impact on the USGW.

11 But the threshold concern of Contention
12 2.1 is the reliability and accuracy of the
13 concentration data. And therefore, the Joint
14 Intervenors' failure to raise a genuine dispute on
15 that issue is necessarily dispositive of the
16 contention. As a result, any dispute regarding
17 migration is not ultimately material to the
18 contention.

19 And with that, I'll turn it to the Board's
20 questions.

21 CHAIR HAWKENS: Can you say that last
22 sentence again. I don't think I followed that, Mr.
23 Weisman.

24 MR. WEISMAN: All right. What I was
25 saying was any dispute regarding migration is not

1 ultimately material to the motion. And why is that?
2 If the concentrations are low enough, if the
3 concentrations are reliable and accurate, it doesn't
4 matter whether there's migration, right. The effect,
5 the environmental effect of the injection would be
6 small in any case.

7 CHAIR HAWKENS: I would agree with you if
8 you could demonstrate that the concentration level for
9 each was zero. It wouldn't matter. But unless you,
10 you would have to show me where one of your experts
11 makes that statement. Because I don't recall seeing
12 any of your experts making that statement --

13 MR. WEISMAN: Well, Your Honor, the Pace
14 data that FPL submitted, those data showed that all
15 the chemicals in the samples they tested were not
16 detectable. They were below the detection limits.

17 CHAIR HAWKENS: That was for the two
18 years, I believe?

19 MR. WEISMAN: Yes, Your Honor.

20 CHAIR HAWKENS: Prior to that, there's a
21 history of having detectable levels.

22 MR. WEISMAN: And as Counsel for FPL
23 pointed out, the earlier data were taken before the
24 Sewer District improved its treatment processes. But
25 even so, the mere detection of those chemicals does

1 not mean that there would be some significant effect.

2 The staff stated in its affidavit in
3 response to the motion for summary disposition that
4 the concentrations reported are very low in absolute
5 terms.

6 So there is -- and the Intervenors have
7 not presented any reasons why the chemicals in those
8 concentrations would have any significant impact. So
9 there is no reason to conclude that the impacts would
10 be anything other than small. And therefore, the
11 Board can grant the FPL motion.

12 So I'm now going to talk about whether
13 there's a genuine dispute regarding the concentrations
14 themselves. And the staff believes that no genuine
15 dispute remains regarding the reliability or accuracy
16 of the chemical concentrations in the wastewater.

17 Most importantly, the Intervenors,
18 although they have said -- and I'm sure they'll expand
19 on this in their argument --

20 CHAIR HAWKENS: Mr. Weisman, before you go
21 into that, can you tell us a little bit about this
22 letter that we received recently?

23 MR. WEISMAN: Yes, Your Honor. The staff
24 made a statement, both in its answer and in the staff
25 affidavit, that the staff used a higher value of

1 tetrachloroethylene, recited in the discussion in the
2 answer and in the affidavit, in its analysis in the
3 DEIS.

4 But that was erroneous. The staff
5 evaluated and relied on the concentration that FPL
6 provided for the cycled up -- for the injected
7 wastewater, injected cooling water. And that number
8 was derived from the 1.1 micrograms per liter, the
9 lower value that was cited in that discussion.

10 So the staff apologizes for that error.
11 We just wanted to make sure that the Board had an
12 accurate record for a decision here. And that's why
13 we sent in the letter.

14 CHAIR HAWKENS: And can you explain to me
15 where you came up with the other two values which you
16 thought were both higher than 1.1 used by FPL?

17 MR. WEISMAN: I believe that's actually
18 addressed in the staff affidavit. But --

19 CHAIR HAWKENS: I read that. And it's not
20 very clear to me.

21 MR. WEISMAN: All right. Yes, Your Honor.
22 In the original affidavit, not the supplemental one.
23 But in 2012, in the context of an FPL motion for
24 summary disposition, the staff examined the
25 concentrations that were reported in the -- at that

1 time, the staff was developing the EIS, we didn't have
2 all the information that we needed to write the EIS.
3 And we did not have the raw data that that 2012 motion
4 for summary disposition relied on.

5 So the staff went out and found the Sewer
6 District's raw data itself. And we verified that the
7 statements in the motion for summary disposition were
8 correct, that the concentrations were correct.

9 And that was so except for the one
10 concentration of tetrachloroethylene. And it turned
11 out that the staff had looked at the Sewer District's
12 annual sampling and looked at data from that annual
13 sampling.

14 But FPL had used data from a pilot
15 project, a reused pilot project that would use
16 tertiary sewage treatment techniques. At that time,
17 the Sewer District was only using secondary treatment.

18 So in 2012, we had a disagreement with FPL
19 regarding the concentration of tetrachloroethylene.
20 But upon reviewing FPL's November 2012 letter, in
21 which FPL explained why it used that 1.1 microgram per
22 liter concentration, the staff considered the basis
23 for that and ultimately agreed with FPL that that was
24 an appropriate value to rely on.

25 CHAIR HAWKENS: So the 2.0 micrograms per

1 liter from the 2007 annual plant sampling did not have
2 that tertiary treatment that the 1.1 --

3 MR. WEISMAN: That is my understanding,
4 Your Honor, yes. And likewise, my understanding is
5 also that the 1.6 microgram per liter, as reported in
6 the staff's February affidavit, that also, my
7 understanding is that did not -- was from a sample
8 that had not received tertiary sewage treatment.

9 CHAIR HAWKENS: Thank you.

10 MR. WEISMAN: All right. Now, so I
11 mentioned this before, but most importantly the
12 Intervenors do not contest that the concentrations of
13 the four chemicals in the available Pace sampling data
14 are below the detection limits. Rather, they imply
15 that the mere presence of these chemicals in the
16 wastewater constitutes a dispute with FPL.

17 But this argument cannot be a genuine
18 dispute as it would render the contention's focus on
19 the accuracy and reliability of the data irrelevant.
20 It would then shift to the mere presence of the
21 chemicals. And everybody agrees that these chemicals
22 can be present in the wastewater.

23 So that is, the Intervenors are now
24 assuming, they're asserting that the only acceptable
25 data would be the complete absence of the four

1 chemicals, a claim that they do not support and, in
2 any event, is not required by NEPA.

3 Likewise, the Joint Intervenors claim a
4 dispute on the basis of the concentrations in the data
5 are "variable." However, given FPL's undisputed
6 statements that the newer Pace samples show
7 concentrations below the detection limits, the Joint
8 Intervenors fail to explain nor provide any expert
9 support about how the variability of those
10 concentrations would be environmentally significant.

11 Without having done so, the Joint
12 Intervenors generalized statements about variability
13 or the mere presence of chemical concentrations cannot
14 represent a genuine material dispute.

15 So I think we've -- the Board's second
16 question was on the disagreement, the apparent
17 disagreement between the staff and FPL on the
18 concentration of tetrachloroethylene. And I think
19 I've already addressed that.

20 I'll move on to the next Board question
21 which was the materiality of the apparent disagreement
22 between FPL and staff concerning the potential for
23 upwelling.

24 As we've discussed, in regard to the
25 Board's questions about the chemical concentrations,

1 there is no genuine dispute remaining regarding the
2 accuracy and reliability of the chemical
3 concentration. And that's dispositive of the
4 contention.

5 Therefore, any disagreements about the
6 potential for upwelling, whether they're between FPL
7 and the staff or between FPL and the Joint
8 Intervenors, are ultimately not material to the
9 disposition of the motion and the contention. And
10 summary disposition is warranted.

11 In any event, the staff explained in its
12 response to FPL's motion that the analyses in the DEIS
13 did not rely on an assumption that there would be no
14 migration beyond the Boulder Zone.

15 And FPL's motion correctly references the
16 DEIS analysis that indicates upward migration would
17 likely be limited to 300 feet into the base of the
18 middle confining unit and not into the underground
19 source of drinking water.

20 In sum, as a technical matter, whether
21 there's no migration out of the Boulder Zone or
22 whether there's no migration above 300 feet into the
23 middle confining unit, the chemicals of concern here
24 would not find their way into the underground source
25 of drinking water. And there's no genuine dispute

1 about the environmental impacts.

2 I will move -- Any questions about that?

3 CHAIR HAWKENS: Please continue.

4 MR. WEISMAN: Thank you, Your Honor. The
5 Board's next question had to do with the sampling and
6 test results from FPL's exploratory well. And this
7 question highlights the assertion from the Intervenor
8 that the determination related to potential migration
9 out of the Boulder Zone was based largely on some of
10 the data from Well EW1. But this was not the sole
11 basis.

12 In the DEIS, the staff explains that not
13 only was more data from Well EW1 considered but also
14 data from another onsite well -- it's denoted in the
15 EIS as DZMW1, and that's the dual zone monitoring well
16 -- and formation pressure testing between the wells.

17 The staff also considered a number of
18 local and regional studies of hydrology and impacts of
19 deep well injection and compared these to what was
20 found onsite.

21 But the Board doesn't need to reach this
22 issue. Because, like I said, FPL recited several
23 times the lack of dispute on the concentration data is
24 dispositive. So the Board doesn't have to reach that
25 question.

1 The Board's next question went to the
2 expert testimony of the Joint Intervenors' expert, Mr.
3 Quarles, and the sampling and test results from EW1.
4 And again, the Board really doesn't need to reach that
5 question. Because ultimately it's not a genuine
6 dispute about the motion. The Board can make its
7 finding solely based on the lack of dispute regarding
8 the concentration data.

9 CHAIR HAWKENS: Mr. Weisman, Mr. Quarles,
10 the Joint Intervenors' expert, stated that vertical
11 migration, if there is a pathway, can occur and reach
12 the Upper Floridan aquifer within a matter of days.
13 Is it the staff's position that if this wastewater did
14 migrate to the Upper Floridan aquifer within a matter
15 of days that would not pose a problem?

16 MR. WEISMAN: Your Honor, I think that the
17 staff would first address the supposition built into
18 Mr. Quarles' position which is that such a pathway
19 would exist. There are really only two ways for such
20 a pathway to exist. One would be through an --

21 CHAIR HAWKENS: And I'd like to hear that
22 aspect of your answer. But if you could first answer
23 my question. If that vertical pathway did exist, and
24 the water did migrate within a matter of days, is it
25 your position it would have a small environmental

1 impact?

2 MR. WEISMAN: Based on these four chemical
3 constituents, Your Honor, the answer is yes. There
4 might be other considerations, such as possibly
5 biological hazards, that might be important. But
6 that's not the subject of this contention. But as to
7 these four chemical constituents, the concentrations
8 are so low that the staff's position would be that any
9 environmental impact would be small.

10 CHAIR HAWKENS: Why is that not a classic
11 battle of the experts that should go to an evidentiary
12 hearing? We have Mr. Quarles who's in direct
13 disagreement with what you're representing as the
14 staff's position. And does your expert address that
15 possibility, that if the wastewater does reach the
16 Upper Floridan aquifer within a matter of days you
17 would have a small environmental impact?

18 MR. WEISMAN: If I might consult, Your
19 Honor, I would appreciate it.

20 CHAIR HAWKENS: Sure.

21 (Pause)

22 MR. WEISMAN: Thank you, Your Honor. I
23 think that there are a couple of parts, a couple of
24 different ways to answer your question. And the first
25 thing that I'm going to say is that the Joint

1 Intervenorors have not explained the significance of any
2 such rapid upwelling given the concentration data
3 here.

4 Second, the Joint Intervenorors themselves
5 cite the 2003 EPA relative risks assessment and that
6 assessment concludes that the overall risk to human
7 health would be low, even where there had been impacts
8 to underground sources of drinking waters. And those
9 impacts would be even lower when the injectate has
10 been treated to reclaim water standards.

11 Finally, even where there has been some
12 upwelling at other sites, there are a wide variety of
13 things that would have to occur for there to be rapid
14 upwelling in the way Mr. Quarles describes. And as I
15 understand it, that hasn't been observed at other
16 sites.

17 So it's that does not appear to be, the
18 Joint Intervenorors haven't described how that might
19 happen. They haven't provided a basis for a genuine
20 disagreement here.

21 CHAIR HAWKENS: And now I'll thank you for
22 those answers. I'll ask my question one more time.

23 MR. WEISMAN: Yes, Your Honor.

24 CHAIR HAWKENS: Is it the staff's position
25 then that if this rapid vertical migration did occur

1 so that you're getting nearly a direct uprising of the
2 waste water that reaches the Upper Floridan aquifer
3 within a couple of days, that the environmental impact
4 would be small?

5 MR. WEISMAN: I have to consult one more
6 time, I'm sorry. If you will indulge me.

7 CHAIR HAWKENS: Sure.

8 (Pause)

9 MR. WEISMAN: The answer to that question,
10 Your Honor, is yes the impact would be small.

11 CHAIR HAWKENS: All right, please
12 continue.

13 MR. WEISMAN: I really have nothing else
14 to add. Thank you, Your Honor, for the opportunity to
15 present argument.

16 CHAIR HAWKENS: We probably have a couple
17 of questions. I'll start off. The dual monitor
18 wells, as I read the DEIS there in between pairs of
19 the injection wells it will be about 75 feet from an
20 injection well, is that correct?

21 MR. WEISMAN: I don't know the exact
22 distances. I could confirm that if you wish. I do
23 believe that it is specified in the EIS.

24 CHAIR HAWKENS: You mentioned that the
25 dual monitor wells would only detect wastewater that

1 was within their range. And I was wondering exactly
2 what that meant, what the range would be.

3 MR. WEISMAN: Your Honor, if you will
4 allow me to consult with my expert, I will give you
5 that answer. I apologize that I don't know it off the
6 top of my head.

7 CHAIR HAWKENS: All right. Before you do,
8 are there other questions?

9 JUDGE BURNETT: I had a question. Mr.
10 Weisman, concerning upwelling, in the staff answer it
11 was said that some limited upwelling may be expected,
12 but limited to only 300 feet into the confining bed.

13 MR. WEISMAN: Yes, Your Honor.

14 JUDGE BURNETT: And I'm curious how that
15 300 foot estimate was made.

16 MR. WEISMAN: Well, Your Honor, the
17 injectate is slightly, is somewhat more buoyant than
18 the water that's in the boulder zone. And the staff
19 performed calculations of how far the driving force of
20 that buoyancy might be expected to drive that
21 wastewater up into the confining unit. And that's
22 about as far as it would go.

23 JUDGE BURNETT: Thank you.

24 CHAIR HAWKENS: I have another question.
25 Joint Intervenors raised questions about the integrity

1 of the injection wells and a concern about leakage
2 from the injection wells.

3 Does the DEI address the impact on the
4 ground water if an injection well were to be
5 compromised right above the middle confining unit,
6 right at the base of the Upper Floridan Aquifer so you
7 had a direct and lengthy discharge of wastewater into
8 an underground source of drinking water.

9 MR. WEISMAN: Your Honor, the staff
10 believes that that kind of event would be very
11 unlikely because the Applicant would be observing the
12 pressures in the well and they would see changes that
13 would alert them to, they would see pressures in the
14 other variables they would monitor that would alert
15 them to the fact that there was a problem with the
16 well.

17 So the staff would believe it unreasonable
18 for a lengthy failure and loss of a large amount of
19 material from such a failure.

20 And to more directly answer your question,
21 the staff did evaluate direct bypass that you're
22 describing. And those conclusions are reflected in
23 the EIS.

24 CHAIR HAWKENS: And what were the
25 conclusions, or at least can you direct me to the page

1 of the DEIS please?

2 MR. WEISMAN: I don't know the page
3 number, but perhaps I can get that from my expert.

4 CHAIR HAWKENS: All right. You want to do
5 that now, or do you want to do that, provide that
6 during the rebuttal, Mr. Weisman?

7 MR. WEISMAN: I will be happy to provide
8 that during the rebuttal.

9 CHAIR HAWKENS: All right, thank you.

10 MR. WEISMAN: Thank you, Your Honor.

11 CHAIR HAWKENS: Mr. Totoiu, we're ready to
12 hear from you, sir.

13 MR. TOTOIU: Well good morning.

14 CHAIR HAWKENS: Good morning.

15 MR. TOTOIU: We're here today for the
16 Board to determine whether genuine dispute of material
17 fact exists regarding Joint Intervenors contention
18 2.1. Summary judgement is appropriate only when there
19 are no genuine issues in dispute.

20 The burden rests on the moving party, and
21 the Board must examine the record in light most
22 favorable to the non-moving party. If there's any
23 possibility that a litigable issue a fact exists or --

24 CHAIR HAWKENS: Material fact.

25 MR. TOTOIU: Material fact exist or any

1 doubt as to whether the parties should proceed
2 further, the motion must be denied. This is
3 particularly inappropriate where there's conflicting
4 testimony and which we respectfully submit today there
5 is.

6 It's not a time to weigh the evidence and
7 determine the truth of the matter, but whether to ask
8 whether reasonable minds can differ. We submit that
9 FPL has failed to meet its burden of demonstrating
10 that no genuine dispute exists.

11 If anything, the expert testimony offered
12 by FPL poses even more questions that must be answered
13 at an evidentiary hearing.

14 We have long maintained that for more than
15 four years in fact that there's not an adequate
16 geologic layer with sufficient aerial extent,
17 thickness, or hydraulic conditions to prevent
18 migration.

19 Four years ago, Mr. Quarles pointed to
20 independent studies that support the conclusion that
21 migration can occur. Four years and two motions for
22 summary disposition later, little has changed. FPL's
23 position is still based on generalized data and
24 assumed values as opposed to an actual site specific
25 data and analysis.

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1 And I would like to discuss a little bit
2 about FPL's latest testing and findings, and starting
3 with the EW-1 test. We believe those conclusions are
4 based on flawed methods and unacceptable generalities.

5 As we discussed in our answer, it was
6 flawed in many respects. First, pulverized cuttings
7 don't give you what you need to determine the presence
8 of voids, fractures, faults, hydraulic capacity or the
9 confining nature of the bedrock.

10 Bedrock core samples were drawn from 122
11 feet of a 3,230 foot deep well. That's four percent
12 of samples, four percent of the depth of the well.
13 What results of that? It requires FPL then to
14 generalize the other 96 percent of that well.

15 Moreover, as Mr. Quarles explained in his
16 third affidavit, their own research raises doubts
17 regarding the efficacy of the confining layer. The
18 low percentage of recoveries of those core samples
19 suggests that there are actually voids in the bedrock.

20 Those recoveries are examined to look at
21 how much of that interval contains bedrock. The
22 average percentage was 54 percent, and as low as 8
23 percent which means that more than 90 percent of that
24 interval had voids or very soft or fractured bedrock.

25 Further, the porosity requirements likely

1 confirm that voids were present in that bedrock core
2 sample. The percentage of porosity ranged from 27.5
3 percent to 43.5 percent which again suggests the
4 presence of voids.

5 In fact, some of these pieces couldn't
6 even be tested because they weren't enough intact to
7 make a proper examination of them. Further, this
8 straddle packer test and the termination of 8 of 13
9 tests suggests that voids and fractures were present.

10 In addition to FPL's own most recent
11 evaluation, outside regional studies again raised
12 doubts regarding the efficacy of that confining layer.
13 We have the 2008 Reece and Richardson study which
14 found that confinement was uncertain and that more
15 studies were needed.

16 So this led to Cunningham et al in 2012
17 citing an immediate need to study that hydrogeology
18 because of this practice of deep well injection of
19 municipal wastewater.

20 And what did that study find? It found
21 two things. First, the presence of tectonic faults,
22 second the presence of collapse structures. Both of
23 those breach the confining layer in the Floridan
24 Aquifer. One of these faults runs along the shoreline
25 of Biscayne Bay where Turkey Point is located.

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1 This can serve as a passageway for upward
2 migration. Car structures also exist in Biscayne Bay
3 and those create breaches in confining layers which
4 can result in upward migration.

5 Given all of this and what we've contended
6 for four or more years now, a site specific study is
7 needed to determine whether or not these features,
8 these fractures, these voids are present at the Turkey
9 Point site and whether there's an adequate confining
10 layer.

11 Now while FPO and NRC may contend that
12 these studies were disclosed or considered and that
13 the EIS is not a research document. A federal agency
14 must examine the relevant data and articulate a
15 satisfactory explanation for its action including a
16 rational connection between the facts found and the
17 choice made.

18 And we respectfully submit that in light
19 of all this data and research that that connection was
20 not established and a document cannot rest on a
21 conclusory statement.

22 CHAIR HAWKENS: Mr. Toutouiu, I'm wondering
23 in addition to the litigation, are you taking
24 advantage of your opportunity to submit these comments
25 to the NRC staff in the context of their DIS in

1 formulating their FEIS?

2 MR. TOTOIU: I believe that we submitted
3 comments, Your Honor, on the DEIS at the time that it
4 was noticed for public comment. I have to confirm,
5 I'm pretty sure we did.

6 CHAIR HAWKENS: So how extensive a survey
7 would you be recommending be taken of the Turkey Point
8 site?

9 MR. TOTOIU: I think, Your Honor, that
10 what's missing here is a site specific analysis of
11 where those 13 wells are going to be placed and the
12 underlying geology there. There were repeated
13 reverences made this is not a dissertation, this is
14 not a research study.

15 But NEPA demands and requires that a full
16 disclosure of the potential environmental impacts be
17 made. And this is particularly serious here because
18 there have been 18 past contamination events as that
19 2003 study had indicated.

20 And we're dealing with four constituents,
21 two of which are probable human carcinogens,
22 tetrachloroethylene and heptachlor. Those
23 constituents as reflected in that Table 3.5, 3.6, with
24 respect to heptachlor, that measurement was three ten
25 thousandths of a milligram per liter away from an MCL.

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1 With respect to TCE, there was six ten thousandths of
2 a milligram per liter short of the MCL.

3 There needs to be assurances that these
4 constituents don't find their way through an
5 undetected void, fracture, through that "confining
6 layer" and impact a potential source of drinking
7 water.

8 This is what NEPA is all about. NEPA is
9 there to ensure that the impacts, the potential
10 impacts are fully examined before the die is otherwise
11 case. As we contend later, and I will get to, if
12 these constituents made their way into the USDW, it is
13 unclear what type of remediation could even occur at
14 that point.

15 The purpose is one of avoidance,
16 disclosure, learn, and avoid. And to that question,
17 if it were to migrate, you know, the argument was made
18 I believe by both FPL and NRC staff that the well
19 construction and the warning system in place would be
20 adequate, and we respectfully disagree.

21 The reason being, as Mr. Quarles explained
22 that if there was a direct, a conduit, a path through
23 that void or fracture that you could have immediate
24 and widespread contamination and that the sampling
25 frequency may not allow you to quickly detect that and

1 get a handle on what exactly the nature and the spread
2 of that contamination would be.

3 You know, there is also an issue regarding
4 the well's design. And it was unclear, there was no
5 formation pressure test ever conducted to monitor for
6 leakage between the concrete that's in contact with
7 the bedrock formations and those outer steel casings.

8 And also, multiple seals can also fail
9 during the lifetime of these due to repeated stress
10 and that those may not be detected before that five
11 year evaluation occurs where they have to go in and
12 examine these wells. A lot can happen within five
13 years.

14 CHAIR HAWKENS: How would you respond to
15 Mr. Weisman's response to a question that if leakage
16 did occur, there are other ways for the operator to
17 detect other than taking a sample, for example
18 pressure monitoring would reveal immediately a serious
19 rupture discharging wastewater.

20 MR. TOTOU: We would say even if so, Your
21 Honor, there appears to be no assurances as to what
22 happens then, how is this remediated. And in fact, it
23 wasn't even clear, you know, based on these past
24 contamination events what happened after that. How do
25 you remediate, how do you clean up these constituents

1 getting in to a potential source of underground, you
2 know, of drinking water.

3 So in closing, Your Honor, given all of
4 this, there is no sufficient explanation as to why
5 based on a single well test and then the fact that
6 these independent studies documenting false and
7 collapsed structures in the vicinity of Turkey Point
8 why there won't be an impact.

9 In fact, there doesn't even seem to be
10 agreement between NRC staff and FPL in terms of
11 whether or not upwelling could occur. While NRC staff
12 eventually concludes that that upwelling would be
13 limited and the impacts would be small, I think that
14 underscores in and of itself an uncertainty there in
15 terms of how the potential for that water to get out
16 of the well and upward into, and moving upward through
17 migration.

18 We submit that taken together, Mr.
19 Quarles' testimony which we have provided over the
20 course of more than four years and three affidavits,
21 the recent Richardson and Cunningham studies, and this
22 very latest round of analysis performed by FPL with
23 the EW-1 test that this only leaves even additional
24 questions and suggests that the presence of potential
25 pathways for migration to occur.

1 Therefore, a genuine dispute exists
2 regarding this contention, and summary judgement is
3 not appropriate.

4 JUDGE BURNETT: Mr. Totoiu, if Florida
5 Power and Light does not use the wastewater for
6 cooling, what's going to happen to that wastewater?

7 MR. TOTOIU: I'm not sure, Your Honor. I
8 believe --

9 JUDGE BURNETT: What's happening now?

10 MR. TOTOIU: Okay, so I understand that
11 the operations would consist of two sources of water,
12 one through reclaimed, I mean not reclaimed, one is
13 through wastewater and the other is from the radial
14 wells.

15 JUDGE BURNETT: Excuse me. I'm asking
16 about the fate of the wastewater generated at the
17 south district wastewater treatment plant. So the
18 plan is to use I believe it's 18.6 million gallons a
19 day for cooling. If that plan does not go forward,
20 those 18.6 million gallons a day will be disposed of
21 in the same way they're being disposed of today which
22 is underground injection.

23 MR. TOTOIU: I don't have any information,
24 Your Honor. I don't know to be honest with you, in
25 terms of where else it would go. But what I would say

1 is that based on that detectible presence that we saw
2 documented between at least 2007 and 2011 that this is
3 quite serious because it indicates that these
4 constituents can't be cleaned up through that
5 district's plant or otherwise they wouldn't be there.

6 JUDGE BURNETT: The recent analytical data
7 suggests that it may not be there.

8 MR. TOTOU: While the PACE results showed
9 for those four constituents not rising to the level of
10 MDL, there's still variability. For over a four year
11 period, those constituents were there. In this most
12 recent sampling they came back under the MDL.

13 But when you're dealing with these types
14 of constituents and two probable human carcinogens,
15 you know, the MCLG for heptochlor and TCE,
16 tetrachloroethylene is zero. It's zero because it's
17 unacceptable at any level for human consumption. And
18 I think that that underscores the seriousness of the
19 fate of these particular constituents.

20 JUDGE BURNETT: Yes. To get back to my
21 original question, I'm asking that because my
22 understanding is that all of the wastewater generated
23 or treated at that plant that is some ten miles or so
24 north of Turkey Point is now injected underground.

25 And so if a portion of that wastewater is

1 not used for cooling, it's still going to be injected
2 underground which is what you want to prevent. But
3 your argument will not prevent it from happening.

4 MR. TOTOIU: Well, we're concerned in this
5 proceeding is to, the plant's operation specifically,
6 I have not examined what otherwise may occur with that
7 wastewater should this plant not, you know, utilize
8 that wastewater stream.

9 I would think that that is still very much
10 problematic given the nature of these constituents.
11 But I'm not familiar with the future, the otherwise
12 alternatives that may be in place. I've examined, or
13 we've examined this through these operations. But I
14 understand, I appreciate that. I just don't have
15 enough knowledge to weigh in particular about that
16 precise potential outcome I guess.

17 JUDGE BURNETT: Okay, thanks.

18 CHAIR HAWKENS: Mr. Totoiu, getting back
19 to the concentrations of the constituents, Joint
20 Intervenors do not challenge FPL statement that
21 they're conservative and that they're reliable. So
22 for present purpose, this Board is authorized to take
23 that fact as admitted, correct?

24 MR. TOTOIU: We did not dispute that. I
25 think you're citing to material fact 41 I believe.

1 CHAIR HAWKENS: Correct.

2 MR. TOTOIU: I think, you know, to answer
3 that question whether it's an admittance or --

4 CHAIR HAWKENS: First to start off, you
5 did not dispute it?

6 MR. TOTOIU: I did not, you're right.
7 You're right, Your Honor. But I think that it's the
8 broader question is still in dispute as to what those
9 levels will be because of the variability. And I
10 think that that variability is what's --

11 CHAIR HAWKENS: And if we were to grant
12 your assertion that they're variable, we would also,
13 I think, have to accept your concession that it's
14 conservative because it's bounded and we would accept
15 those figures that are in the DEIS by your concession
16 as being conservative and reliable and then proceed to
17 the next step is assuming they are discharged into the
18 boulder zone, what impact if any will there be if they
19 migrate to the Upper Floridan Aquifer. Is that
20 correct?

21 MR. TOTOIU: Yes. I don't think we are
22 disputing that they're conservative. I think that the
23 issue here is they were present for four years. The
24 PACE study in 2012, the quarterly shows zero. Well
25 maybe not zero but under the minimum detection levels.

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1 There's a difference there. There is variability,
2 there's a discrepancy.

3 And when you're dealing with the
4 seriousness of these constituents that a dispute still
5 exists and it is certainly relevant to the issue of
6 migration. If it's there, you know, we know it's
7 there and then what's the ultimate fate, the outcome.

8 CHAIR HAWKENS: So is the question what is
9 the impact of migration assuming the conservative and
10 reliable concentrations reflected in Table 3.5 or
11 injected into the boulder zone? Would that be a
12 correct representation of your view?

13 MR. TOTOIU: I'm sorry, Your Honor. Can
14 you rephrase? I apologize.

15 CHAIR HAWKENS: I will endeavor to.

16 MR. TOTOIU: Okay.

17 CHAIR HAWKENS: Assuming the conservatism
18 and reliability of the values in Table 3.5 and
19 accepting them, not disputing them, recognizing they
20 may be lower, but those figures are bounding,
21 conservative, and reliable.

22 So the issue then becomes from joint
23 intervener standpoint, is the DEIS correct in
24 concluding that the impact on the Upper Floridan
25 Aquifer will be small if those values in Table 3.5 for

1 these four constituents are discharged into the
2 boulder zone.

3 MR. TOTOU: I think that's correct, Your
4 Honor. I would turn to, I think, the Barnhurst
5 affidavit. I think it's Paragraph 11 where NRC
6 staff's expert essentially, you know, recognized the
7 relevancy here, but that it's then a matter of how
8 confining is that confining layer.

9 And it was staff's position which we
10 dispute that it's confining and therefore the impact
11 is small. That is very much in dispute as Mr. Quarles
12 has explained.

13 CHAIR HAWKENS: Does the staff's recent
14 letter dated April 4th have any impact on the
15 question, your answer to the question that I just
16 asked?

17 MR. TOTOU: Well, I think --

18 CHAIR HAWKENS: And I'll summarize it.
19 And to the extent I misstate it, Mr. Weisman, please
20 correct me.

21 MR. WEISMAN: Yes, Your Honor.

22 CHAIR HAWKENS: But what they're doing is
23 agreeing with not only the figures in Table 3.5, but
24 with the figures that underlied it that were used by
25 FPL, namely the 1.1 microcurie per liter for the

1 tetrachloroethylene.

2 MR. TOTOIU: I don't think it's, I mean,
3 I think it, from our perspective it just, it reaffirms
4 the presence of TCE and the variability. I mean, I do
5 not take issue with the mistake that I guess was made
6 in the answer.

7 CHAIR HAWKENS: All right, thank you.

8 JUDGE BURNETT: I have a question. Mr.
9 Totoiu, could you summarize what other types of
10 studies that you feel are necessary, the site specific
11 studies that you mentioned, what else would Florida
12 Power and Light need to do?

13 MR. TOTOIU: Well, to begin with the site
14 specific study because I want to go back to that
15 question you raised earlier about otherwise what might
16 be going on with the plant. The plant is some
17 distance away from, I'm sorry, the District's
18 treatment plant is some distance away from --

19 JUDGE BURNETT: Yes, I think it's ten
20 miles.

21 MR. TOTOIU: Ten miles. So this
22 highlights another issue, well it highlights an issue
23 that Mark Quarles has raised in that that geology
24 differs, and it can differ significantly within those
25 ten miles.

1 So why I bring this up is in two respects.
2 First, if they're otherwise injecting that water, just
3 to go back to your earlier question, hypothetically.
4 I don't know where they may otherwise be injecting
5 this water, into a well that's ten miles away, perhaps
6 there's the adequate confining layer there. Don't
7 know.

8 But in this instance, there's not a site
9 specific analysis that was made to determine within
10 that footprint of Turkey Point whether or not there's
11 fractures and voids that are present that if you were
12 to dispose of this wastewater that it otherwise
13 wouldn't migrate upwards.

14 So principally what we have long
15 contended, and this is nothing new. I mean, beginning
16 back in 2012, I think it's January a site specific
17 analysis is necessary, and it's necessary in light
18 particularly of those results from the Cunningham et
19 al study which you could see through the mapping
20 revealed the very real possibility of these fractures
21 and voids that may be present in the area.

22 We take issue and dispute I think the
23 suggestion made that, you know, the geology is pretty
24 much consistent within that area. I don't think
25 Cunningham supports any such position, and that's why

1 a site specific analysis is required for those 13
2 wells.

3 Let's just assume that EW-1, putting aside
4 everything, all the flaws in the methodology that
5 we've identified and let's just assume a best case
6 scenario that in that instance, in that area where
7 that well is that there isn't a fracture or a void,
8 but just assume for argument sake.

9 That's not dispositive of whether or not
10 there's voids and fractures for the other 12 wells, 13
11 total that FPL plans on drilling. So, you know, from
12 our perspective again to underline the seriousness of
13 this, respectfully it's not an academic exercise.

14 We're dealing with very serious types of
15 constituents that have been identified in that
16 wastewater stream, and there needs to be assurances
17 that those do not get into the public's potential
18 source of drinking water as well as an aquifer that
19 underlies two national parks.

20 JUDGE BURNETT: Thank you. They did of
21 course drill this well, this bore hole, actually two
22 wells because there was a dual zone monitor well as
23 well. And in addition to the coring which was as you
24 say only four percent of the total, they ran
25 geophysical logs which are more or less continuous I

1 believe from the top to the bottom.

2 So what other types of studies do they
3 need to do? If you want to look at the subsurface,
4 the best way to do that is to drill a hole, which of
5 course is very expensive. But are you suggesting that
6 the geophysical studies that were done in Biscayne Bay
7 by Cunningham, that something like that should be done
8 on land at the site for the injection wells?

9 MR. TOTOIU: Respectfully, Your Honor, I
10 don't think I'm prepared to say today exactly what
11 such a study would look like, but I can give you a
12 general impression.

13 I think at the very least an analysis has
14 to be done within proximity of those 13 wells that are
15 going to be drilled. The geology can vary. All you
16 need is one fracture, one void and you have potential
17 migration.

18 So at the very least, I think that
19 analysis of a subsurface geological assessment needs
20 to be made as to where these wells are going to be.
21 And I would like to say that, you know, respectfully
22 that it's the Agency's burden to put in an
23 environmental impact statement to disclose sufficient
24 information so that the public and the decision makers
25 can have a full understanding of what those

1 environmental impacts would be.

2 Respectfully, I don't think it is, and I
3 say this because I can't give you today what that test
4 would look like, that analysis would look like. But
5 I would respectfully also submit that that is really
6 the Agency's duty under NEPA to make a full disclosure
7 and assessment, and not petitioner, or Joint
8 Intervenors.

9 So I hope I've answered the question the
10 best I can. I can't get into the details of what such
11 a study would look like. But you know, this is
12 something that we have brought to everyone's attention
13 since 2012, the need of this type of analysis because
14 you're dealing, you're looking at, you know, at least
15 twofold you're looking at flood methodologies within
16 the latest round of sampling, and not only flood
17 methods and generalized assumptions, but it doesn't
18 even support their position in many regards as I've
19 stated earlier as the recoveries and the porosity
20 actually suggest otherwise, that there are voids or
21 that bedrock is not solid.

22 So given that, I think given the history
23 of past events and what Cunningham has found, more
24 needs to be done.

25 JUDGE BURNETT: Thank you.

1 CHAIR HAWKENS: Mr. Totoiu, I think I
2 understood the staff to say that even if there were
3 rapid vertical migration such if the wastewater rose
4 to the Upper Floridan Aquifer within a matter of days,
5 that would not change the conclusion in the DEIS that
6 the environmental impact would be small. It just
7 doesn't matter they say. I'm wondering what your
8 response to that is.

9 MR. TOTOIU: My position is in response to
10 what the Barnhurst affidavit had said at the time,
11 that Paragraph 11 which took issue with, which said
12 that even though some limited upwelling could occur,
13 the confining layer was otherwise confining enough so
14 this is not an issue.

15 What I hear today is even if we had a
16 fracture that provided a straight pathway upward
17 stopping at no point and getting into the drinking
18 water that that impact would be small. I think, I
19 mean, there is a dispute exists between the degree of
20 those impacts.

21 And I don't, I'm not aware of, other than
22 what was stated today, any subsequent analysis to why
23 that would otherwise be small given the variability
24 and like I explained earlier over a four year period
25 measurements, sampling levels that were just shy of

1 the MCL.

2 And we're talking about tenths, three
3 tenths of a thousandth of a milligram per liter and
4 six ten thousandths of a milligram per liter. That's
5 not much of a margin of error and room there. So this
6 is significant.

7 And while I appreciate, you know, hearing
8 that today, I mean, there's nothing offered else to
9 otherwise explain why that would be small.

10 CHAIR HAWKENS: Any other concluding
11 remarks, Mr. Totoiu?

12 MR. TOTOIU: I have no more, Your Honor.
13 Thank you very much.

14 CHAIR HAWKENS: All right, thank you.
15 Before we hear rebuttals from first Mr. Weisman, Ms.
16 Harshaw, we'll take a ten minute break, reconvene at
17 12:00 and we will conclude then. Thank you.

18 (Whereupon, the above-entitled matter went
19 off the record at 11:49 a.m. and resumed at 11:59
20 a.m.)

21 CHAIR HAWKENS: Please be seated. We'll
22 wait for a minute before starting rebuttal.

23 (Pause)

24 CHAIR HAWKENS: Be prepared to proceed,
25 Mr. Weisman.

1 MR. WEISMAN: Yes, Your Honor. Thank you.
2 During the portion of the staff's argument, the Board
3 asked a couple of questions. I would like to answer
4 those now. The first question was about the range for
5 the dual zone monitoring wells.

6 The IS in Chapter 3 Figure 3-7 shows the
7 location, or the proposed location of the injection
8 and monitoring wells. You will see on that figure
9 that there is one monitoring well in between two
10 injection wells, and the staff would expect that for
11 each pair of injection wells, the associated
12 monitoring well would be effective for those nearby
13 wells. Beyond that --

14 CHAIR HAWKENS: I believe I read either in
15 the DEIS or in the affidavit submitted by your expert
16 that it was about 75 feet from the injection well.

17 MR. WEISMAN: That could be correct. My
18 recollection is that the two injection wells were
19 approximately 300 feet apart, but I could be mistaken.

20 CHAIR HAWKENS: Okay. That's close
21 enough, thank you.

22 MR. WEISMAN: All right. And with respect
23 to the question on direct bypass, the staff mentions
24 in Section 5.2.1.3 and in Appendix G. The analysis in
25 Appendix G is not specific to the four constituents at

1 issue in this contention.

2 It's generally that discussion at Page G-
3 48 is written in regard to radioactive constituents,
4 but that discussion is generally applicable and though
5 processes described there in regard to the effects of
6 direct injection, except for radioactive decay of
7 course, would be generally applicable.

8 And I would like to address Judge
9 Kennedy's, I'm sorry, Judge Burnett's question
10 regarding disposal at the South District plant. And
11 the interveners claim that perhaps adequate
12 confinement would be at that location.

13 But two, at least two of the studies that
14 the interveners site, that's Wash and Price, and the
15 EPA 2003 study identify upwelling at the South
16 District plant. So to the extent that the Joint
17 Intervenors are arguing that those studies might
18 indicate some kind of upwelling at the Turkey Point
19 site, well the upwelling that they did identify
20 occurred ten miles away at the South District plant.

21 And in regard to the Joint Intervenors'
22 argument that the concentrations of these chemicals
23 are close to the maximum contaminate levels, the EPA
24 standards, they're close perhaps, but they're below.
25 And according to EPA, it's safe to drink water with

1 contaminates at that level.

2 CHAIR HAWKENS: At what level is that?

3 MR. WEISMAN: At the MCLs, the EPA
4 drinking water standards have maximum contaminate
5 levels for safe drinking water.

6 CHAIR HAWKENS: So the values,
7 concentrations for those four constituents in Table
8 3.5 are all below EPA drinking water standards?

9 MR. WEISMAN: Yes, Your Honor. Finally,
10 as we've said repeatedly, the Joint Intervenors'
11 failure to raise a genuine dispute in regard to the
12 accuracy and reliability of the data is dispositive
13 here.

14 And the statement regarding variability,
15 that Joint Intervenors have provided no analysis at
16 all, no evaluation of the variations in that data. So
17 since they haven't raised a dispute, there can't be a
18 battle of experts on that question.

19 CHAIR HAWKENS: Why did both FPL and the
20 staff then, it says the DEIS reasonably concluded that
21 the impacts would be small for three reasons.

22 MR. WEISMAN: Yes, Your Honor.

23 CHAIR HAWKENS: Middle confining unit, the
24 highly regulated design and testing of the injection
25 wells, and the monitoring and mitigation programs

1 during operation.

2 It seems to me that those features, you
3 know, the concern about migration and those features
4 which impact migration, rate of migration, extent of
5 migration are not, have not been conceded away by
6 Joint Intervenors and are part of the contention.

7 MR. WEISMAN: I would say, Your Honor,
8 that EIS is written in a defense in depth manner. The
9 staff considered all the factors in arriving at a
10 judgement. But for this contention, either position
11 could be dispositive, right? If there were a very low
12 probability of migration, then it really wouldn't
13 matter much what the concentrations of the chemicals
14 were. But the important point is --

15 CHAIR HAWKENS: I have to interrupt there.
16 That seems contrary with what you just told me, that
17 because it's below EPA allowed for drinking, it
18 doesn't matter. Now you're saying it does matter if
19 there were not a middle confining unit.

20 MR. WEISMAN: No, Your Honor, no. I'm
21 sorry if I misstated it, but the argument --

22 CHAIR HAWKENS: It's conceivable I
23 misunderstood you, so not to worry.

24 MR. WEISMAN: I was attempting to say that
25 the argument is in the alternative. And once the

1 Joint Intervenors have failed to dispute the
2 reliability and accuracy of the concentration of the
3 chemicals, that in and of itself is dispositive and
4 there's no reason for the Board to reach the
5 confinement argument. And that's all I have.

6 CHAIR HAWKENS: Is there anywhere in the
7 DEIS where it explicitly makes that statement, Mr.
8 Weisman, that we could inject this directly into the
9 Upper Floridan Aquifer and it just wouldn't matter,
10 environmental impact would be small?

11 MR. WEISMAN: I do not believe that the
12 DEIS makes that statement.

13 CHAIR HAWKENS: And if Mr. Quarles says
14 that that's a serious concern and that any amount of
15 several of these chemicals in the drinking water,
16 which they may be carcinogens as a matter of concern,
17 doesn't that raise a material issue?

18 MR. WEISMAN: No, Your Honor, because the
19 Joint Intervenors are obligated to dispute statements
20 of fact attached to the Applicant's motion, and that
21 they have not done. In that regard, I'm sorry.

22 CHAIR HAWKENS: Is the PACE data going to
23 be included in the DEIS, Mr. Weisman?

24 MR. WEISMAN: I don't know what the
25 staff's plans are in that regard. Certainly the staff

1 will address all comments that it has received on the
2 DEIS in formulating the FEIS. But I don't know if
3 that's necessary to address the comments or not.

4 I would expect that yes, that the staff
5 would reflect the new data because the staff will
6 consider that data. I would expect the staff to
7 reflect it in the FEIS.

8 CHAIR HAWKENS: Thank you.

9 MR. WEISMAN: Thank you very much, Your
10 Honor.

11 CHAIR HAWKENS: Ms. Harshaw, you have the
12 floor.

13 MS. HARSHAW: Thank you. FPL concurs that
14 this contention is about the concentration of the
15 constituents in the injectate. Joint Intervenors have
16 not disputed that those concentrations are reasonable
17 conservative, reasonably accurate, and that's
18 dispositive.

19 Those concentrations, even assuming that
20 they are cycled up when in fact many of them are not,
21 are below the minimum concentration limit,
22 contamination limit that EPA, based on their extensive
23 studies, have said is acceptable even in drinking
24 water.

25 Therefore, injecting this wastewater, at

1 least with respect to those constituents, and it
2 migrating can't have an impact that's anything but
3 small. Furthermore, the NRC staff can rely on the
4 rigorous regulatory process that the DEP has in place
5 for drilling each of these wells.

6 Joint Intervenors are requesting that we
7 do an extensive study across the site and that one
8 well is not enough, apparently wanting us to drill all
9 of the wells and gather the same data. Recognize that
10 each of those wells will have to go through the same
11 permitting process, will have to demonstrate
12 confinement, will have to demonstrate that the well
13 operates properly.

14 The NRC can reasonably rely on that in
15 light of the fact we've already drilled one and shown
16 that that well is operated properly. We've performed
17 a pressure test.

18 CHAIR HAWKENS: Is that to say each newly
19 drilled well will essentially be an exploratory well
20 as it goes down just like EW-1?

21 MS. HARSHAW: You don't have to call it an
22 exploratory well, but each time we drill a new well,
23 it has to go through this same geophysical logs which
24 are the primary method for determining confinement and
25 which Joint Intervenors have not raised a material

1 dispute with.

2 You have to do all the same data that
3 we've done and you have to submit that to the DEP and
4 they have to approve it. So each of the things that
5 Joint Intervenors have requested will be done before
6 any of these wells can operate.

7 And we've already done it once. The NRC
8 has reviewed that, the DEP has reviewed it. They
9 would not have issued a conversion, they would not
10 have converted that well to an injection well if they
11 did not have reasonable assurance that there was
12 confinement at the site.

13 There is no precedent for requiring the
14 sort of studies that Joint Intervenors are asking for.
15 The studies performed by Cunningham, the DEP doesn't
16 ask for those kind of studies when we do a well. They
17 ask for what we did, the geophysical logs, the core
18 borings, and that's what we did. They certainly don't
19 ask that you go drill a whole bunch of wells across
20 the entire site before you can operate one.

21 The Board has asked a couple of questions.
22 They asked about whether the permit was where the
23 sampling was required, and it is indeed in the permit
24 for the EW-1 well when it was converted to an
25 injection well.

1 The weekly sampling requirement is in
2 there, and the continuous pressure monitoring and
3 annual pressure monitoring, that is in the permit that
4 we currently have for that well, and it will be in the
5 permits that we have for the other wells.

6 You asked the question of NRC staff about
7 the location of the wells, of the dual zone monitor
8 well. I will tell you that the DEP regulations
9 require them to be less than 150 feet away and ours
10 are about 75 feet away from the wells.

11 Finally, as the Board noted, this water,
12 if it's not used by FPL it will be injected by the
13 South District wastewater treatment plant. That's
14 what it's doing now. The South District wastewater
15 treatment plant has a permit to inject this very water
16 that we'll be relying on and that we're relying on
17 their data from. That's all I have.

18 CHAIR HAWKENS: Thank you very much. The
19 case is submitted. I'm grateful for your traveling
20 from Florida. Are you from Florida or are you both
21 from DC?

22 MS. HARSHAW: DC. I wish I was in
23 Florida.

24 CHAIR HAWKENS: I'm glad you came from the
25 next door building. We're grateful for that, but your

1 written pleadings, your oral argument will be very
2 helpful to us in resolving the issues presented.

3 Under the milestones in our regulations,
4 we're required to get it out within a certain period
5 of time. We contemplate making that which would be
6 around mid-May. And we are adjourned. Thank you very
7 much.

8 (Whereupon, the hearing in the above-
9 entitled matter was concluded at 12:15 p.m.)
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