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Units 3 and 4

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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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ATOMIC SAFETY AND LICENSING BOARD PANEL

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HEARING

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In the Matter of: : Docket Nos.

FLORIDA POWER & LIGHT : 50-250-LA

COMPANY : 50-251-LA

(Turkey Point Nuclear : ASLBP No.

Generating Units 3 and 4) : 15-935-02-LA-BO01

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Tuesday, January 12, 2016

Hampton Inn & Suites

Reef Room

2855 NE 9th Street

Homestead, Florida

BEFORE:

MICHAEL M. GIBSON, Chair

DR. MICHAEL F. KENNEDY, Administrative Judge

DR. WILLIAM W. SAGER, Administrative Judge

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

(9:17 a.m.)

1  
2  
3 CHAIR GIBSON: All right, I believe we are  
4 all present now and accounted for. Back on the  
5 record.

6 I believe we gave the staff some homework  
7 last night. Were you all able to help us out?

8 MS. GRANGE: Yes, sir.

9 CHAIR GIBSON: Thank you. What did you  
10 find out?

11 MS. GRANGE: Well first, sir, I just want  
12 to restate the question. So, you were looking for  
13 where in the documents incorporated by reference in  
14 the 2014 EA we described the saltwater-freshwater  
15 interface, as well as migration of water from the  
16 cooling canal system to the aquifer.

17 And so in the 2014 EA on page 44465, there  
18 is three documents that we incorporate by reference  
19 and those are the 1972 final environmental statement  
20 for construction of Turkey Point, the 2002  
21 supplemental environmental impact statement for  
22 license renewal of Turkey Point, and then 2012 EPU  
23 environmental assessment.

24 CHAIR GIBSON: Okay.

25 MS. GRANGE: So, those are the three

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1 documents that we looked at last night.

2 And so for the saltwater-freshwater  
3 interface, the best description is in the 1972 final  
4 environmental statement. On page Roman numeral V-3.  
5 And on that page, it is talking about the construction  
6 of the cooling canal system and it states that pumps  
7 will be installed to drain the interceptor ditch  
8 system and, thereby, control the movement of the  
9 interface between the groundwater system under control  
10 of the applicant and that under control of the Central  
11 and Southern Drainage District System to the west.

12 The saltwater-freshwater interface is also  
13 described in the EPU EA at page 20062, starting in  
14 column one. And it is also described in the license  
15 renewal SEIS on page 2-7 but that is a rather high-  
16 level discussion because groundwater is a Category I  
17 issue in license renewal.

18 The second thing, the migration of water  
19 from the cooling canal system to the aquifer, that is  
20 described in the EPU EA on page 20062, starting in  
21 column one and that describes groundwater exchange.  
22 And groundwater exchange, we are looking for two  
23 directions. So, it doesn't specifically say migration  
24 but exchange is meant to mean the same thing.

25 It is also described in the 2002 license

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1 renewal SEIS. That is briefly described on page 2-7  
2 and 2-18. Once again, since groundwater is a Category  
3 I issue for license renewal, it is rather high-level.  
4 But then if you look in the 1996 generic environmental  
5 impact statement for license renewal, which is  
6 incorporated by reference into the license renewal  
7 SEIS on page 4-121, that describes groundwater  
8 degradation as an issue that can result from continued  
9 operation during the license renewal period at all  
10 plants. Turkey Point is specifically mentioned. And  
11 then there is a description of groundwater plumes that  
12 can occur in shallow aquifers, in systems where the  
13 cooling ponds are unlined.

14           Additionally, I would like to mention that  
15 the 2009 COL environmental report, although we did not  
16 incorporate that by reference, we do reference it in  
17 the 2014 EA and that describes both the saltwater-  
18 freshwater interface and the migration of water from  
19 the cooling canal system to the aquifer in good detail  
20 and it also includes some figures as well.

21           CHAIR GIBSON: Thank you.

22           MS. GRANGE: You're welcome.

23           JUDGE SAGER: Okay, I have a few questions  
24 to ask. I think this goes to you, Ms. Grange.

25           So, in 2002, in the EIS it states on page

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1 4-31 to 4-32, and that is page 135 of the PDF. Mr.  
2 Welkie, can we bring that up? Did we get you those?

3 MR. WELKIE: Which document?

4 JUDGE SAGER: It would be the 2002  
5 environmental impact statement, page 4-31 -- sorry,  
6 page 135 of the PDF. See if we can actually find  
7 that.

8 I'm not seeing it here. That's page -- it  
9 is a different version? Okay.

10 MS. GRANGE: If I may?

11 CHAIR GIBSON: Page 135 of the PDF, do we  
12 have that?

13 JUDGE SAGER: He may have a different  
14 version.

15 CHAIR GIBSON: Oh, okay.

16 MS. GRANGE: If I may?

17 CHAIR GIBSON: Yes.

18 MS. GRANGE: I believe you have the wrong  
19 ML number because that document was divided into  
20 several ADAMS numbers.

21 JUDGE SAGER: Okay.

22 MS. GRANGE: So, the correct number for 4-  
23 31 is ML-020280119.

24 CHAIR GIBSON: Okay. Okay, two seconds.  
25 I don't know if we can wait that long.

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1 MS. GRANGE: I have the document up, so I  
2 can --

3 CHAIR GIBSON: Okay.

4 MS. GRANGE: -- go ahead, if that is okay  
5 with everyone else.

6 CHAIR GIBSON: It would be nice if  
7 everyone could see it.

8 JUDGE SAGER: Yes, it would be nice if we  
9 could all see it.

10 CHAIR GIBSON: I think we are mixed up.  
11 I don't think we care about the Generic EIS.

12 JUDGE SAGER: Right, it is the EIS  
13 referring to the GEIS.

14 MR. HARRIS: Your Honor, with the license  
15 renewal -- this is Brian Harris with the staff. With  
16 the license renewal EISs, they are still called the  
17 generic and then they have a supplement, so the  
18 specific --

19 CHAIR GIBSON: So this is a supplement.  
20 So, this is correct insofar as we do have the right  
21 document?

22 MR. HARRIS: Right but I don't know if  
23 Judge Sager was looking for the one that was the  
24 Generic one 1996 that was applicable to all or the one  
25 that was specific to Turkey Point.

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1 JUDGE SAGER: This would be the one in  
2 2002. This is the one we want, then.

3 CHAIR GIBSON: I'm sorry. Yes, this is  
4 what we want.

5 I tell you what. While they are trying to  
6 find that, let me ask you if you could give me the  
7 quotes for the -- or the citations to the material you  
8 read to me earlier. I want to make sure I have got  
9 those right.

10 MS. GRANGE: So to understand, you want me  
11 to restate the references?

12 CHAIR GIBSON: Yes, the 1972 final EIS was  
13 the first document that you mentioned and you had a  
14 specific citation to a specific --

15 MS. GRANGE: That was page Roman numeral  
16 V-3.

17 CHAIR GIBSON: Okay.

18 MS. GRANGE: The next citation was in the  
19 EPU EA.

20 CHAIR GIBSON: Yes.

21 MS. GRANGE: And that was 20062, starting  
22 in the first column of text.

23 The next one was the 2002 EIS for license  
24 renewal --

25 CHAIR GIBSON: Yes.

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1 MS. GRANGE: -- page 2-7.

2 CHAIR GIBSON: Okay.

3 MS. GRANGE: I also mentioned the EPU EA  
4 at 20062, again, the same column of text.

5 CHAIR GIBSON: Yes.

6 MS. GRANGE: And also later on that page  
7 in the third column of text, the 2002 EIS for license  
8 renewal, again, on page 2-7 and 2-18.

9 CHAIR GIBSON: 2-18?

10 MS. GRANGE: Yes.

11 CHAIR GIBSON: Okay.

12 MS. GRANGE: And then the 1996 generic  
13 environmental impact statement for license renewal,  
14 page 4-121.

15 CHAIR GIBSON: Okay, great. Thank you.

16 Is this page you were hoping for?

17 JUDGE SAGER: Yes.

18 CHAIR GIBSON: Okay, thank you.

19 JUDGE SAGER: Okay, sorry about that. It  
20 looks like we have it up here now and that is the --  
21 which one is it? The GEIS or -- this is the EIS.

22 Okay, so right about there in the middle  
23 of your page, you see that the nuclear plants do not  
24 contribute significantly to groundwater intrusion.  
25 And then a little bit farther down at the very bottom,

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1 it says: Therefore, the staff concludes that there  
2 are no groundwater quality degradation impacts.

3 So, my question is therefore, the staff  
4 concluded that there are no groundwater quality  
5 problems, based on that incorporation by reference.  
6 Is that correct?

7 MS. GRANGE: Well, the full sentence says  
8 beyond the impacts discussed in the GEIS. And so when  
9 you go to the reference that I mentioned earlier, it  
10 does talk about saltwater plumes that can happen in  
11 unlined aquifers. And so that would be a known effect  
12 that the staff identified generically for that kind of  
13 plant. And so, we understood that that was an effect  
14 that could happen and that was happening at Turkey  
15 Point. But beyond what was discussed in the GEIS, we  
16 didn't expect any additional impacts. So, that is  
17 what that statement is meant to mean in a fuller  
18 sense.

19 JUDGE SAGER: Okay, so your reference is  
20 back, then, back to the 1972 --

21 MS. GRANGE: The 1996 GEIS or G-E-I-S.

22 JUDGE SAGER: 1996, okay.

23 MS. GRANGE: So, that is at the end of  
24 that sentence and the very beginning of 4-32 in your  
25 reference that we are looking at. And you could look

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1 directly back at the reference I gave earlier, which  
2 is page 4-121 of the 1996 GEIS to get that  
3 information.

4 JUDGE SAGER: Okay, thank you.

5 CHAIR GIBSON: Well, could you scroll back  
6 one? Right there. Thank you.

7 JUDGE SAGER: Okay, so I think what you  
8 just told me is that, therefore, you think you had the  
9 bases covered and so there was nothing more said in  
10 the environmental impact statement of 2002 about  
11 groundwater issues.

12 MS. GRANGE: Correct.

13 MR. SCROGGS: Okay.

14 MR. HARRIS: Your Honor, this is Brian  
15 Harris for the staff. I don't mean to interrupt. It  
16 might help to understand this to ask the question  
17 about Category I, Category II issues and license  
18 renewal as the Commission, it has changed but when  
19 Turkey Point was done -- and so there is a different  
20 type of analysis that is done when something was a  
21 Category I issue. It might be worthwhile to put that  
22 on the record from the staff.

23 JUDGE KENNEDY: Ms. Grange, could you  
24 describe what a Category I issue is and how it is  
25 treated?

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1 MS. GRANGE: Sure. So, for a license  
2 renewal, the staff had looked at a number of issues  
3 that could occur during continued operation for all of  
4 the plants that were operating. And in 1996, they  
5 published the Generic Environmental Impact Statement.  
6 And so that generically addresses license renewal and  
7 issues are categorized as either Category I, which are  
8 generic issues, or Category II, which are site-  
9 specific.

10 So, for the Category I, the generic  
11 issues, the staff determined that we could make a  
12 conclusion generically for all nuclear plants,  
13 regardless of the specifics at the site as to what the  
14 level of impact would be during the license renewal  
15 term.

16 And so, the issue that we were just  
17 talking about for Turkey Point was one of those. It  
18 was a Category I issue where we said for all plants it  
19 would be small unless the staff determined at the time  
20 of the review that there was new and significant  
21 information that could call into question that  
22 conclusion. And so that is the statement that we were  
23 reading about. The staff had not identified any new  
24 information that would call into question the  
25 conclusions in the GEIS.

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1           So, in that case, we determined that we  
2           agreed with the GEIS that the conclusion was, in fact,  
3           small.

4           For Category II issues, we look in detail  
5           at each site, as they are site-specific issues and the  
6           conclusion may be different at different sites. And  
7           so we could conclude small, moderate, or large,  
8           depending on the specific characteristics of the site.

9           CHAIR GIBSON: Now, as the groundwater was  
10          a Category I issue in 1996 when the Generic  
11          Environmental Impact Statement was issued, has that  
12          changed any since 1996?

13          MS. GRANGE: I would need to go back and  
14          look at that. We just issued a Revision I to the GEIS  
15          in 2013 and some of the issues were kind of resorted  
16          and combined. So I can, if you give me a moment, I  
17          can check that.

18          CHAIR GIBSON: Yes, we will give you a  
19          moment. Everybody is taking a little more time today.

20          MR. HARRIS: Your Honor, this is Brian  
21          Harris for the staff. Maybe I can help with finding  
22          the cite. It is Appendix B of Part 51. It does go  
23          into groundwater. It was mentioned also in both our  
24          briefs and in the Commission's recent order about the  
25          reexamination of groundwater that it is still a

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1 Category I issue for a cooling canal system like the  
2 one at Turkey Point.

3 CHAIR GIBSON: Could you give us a  
4 citation to where the Commission said that? I'm  
5 sorry, I just didn't get that. You said they recently  
6 --

7 MR. HARRIS: It is from CLI15-25 and I  
8 believe it is Footnote 96. And I'm quoting from it.  
9 The staff also notes the Commission reexamined  
10 saltwater intrusion in its recently updated Generic  
11 Environmental Impact Statement and rule associated  
12 with power plant license renewal and found the impact  
13 to be small. And they are citing to the staff brief  
14 citing revisions to the environmental review of  
15 renewal of nuclear power plant operating license 78  
16 *Federal Register* 37282 and then the specific cite is  
17 37-300 through 301.

18 CHAIR GIBSON: Thank you.

19 MS. GRANGE: Your Honor?

20 CHAIR GIBSON: Yes.

21 MS. GRANGE: I can also give you a  
22 reference in the 2013 GEIS, if that would be helpful.

23 CHAIR GIBSON: Yes.

24 MS. GRANGE: Page B-10. Well, all of  
25 Appendix B is a table that compares the 1996 GEIS

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1 issues with the 2013 GEIS issues. And so page B-10  
2 specifically addresses the issue of groundwater  
3 quality degradation and saltwater intrusion. And that  
4 issue was re-categorized in the 2013 GEIS as  
5 groundwater quality degradation resulting from water  
6 withdrawals and it was still small in Category I.

7 CHAIR GIBSON: That was water withdrawals,  
8 correct?

9 MS. GRANGE: Correct, it is now called  
10 that. So, the issues of groundwater quality  
11 degradation from Ranney wells, as well as groundwater  
12 quality degradation from saltwater intrusion, which  
13 were two issues in the 1996 GEIS have now been  
14 combined. And the title of the issue now is  
15 groundwater quality degradation resulting from water  
16 withdrawals.

17 CHAIR GIBSON: Okay.

18 JUDGE KENNEDY: As opposed to saltwater  
19 migration?

20 MS. GRANGE: The new category is supposed  
21 to be inclusive of both of the old categories because  
22 we found that when we looked at it again, we found  
23 that we could broaden that issue because we found that  
24 they were small plants with Ranney wells and plants  
25 that were experiencing saltwater intrusion.

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1 JUDGE KENNEDY: Let me see if I can -- I  
2 don't think of Turkey Point as a generic issue in  
3 terms of the type of system seems somewhat unique in  
4 the United States.

5 Are you telling me that in the GEIS they  
6 specifically dealt with Turkey Point under the generic  
7 issue?

8 MS. GRANGE: Yes, Turkey Point is  
9 described when they evaluate the generic issue, as  
10 well as other plants that have unlined cooling pond  
11 systems. South Texas is another one that is  
12 mentioned.

13 JUDGE KENNEDY: So, it includes both the  
14 canals and anybody using cooling ponds like South  
15 Texas.

16 MS. GRANGE: Correct.

17 JUDGE KENNEDY: Thank you.

18 JUDGE SAGER: Okay, thank you. Back to  
19 me.

20 Okay, so also in the 2002 Environmental  
21 Impact Statement, it says on page E-25, which is page  
22 208 of the PDF, Mr. Welkie, if you could try to bring  
23 that up, but I think you will believe me when it says  
24 that the average salinity is 36 parts per thousand and  
25 the maximum is 46 parts per thousand.

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1           So, this would have been the 2002  
2 Environmental Impact Statement. So my question is, is  
3 that an accurate representation of the salinity values  
4 in the cooling canal system at 2014, when you were  
5 considering this for the EA?

6           MS. GRANGE: Well, we know that the  
7 salinity had been, I think you said 71 was the maximum  
8 they cite there, we knew the salinity had been higher  
9 than that and we do discuss that in the 2012 EPU EA,  
10 too, I believe.

11           So, although we say in the 2014 EA that we  
12 incorporated the descriptions of the environment in  
13 the other documents, we do caveat it with some things  
14 that have changed in the system and salinity is one of  
15 those.

16           JUDGE SAGER: Right because my next  
17 question was in the 2012 EA for the EPU, it states,  
18 additionally, the CCS water is hypersaline, twice the  
19 salinity of Biscayne Bay, with seasonal variations,  
20 ranging from approximately 40 to 60 parts per  
21 thousand. So, I think that is what you just referred  
22 to.

23           MS. GRANGE: Correct.

24           JUDGE SAGER: Okay. Also in the 2002 EIS  
25 for the license renewal on page 208 of the PDF is the

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1 following statement. The canal system does not  
2 withdraw water or discharge waters to or from other  
3 water bodies. Yes, there it is right there.

4 And in 2012, in the EA for the EPU, it  
5 makes the following statement. I believe it is on  
6 page 10 of that document. Because the PTN, which I  
7 believe is referring to the CCS canals are online,  
8 there is an exchange of water between the PTN canal  
9 system and the local groundwater in Biscayne Bay. So,  
10 isn't this the opposite of the statement made in the  
11 2002 EIS that the system is basically closed?

12 MS. GRANGE: Well, I believe that these --  
13 of course there are different authors for these two  
14 documents because they were done at different times.  
15 The systems are described a little bit differently in  
16 each. And so I believe the first one is talking about  
17 surface water connections, direct connections, which  
18 there are none. The second one is talking about  
19 groundwater exchange. And so that is talking about  
20 the exchange of groundwater with the aquifers. And in  
21 that context, it is saying that the groundwater, it is  
22 saying that the cooling canal system would exchange  
23 water with the aquifer. The aquifer could flow out  
24 into the bay. So, it is not saying that there is a  
25 direct connection there either. So, I don't think

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1 that these are contradictory statements from my point  
2 of view.

3 JUDGE SAGER: Yes, go ahead.

4 CHAIR GIBSON: What are you saying about  
5 -- I didn't understand what you were saying about  
6 surface water. You said these are descriptions of  
7 surface water systems and then you were explaining  
8 there is a difference between these two statements or  
9 the authors. And so I did not follow what you were  
10 saying.

11 MS. GRANGE: Sure, let me try to restate  
12 it.

13 CHAIR GIBSON: Thanks.

14 MS. GRANGE: I was just prefacing it with  
15 the fact that these systems are described a little bit  
16 differently in each document the NRC writes, simply  
17 because there is different authors.

18 CHAIR GIBSON: Okay.

19 MS. GRANGE: So, they organize things in  
20 a different fashion.

21 So, the first document that we looked at,  
22 the license renewal SEIS --

23 CHAIR GIBSON: You are talking about the  
24 2002 EIS, now.

25 MS. GRANGE: Correct.

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1 CHAIR GIBSON: And what was it describing  
2 there?

3 MS. GRANGE: The excerpt that Judge Sager  
4 just read appears to be describing surface water  
5 connections. So, when it says that there is no  
6 connection with other surface waters, it is intended  
7 to mean direct connections. So, there is no direct  
8 inflow or outflow to the Bay or to Card Sound or any  
9 other surface water bodies.

10 The second quote that we --

11 CHAIR GIBSON: So, it is only speaking  
12 about surface water bodies.

13 MS. GRANGE: Correct.

14 CHAIR GIBSON: You are saying that is not  
15 speaking about groundwater.

16 MS. GRANGE: Correct, in the context of  
17 that quote. It is only speaking about surface waters  
18 there.

19 JUDGE SAGER: So, this hearkens back to  
20 yesterday, basically the same statement made. This is  
21 a closed system because it doesn't discharge directly  
22 to surface waters.

23 MS. GRANGE: Right. Yes, exactly, the  
24 closed cycle cooling system idea.

25 CHAIR GIBSON: Okay, go ahead. I'll ask

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1 my questions later.

2 JUDGE SAGER: Okay. So, the next question  
3 or two, which is really to try to wrap that up, as you  
4 know, I was looking at things that appeared to me to  
5 be conflictual. And so it is difficult for someone  
6 like me, who is an interested reader, to see those  
7 differences.

8 So, by incorporating these two documents  
9 by reference that seem to come to different  
10 conclusions, how could a reader sort that out?

11 MS. GRANGE: I don't believe that they  
12 have come to different conclusions, if there is  
13 something I could help clear up about what you might  
14 think would be different conclusions.

15 I might add, also, that each document is  
16 evaluating a different proposed action. And so each  
17 document is looking at each resource in the level of  
18 detail that the staff found at the time was  
19 appropriate to describe the environment and then  
20 evaluate the impacts that might occur from that  
21 specific proposed action. So, I think each document  
22 is going to preface the different resources a little  
23 bit differently because of that as well.

24 JUDGE SAGER: Okay, thank you. Well, what  
25 I was getting at is I think wouldn't a reasonable

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1 reader of this come to the conclusion that there are  
2 no groundwater impacts?

3 MS. GRANGE: I believe a reasonable reader  
4 could come to that conclusion.

5 JUDGE SAGER: Okay. So, we reference the  
6 two that was a big jump in like 15 parts per thousand  
7 from 36 to 46, actually it was an average of 36 with  
8 highs of 46 parts per thousand to 40 to 60, which we  
9 could call an average of 50. So, that is about a 15  
10 parts per thousand jump in these two different  
11 reports.

12 I couldn't find any discussion of that  
13 change. Are you aware of any?

14 MS. GRANGE: Well, we also talked about  
15 that change yesterday that since the inception of the  
16 cooling canal system there is a steady increase to an  
17 equal agreement of about 60 parts per thousand that  
18 lasted for about ten years and then, in the past few  
19 years, it has jumped up from there.

20 JUDGE SAGER: Okay, thank you.

21 CHAIR GIBSON: When you say the last few  
22 years, when did you notice that change jumping up the  
23 last few years?

24 MS. GRANGE: I believe FPL yesterday had  
25 said it was in 2013 but I would need to confirm with

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1       them.

2                   CHAIR GIBSON:  Okay.  I would like to get  
3       to the 2002 EIS for the license renewal on page E-25.  
4       I believe it is E-25.  Do we have that?

5                   Oh, that's right.  They call it a Generic  
6       Environmental Impact Statement.  It is interesting  
7       choice of titles.  Isn't this designed to be site-  
8       specific?

9                   MR. HARRIS:  Your Honor, the way it is  
10       titled is because there is the generic rulemaking for  
11       the Generic Environmental Impact Statement and this is  
12       the supplement for a specific plant.  So, this is  
13       supplementing the generic rulemaking that was done.  
14       So, that is why it ends up with that title.

15                   CHAIR GIBSON:  Yes.  Could you get us to  
16       page E-25?  Is that possible?  If it is too hard to  
17       find -- is there not an E-25?  Maybe there's not.

18                   We are all taking a lot of time today.  He  
19       was on -- you were on the right page of the other  
20       document.  Could you go help Mr. Welkie, please?  
21       There we are E-25.  Right there.  Bingo!  Awesome.

22                   All right, now, we want to find a  
23       reference here to an interceptor ditch.  You see I  
24       believe it is in that paragraph right there.  Okay.

25                   Now, you were saying, Ms. Grange, that

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1 they sort of, different authors discuss different  
2 topics and so we can't really make a direct  
3 correlation between them. So, I want to focus on this  
4 one.

5 The interceptor ditch protects freshwater  
6 habitats to the east and south of the system from  
7 intrusion of the hypersaline waters of the canals  
8 during dry periods. Groundwater flow in the area is  
9 from west to east toward Biscayne Bay. The flora of  
10 the cooling canals is dominated by rooted marine  
11 plants, which are removed on about a three-year cycle  
12 to maintain water flow.

13 Now, is this a description of not the  
14 cooling canal system but of the ditches that are on  
15 the site, the surface ditches that are on the site?

16 MS. GRANGE: Yes, I believe that that is  
17 what this sentence that you just read out is referring  
18 to.

19 CHAIR GIBSON: Yes.

20 MS. GRANGE: Can you give me the actual  
21 page number?

22 CHAIR GIBSON: It's E-25.

23 MS. GRANGE: Oh, E-25?

24 CHAIR GIBSON: Yes, ma'am.

25 MS. GRANGE: Okay.

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1 CHAIR GIBSON: It's 208 of the PDF of  
2 this.

3 MS. GRANGE: Okay, thank you.

4 CHAIR GIBSON: No problem.

5 MS. GRANGE: So, this is an excerpt from  
6 the biological assessment that was prepared for  
7 license renewal.

8 CHAIR GIBSON: Right. Okay, now the  
9 understanding of the author who wrote this, and I feel  
10 like this is sort of Richard Elliot Friedman's book or  
11 something, was it Ezra? Was it Nehemiah's mentor?  
12 Who was it?

13 Anyway, the interceptor ditch protects  
14 freshwater habitats. Now, we are talking here about  
15 the purpose is to prevent water from moving eastward,  
16 right, toward the freshwater-saltwater interface.  
17 That is the objective here, right?

18 MS. GRANGE: That is my understanding of  
19 the interceptor ditch.

20 CHAIR GIBSON: Okay. Now, again, a  
21 tabular rasa reader who has seen this, are they going  
22 to think that there is any migration out of the  
23 interceptor ditch into the surrounding groundwater  
24 from this? When I read this, it sounds to me like  
25 what they are really describing here is a situation in

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1 which there may be excessive rainfall, the ditch may  
2 overflow and it may go into the other -- into the area  
3 and that would cause it to get into the area to the  
4 east. Is that your understanding as well?

5 MS. GRANGE: My understanding is that a  
6 reader of this document, since this is the biological  
7 assessment, is they would understand that sentence to  
8 be talking about habitat to the east --

9 CHAIR GIBSON: Right. Correct.

10 MS. GRANGE: -- because we are talking  
11 about the groundwater and loss of resources in the  
12 context of the American crocodile and other species  
13 that this document addressed. So, the references that  
14 I have provided earlier that are in the main body of  
15 the 2002 Environmental Impact Statement would speak  
16 more to the cooling canal system as a whole.

17 CHAIR GIBSON: Right.

18 MS. GRANGE: And then also the 1996 GEIS  
19 talks about specifically the saltwater plume that can  
20 happen under cooling canal systems.

21 CHAIR GIBSON: Okay. I believe somebody  
22 wanted -- Mr. Bolleter, you were anxious to say  
23 something. It's fine. Please, go ahead, sir.

24 MR. BOLLETER: Well, just a little bit of  
25 clarification, if you would like, just on the

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1 interceptor ditch and how it operates and the purpose  
2 of the interceptor ditch. Basically, and I will just  
3 try to just use my hands, you have L31 canals. We go  
4 from the west to the east. We have the L31, we have  
5 the interceptor ditch, and we have the cooling canal.

6 The purpose of the interceptor ditch is  
7 you want to try to maintain a seaward gradient. So,  
8 we just want to try to keep that freshwater moving  
9 through the system. And so if you have the cooling  
10 canal gets at a higher elevation than the L31 canal  
11 and the interceptor ditch is maybe right here, you  
12 pump the interceptor ditch to drop the water level so  
13 that it basically creates a funnel. Then, that water  
14 then gets pumped back into the cooling canal. So,  
15 that was the design of the interceptor ditch is about  
16 20 feet deep.

17 CHAIR GIBSON: And my understanding is its  
18 purpose, essentially, was to control the surface  
19 waters to ensure that hypersaline water in these  
20 ditches would not go east but would, basically, be  
21 caught and then the freshwater would be pumped back  
22 toward the ocean. Is that correct?

23 MR. BOLLETER: Right, particularly --

24 CHAIR GIBSON: Or the Biscayne Bay. I'm  
25 sorry.

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1 MR. BOLLETER: Particularly in the upper  
2 portion of the aquifer.

3 CHAIR GIBSON: Okay and when you say the  
4 upper portion of the aquifer, what do you mean there?

5 MR. BOLLETER: Probably the upper 20 to 30  
6 feet. We don't know the original intent of the  
7 design. There has been some confusion as far as  
8 whether it was ever intended to design to prevent all  
9 migration to the west or just to the upper portion of  
10 the aquifer that was fresher.

11 CHAIR GIBSON: Does it work pretty well?

12 MR. BOLLETER: For the upper portion of  
13 the aquifer, we still have a fresher lens, however, at  
14 depth, we do have more saline water at depth.

15 CHAIR GIBSON: Okay. You mentioned the  
16 1972 Environmental Impact Statement.

17 MS. GRANGE: Correct.

18 CHAIR GIBSON: Now, that was about the  
19 channel system not the cooling canal system. Is that  
20 correct?

21 MS. GRANGE: That did discuss the cooling  
22 canal system a little bit differently than it ended up  
23 being constructed because there were a number of  
24 different configurations that were considered.

25 CHAIR GIBSON: Okay. We probably don't

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1 have that document. Do we have that document? Okay.  
2 Could you get to that one? I think she referenced V-  
3 3.

4 Okay. I believe that second paragraph,  
5 beginning construction. Okay, construction of the  
6 channel system would increase the salinity of some 15  
7 square miles of what is now swampland to values equal  
8 to or greater than the salinity of the adjoining  
9 Sound. What is the Sound? Mr. Bolleter, could you  
10 help us with that? Do you know what the Sound was in  
11 1972?

12 MR. BOLLETER: They may be referring  
13 possibly to Card Sound, which is just to the south of  
14 Biscayne Bay is what I am assuming. I don't know that  
15 for sure.

16 CHAIR GIBSON: Okay. Anybody else got any  
17 idea what the Sound is?

18 MR. SCROGGS: There is also Barnes Sound  
19 that is adjacent to Card Sound. It is just different  
20 bodies of water that are in the Bay.

21 CHAIR GIBSON: Okay. Greater than the  
22 salinity of the adjoining Sound and to a salinity that  
23 will be considerably higher than that of the  
24 groundwater. A system of interceptor ditches is  
25 planned for a western property boundary to control

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1 intrusion of saline water into the area west of Levee  
2 31. The permeabilities of the local soils are  
3 relatively high and the flow is on the order of 600 to  
4 800 cubic feet per second out of the system to the  
5 west can be expected.

6 Pumps will be installed to drain the  
7 interceptor ditch system and, thereby, control the  
8 movement of the interface between the groundwater  
9 system under control of the applicant and that under  
10 the control of the Central and Southwest Drainage  
11 District System to the west.

12 Data furnished by the applicant with  
13 respect to groundwater movement to the west are  
14 relatively complete. All intercepted flows are to be  
15 returned to the channel system, so that there is to be  
16 essentially no net loss from the system in this  
17 direction. Because of the dynamics of the system,  
18 surface may, at times, be intercepted by the drainage  
19 and recharge system.

20 Okay, let me first of all see if you guys  
21 can help us out with the control of the Central and  
22 Southern Drainage District System to the west. To  
23 what is that referring? I don't think we have talked  
24 about that before.

25 MR. SCROGGS: We have. It is the South

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1 Florida Water Management District is the agency that  
2 has taken over the role of the Central and Southwest  
3 Flood Control Management. So, these surface water  
4 canals that drain water from agricultural areas or  
5 residential areas and move that out to sea through  
6 structures that prevent backflow of seawater into  
7 those canals are what are managed by the South Florida  
8 Water Management District. The L31 canal system is a  
9 significant portion of that in this area.

10 CHAIR GIBSON: Okay, thank you. Okay, so  
11 I am curious. What is going to put someone on notice  
12 about the possibility of migration from the cooling  
13 canal system into the groundwater from this paragraph.  
14 Because we are talking here about the channel system,  
15 right? We are not talking here about the cooling  
16 canal system, right?

17 MS. GRANGE: We are talking about the --  
18 well, the channel system here is meant, from my  
19 understanding, to mean the cooling canal system is  
20 what they were calling it in this document. And then  
21 the interceptor ditch system is what FPL just  
22 described. And so in the context of this paragraph,  
23 the interceptor ditch system is the way to mitigate  
24 the westward movement of water.

25 CHAIR GIBSON: Okay. Okay, it sounds like

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1 the primary concern here was surface water.

2 MS. GRANGE: From my reading, I would  
3 think it would be groundwater. The sentence in the  
4 middle that says pumps will be installed to drain the  
5 interceptor ditch system and thereby control the  
6 movement of the interface between the groundwater  
7 system, the interface would be referring to the  
8 freshwater-saltwater interface later in that sentence,  
9 when it talks about the groundwater system under  
10 control of the applicant and that under control of the  
11 Central and Southern Drainage District System to the  
12 west. That would be, again, referencing the  
13 interface, which is west of the plant and that would  
14 be the same saltwater-freshwater interface six to  
15 eight miles to the west that we have been discussing.

16 CHAIR GIBSON: Okay.

17 JUDGE SAGER: So, just to clarify. I  
18 think we said this yesterday. If you can put a canoe  
19 in it, it is surface water. If it is in the ground,  
20 it is groundwater. Is that correct? Is that the way  
21 you are interpreting this?

22 So, groundwater isn't at any depth, per  
23 se, it is just underneath. It is not free water on  
24 the surface.

25 MS. GRANGE: Correct. That is my

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1 understanding this is talking about the groundwater in  
2 the Biscayne Aquifer.

3 MR. SCROGGS: If I could add?

4 CHAIR GIBSON: Yes, sir. Yes, sir.

5 MR. SCROGGS: I think we might be  
6 generalizing the interface language to be confusing  
7 with the freshwater-saltwater interface. If you  
8 recall the historic maps that we looked at yesterday  
9 prior to the cooling canal system, that freshwater-  
10 saltwater interface was several miles to the west. I  
11 think this discussion here is focused in on what we  
12 now call the hypersaline and saline water interface.  
13 So, I just wanted to make sure we were all sorted on  
14 that.

15 CHAIR GIBSON: Thank you. Thank you.

16 Okay, if we could go to the 2009  
17 environmental report for the combined operating  
18 license for Units 6 and 7. Do you have that Mr.  
19 Welkie? Maybe you don't have it. Does he have it?

20 Okay, it's all right. We will be okay.

21 Before I get to that, let me ask you one  
22 more question. This final environmental statement we  
23 just talked about was in July of 1972, correct?

24 MS. GRANGE: Correct.

25 CHAIR GIBSON: The CCS was built in '74.

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1 Is that correct?

2 MR. SCROGGS: No, sir. I think it began  
3 the construction in the '70s.

4 CHAIR GIBSON: In the '70s?

5 MR. SCROGGS: In early 1970s.

6 CHAIR GIBSON: Early 1970s?

7 MR. SCROGGS: It was completed and the  
8 units did not come online without the CCS in  
9 operation.

10 CHAIR GIBSON: And when did the units come  
11 online?

12 MR. SCROGGS: Well '72 for Unit 3 and '73  
13 for Unit 4.

14 CHAIR GIBSON: Okay. So, the CCS had  
15 essentially been built by the time this Environmental  
16 Impact Statement was issued in July of '72?

17 MR. SCROGGS: I believe it was probably --

18 CHAIR GIBSON: If not, it was --

19 MR. SCROGGS: It was under construction.  
20 It was a Department of Justice consent order that  
21 directed its construction.

22 CHAIR GIBSON: Okay. Okay, getting back  
23 to the environmental report for the combined operation  
24 licenses for Units 6 and 7. On page 2.3-17, this  
25 statement appears: Figure 2.3-23 shows the

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1 approximate location of the freshwater-saltwater  
2 interface in the area. The figure indicates that the  
3 saltwater interface at the base of the aquifer is  
4 approximately six to eight miles inland of the Unit 6  
5 and 7 plant area.

6 I just wanted -- there was a reference  
7 yesterday that someone made. Is that the reference  
8 that you all were making to the environmental report?  
9 Mr. Ford?

10 MR. FORD: Yes, sir. And then the figure  
11 that is referenced there on --

12 CHAIR GIBSON: Figure 2.3-23 is the  
13 figure. Is that the one you are referring to, sir?

14 MR. FORD: Yes, sir, it is on page 2.3-  
15 170.

16 CHAIR GIBSON: Right.

17 MR. FORD: That shows the location of the  
18 freshwater-saltwater interface.

19 CHAIR GIBSON: You say 2.3-170?

20 MR. FORD: That is the page number.

21 CHAIR GIBSON: Okay. Okay, thank you.  
22 Good.

23 The other things is, while I have got you,  
24 there was a reference in that the water in the canals  
25 is hypersaline because of the efforts of evaporation

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1 with salinity concentrated approximately twice that of  
2 Biscayne Bay. Was that the other thing that you were  
3 referring to? That is at page 2.3-56.

4 MR. FORD: That sounds right.

5 CHAIR GIBSON: Okay. I tell you what.  
6 You can look for it. We are going to go on with some  
7 other questions. If you can find it and let us know,  
8 we would appreciate it, Mr. Ford. Thank you, sir.

9 Ms. Grange, I wanted to be sure I  
10 understood your testimony yesterday. Did you indicate  
11 that the staff relied on the State proceedings to  
12 conclude that the license amendment would have no  
13 impact on surface water resources as well as  
14 groundwater resources?

15 MS. GRANGE: I believe that I referred to  
16 the State proceedings in a couple instances. So, one  
17 instance was in the context of the EPU EA and the EPU,  
18 because there was a process going on between the State  
19 and FPL to mitigate conditions in the cooling canal  
20 system that dates back to that time frame, we did use  
21 that process as a means of evaluating the impacts to  
22 groundwater and determined that that was an  
23 appropriate thing to rely on to make our conclusion.

24 In the context of the 2014 EA, we did not  
25 find any significant impacts that would result from

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1 the proposed action. And one of the things that we  
2 considered, beyond the fact that the action would be  
3 of short duration and that we didn't expect it to  
4 happen very often, was that there was still the  
5 continuing process with the State. And so that was  
6 one of the factors that used to make our conclusion.

7 CHAIR GIBSON: Okay.

8 MR. FORD: So, we have the page.

9 CHAIR GIBSON: Just a minute. You have  
10 the page, Mr. Ford?

11 MR. FORD: Yes, we do.

12 CHAIR GIBSON: Okay, what is that, sir?

13 MR. FORD: You wanted the --

14 CHAIR GIBSON: 2.3-56.

15 MR. FORD: Do you want us to point to  
16 where it has that statement of the salinity?

17 CHAIR GIBSON: Yes.

18 MR. FORD: The salinity of the industrial  
19 wastewater facility relative to the Bay.

20 MS. GRANGE: While Mr. Ford is looking for  
21 that page reference, if I might add to my previous  
22 answer?

23 CHAIR GIBSON: Uh-huh.

24 MS. GRANGE: In the staff's testimony,  
25 answer A-54 on page 45, also it mentions the reasons

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1 that the staff concluded that the license amendment  
2 was not likely to significant affect groundwater.  
3 There is four reasons in number four. It says the  
4 State was already directing the licensee to address  
5 the salinity. So, that is another indication of us  
6 relying on the State process that was ongoing.

7 CHAIR GIBSON: Okay. Did you find what  
8 you were looking for Mr. Ford are you still looking?

9 MR. FORD: I'm not sure. Are we looking  
10 for a cite where it says something about --

11 CHAIR GIBSON: No. No, I wanted to be  
12 sure those were the two sites that we could find  
13 relating to the things you mentioned yesterday about  
14 the environmental report.

15 MR. FORD: There is a number of them.

16 CHAIR GIBSON: Okay.

17 MR. FORD: So, I can give you all the list  
18 of where I found it talks about the canal and  
19 hypersalinity.

20 CHAIR GIBSON: I'll tell you what we will  
21 do. Rather than do those on the -- why don't you make  
22 a list of them? And we will just, we can read them  
23 into the record at one time at the end. Okay?

24 MR. FORD: Okay.

25 CHAIR GIBSON: Rather than take a lot of

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1 time right now. We are all taking too much time right  
2 now.

3 Okay, I would like -- do you have the  
4 *Idaho vs. ICC* citation? Could you put that up? I  
5 would just like to make note of one of the things that  
6 I would like to be addressed in the proposed findings  
7 and conclusions and that is I would like for the  
8 parties to address this issue insofar as reliance on  
9 State action and whether that is a sufficient basis  
10 for, under this case, at least, for relying on what  
11 the state is doing to not address an issue or to  
12 assume that it is going to be addressed properly.

13 Okay. If you all need a cite to this, we  
14 will be sure to put it in the order but I think you  
15 can just slide it down and I think you are good.

16 Now, Ms. Grange, as we discussed or  
17 perhaps this is for Mr. Hobbs, I'm not sure which, as  
18 the 2012 extended power uprate increased the thermal  
19 load in the cooling canal system. Is that correct?

20 MS. GRANGE: The 2012 EPU authorized an  
21 increase. That increase --

22 CHAIR GIBSON: Authorized an increase.  
23 Fair enough. Fair enough, authorized an increase.

24 MS. GRANGE: In total, although the  
25 nuclear units are operating at a higher authorized

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1 power level, the total load to the cooling canal  
2 system has actually been reduced since the staff  
3 reviewed that license amendment.

4 CHAIR GIBSON: And at the time of the 2012  
5 extended power uprate, did the staff consider the  
6 potential likelihood of having to increase the  
7 ultimate heat sink water temperature limit?

8 MS. GRANGE: No, that was not an action  
9 that was foreseeable at that time.

10 CHAIR GIBSON: Now, the 2014 license  
11 amendment has raised the maximum temperature for the  
12 cooling canal system. Correct?

13 MS. GRANGE: Correct, it has raised the  
14 allowable temperature by four degrees.

15 CHAIR GIBSON: And I take it you would  
16 agree that higher thermal load and greater maximum  
17 temperature would, together, increase the salinity in  
18 the cooling canal system more than either action on  
19 its own.

20 MS. GRANGE: Well, as I previously stated,  
21 the thermal load has not actually increased to the  
22 cooling canal system.

23 CHAIR GIBSON: Why do you say that?

24 MS. KLETT: Because Unit 2 is no longer  
25 operating as a power generator. So, it is not

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1 outputting its thermal load into the CCS since 2010,  
2 December of 2010.

3 CHAIR GIBSON: Do I understand correctly  
4 that the decision, although you weren't operating Unit  
5 2, the decision not to finally mothball it, or  
6 whatever the right word was, was in 2013? Did I  
7 understand you to say that yesterday, sir?

8 MR. SCROGGS: Yes, sir, the operation was  
9 converted to a synchronous generator in 2010 but the  
10 final decision to decommission the unit was not made  
11 until 2013.

12 CHAIR GIBSON: Thank you so much.

13 So, is it fair to say that it is the  
14 staff's position that the increase in salinity in the  
15 CCS was never considered reasonably foreseeable at any  
16 point in time?

17 MS. GRANGE: I assume you are talking  
18 about the increase in salinity that has happened over  
19 the past couple of years beyond the equilibrium of  
20 about 60 that was occurring around the time of the EPU  
21 application?

22 CHAIR GIBSON: Yes, I believe Judge Sager  
23 went over with you the data.

24 MS. GRANGE: Okay.

25 CHAIR GIBSON: I believe it started out in

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1 the 30s and 40s and went up considerably from there.

2 MS. GRANGE: Okay, so the original  
3 increase from the 30-something to about 60, that was  
4 anticipated and some of the quotes we just read off  
5 from the various documents, the final environmental  
6 statement, for instance, do talk about the fact that  
7 the salinity would likely increase over time. The  
8 increase that we have seen in the past couple of  
9 years, and that was part of the reason that FPL  
10 submitted the license amendment at hand, we did not  
11 foresee that happening.

12 I believe that the EPU EA, though, does  
13 describe the fact that with a temperature increase,  
14 salinity would then also increase. That was under the  
15 assumption that heat load to the cooling canal system  
16 in total would increase, which actually, in fact, did  
17 not happen because of Unit 2 going offline.

18 CHAIR GIBSON: Right, which happened after  
19 the environmental assessment was completed.

20 MS. GRANGE: Correct.

21 CHAIR GIBSON: Okay. I think the other  
22 issue that we are going to want addressed in the  
23 proposed findings and conclusions in this case is  
24 segmentation.

25 Okay. I believe that concludes the

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1 questions that we have of these witnesses. I would  
2 like to take a 15-minute recess to let you all prepare  
3 questions, additional questions that need to be asked  
4 to complete the record and we will be in recess for  
5 the next 15 minutes. Thank you.

6 (Whereupon, the above-entitled matter  
7 went off the record at 10:18 a.m. and resumed at  
8 10:50 a.m.)

9 CHAIR GIBSON: Thank you. Please be  
10 seated. Back on the record.

11 First of all, were you all able to get the  
12 citations to salinity? Mr. Ford, do you have those  
13 for us?

14 MR. FORD: What I have is a list of all of  
15 the page numbers that they reference the interaction  
16 between the CCS and the groundwater and saltwater  
17 intrusion. I was just going to read those page  
18 numbers off.

19 CHAIR GIBSON: Can you please read those  
20 for us? Yes, sir.

21 MR. FORD: This is from the 2009 combined  
22 operating license environmental report ADAMS number  
23 ML91870907 and I will just read off the page numbers:  
24 2.3-11, 2.3-10, 2.3-17, 2.3-25, 2.3-33, 2.3-34, 2.3-  
25 41, 2.3-48, 2.3-150, 2.3-51, and 2.3-170.

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1 CHAIR GIBSON: Thank you. Okay, we have  
2 gotten a questions. A few were a bit argumentative.  
3 I'm sure you all don't take that as a surprise. But  
4 we do have a few questions that we think probably  
5 deserve to be asked and so we will start with Judge  
6 Kennedy.

7 JUDGE KENNEDY: Thank you. The first  
8 question is for Ms. Grange. Was your discussion of  
9 the short duration that temperatures would exceed 100  
10 degrees, I'm assuming in the cooling canal, your  
11 reasonable forecast? Or any staff witness.

12 MS. KLETT: Our discussion of the short  
13 duration, that was not a condition of granting the  
14 license amendment. It was just a reasonable  
15 projection of just the natural temperature ranges in  
16 the CCS in the accommodation of the low likelihood  
17 that the conditions that the CCS was experiencing in  
18 2013 and 2014 would not happen again or were unlikely  
19 to happen again.

20 JUDGE KENNEDY: I'm thinking. All right,  
21 I think I will accept that. Thank you.

22 This is a question for FP&L. Yesterday,  
23 Dr. Stoddard testified or discussed the ammonia and  
24 phosphorus readings in the Biscayne Bay. Do you have  
25 any information regarding the values of these

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1 nutrients in the canal system at about the same time?

2 MR. BOLLETER: Yes, we do and I think we  
3 have to be very careful with the data that we get that  
4 you can very easily jump to conclusions by just  
5 looking at one data set. Could it be plausible there  
6 is seepage? Could be. That is one plausible  
7 explanation but also, at the same time, we have data  
8 within the cooling canal during that same time period  
9 where the phosphorous values are much lower than what  
10 you see in that particular location. Actually, they  
11 are dropping at the same time the phosphorous at that  
12 particular station in Biscayne Bay is going up.

13 Also, the ammonia values in the cooling  
14 canal were very low while the ammonia values at that  
15 Biscayne Bay station were going up. We did get a  
16 spike in ammonia in the cooling canal at a much later  
17 time frame. So, the time periods don't match up. So,  
18 we just have to be very careful about jumping to  
19 conclusions.

20 Also a well that we have, or we have  
21 multiple wells, but a well that we have in the berm on  
22 the eastern side of the cooling canal, the ammonia  
23 values, they are high but they are lower than what we  
24 are seeing in Biscayne Bay. So, we are in the process  
25 of working with Miami-Dade County trying to better

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1 assess what is going on. So, it is not just one piece  
2 of information but the data that we have in the  
3 cooling canal, those values, again, are lower than  
4 what we were seeing in the Bay. What we have in the  
5 groundwater well is lower than what we are seeing in  
6 the Bay.

7 JUDGE KENNEDY: Just as a follow-up to  
8 that, yesterday Dr. Stoddard suggested that there was  
9 about a three-day delay between the values in the  
10 canal and the values in the Bay. Does that seem  
11 reasonable to you?

12 MR. BOLLETER: No. I mean I think there  
13 is a much longer delay, lag time that you would see  
14 that effect. Plus, if we had high levels of ammonia  
15 and say phosphorous in the cooling canal system and if  
16 there was a three-day period, you would have seen  
17 similar concentrations in the cooling canal that we  
18 are seeing in the Bay and we don't see that.

19 JUDGE KENNEDY: Thank you.

20 CHAIR GIBSON: Judge Sager.

21 JUDGE SAGER: These questions also go to  
22 FPL. So, this referring to the administrative order  
23 by is it Florida Department of Environmental  
24 Protection or South Florida Water Management District  
25 -- you know what I am speaking about, the

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1 administrative order for --

2 MR. SCROGGS: Yes, sir.

3 JUDGE SAGER: -- freshening the canals?  
4 What is the duration of that order? Does it have an  
5 end?

6 MR. SCROGGS: Well, the administrative  
7 order, it is a little more complex than directing a  
8 specific action. It is directing FPL to develop a  
9 salinity management plan to achieve a certain  
10 objective, which is reduce the salinity in the cooling  
11 canal system. There is no term applied to that  
12 administrative order but they do communicate an  
13 expectation that we would achieve that target annual  
14 average salinity of 34 psu in about a four-year  
15 period, if I remember correctly.

16 JUDGE SAGER: And then is there any  
17 expectation that you will keep it there through the  
18 life of the plant?

19 MR. SCROGGS: That is the intent of the  
20 administrative order, that is the objective, and that  
21 is the purpose of us identifying the Upper Floridan  
22 Aquifer wells as that long-term balancing water  
23 resource.

24 JUDGE SAGER: Okay and I think we heard  
25 testimony that a big part of that is this withdrawal

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1 of 14 million gallons per day from the Upper Floridan  
2 Aquifer from wells in a well field. I presume you  
3 have looked at this in relation to this whole  
4 proceeding. Do you expect that you have to -- is 14  
5 million gallons a day enough over the long period?  
6 Will it be used intermittently or will it be sort of  
7 permanently on pumping that water out?

8 MR. SCROGGS: We have a seasonal variation  
9 in salinity, right, with the dry season and the wet  
10 season. When we have a wet season that is productive  
11 in terms of precipitation, there wouldn't be a need to  
12 augment that with the Floridan wells. The Floridan  
13 wells are intended to make up the deficit during the  
14 dry season and leading into the wet season.

15 The volumes of water that were provided in  
16 2015 through the L31 are about 50 to 60 percent of  
17 what you would expect if you ran the 14 million gallon  
18 per day Floridan wells for a full year. So, the  
19 response of the system in relation to that volume in  
20 2015 seems to demonstrate pretty strongly that that is  
21 a sufficient volume for the task.

22 JUDGE SAGER: Even throughout the life of  
23 the plants? You wouldn't foresee that you need to  
24 come again and ask for more groundwater.

25 MR. SCROGGS: That has been the results of

1 the modeling and that is our presumption, based on the  
2 data.

3 JUDGE SAGER: Okay, thank you.

4 CHAIR GIBSON: Okay. Do you have the  
5 *Calvert Cliffs* cite? I mentioned the State action  
6 issue. We put up the *Idaho* case. I also wanted to  
7 put up the *Calvert Cliffs* case. These are both State  
8 action cases. So, I just wanted to be sure and call  
9 that to your attention so that when you did your  
10 proposed findings and conclusions, you will have an  
11 opportunity to consult that as well.

12 Housekeeping matters. We are going to  
13 have the PowerPoint slides that Dr. Stoddard referred  
14 to yesterday. We are not going to admit those as an  
15 exhibit. So, that is not going to be part of his  
16 testimony filed in this case. We are not going to  
17 revise it. We are not going to have a new exhibit.

18 What we are going to do instead is, I  
19 think, there is references to it in the transcript and  
20 it won't make any sense if we don't have it somehow  
21 referenced. So, what we are going to do is we are  
22 going to take the underlying data provided by Dr.  
23 Stoddard, which is on an Excel spreadsheet and quite  
24 large and it is going to be sent to each party by the  
25 law clerks when they return to Washington. In

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1 addition, a CD containing the underlying data will  
2 also be sent to the Office of the Secretary.

3 The PowerPoint slides themselves that were  
4 referenced will be attached to the end of yesterday's  
5 transcript just as an appendix. Okay? I think that  
6 is about the only way we can handle that. Otherwise,  
7 we have referenced to something that was talked about  
8 that we don't otherwise have in evidence.

9 So, the only way we can really do that is  
10 to attach it as an appendix to the transcript. So, it  
11 won't be an exhibit but since we referenced it, we had  
12 to find some way to put it in there.

13 Does anybody have any objection to doing  
14 that? Okay, very well. I couldn't figure any other  
15 way out either. Okay.

16 Now, we will, of course, appreciate the  
17 parties' suggestions on transcript corrections. With  
18 regard to transcript corrections, when you do submit  
19 them, please note that this is not to correct an error  
20 that your witness may have said by misspeaking. It is  
21 solely to correct an error that our court reporter  
22 made in transcribing.

23 I would ask Florida Power and Light to  
24 take the lead on this and to come up with a joint list  
25 that it shares with the other parties in terms of

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1 transcript corrections. So, within ten days of the  
2 transcript becoming available, Florida Power and  
3 Light, can you and the other parties circulate your  
4 proposed transcript corrections among yourselves and  
5 then get them to us within ten days thereafter? Would  
6 that work?

7 MR. BLAIR: Just for clarification, so  
8 within the -- it wasn't two ten-day periods, it was  
9 one single ten-day period.

10 CHAIR GIBSON: It would be a total of 20  
11 days from when the transcript becomes available that  
12 you all will be sending us your joint proposed  
13 transcript corrections.

14 MR. BLAIR: Okay.

15 CHAIR GIBSON: But I would like for you  
16 within ten days of the date of the transcript becomes  
17 available to go through the transcript, figure out  
18 where you think there are errors and circulate it to  
19 the staff and to Mr. White.

20 MR. BOLLETER: Understood.

21 CHAIR GIBSON: And then what we will do,  
22 then, they hopefully will also be reviewing the  
23 transcript for their own corrections but they can take  
24 the basic format and hopefully you will have caught  
25 all of them but to the extent they catch other

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1 mistakes that the court reporter made in transcribing  
2 the testimony, then that will be fixed.

3 MR. HARRIS: Your Honor, could I have a  
4 couple of seconds to confer with my witnesses? Some  
5 of them are on travel like right after this. So, that  
6 ten day -- I just want to make sure I know when they  
7 are going to be available.

8 CHAIR GIBSON: Okay, sure. Sure.

9 MR. HARRIS: Give me one second, Your  
10 Honor. I'm just looking at a calendar because one of  
11 the witnesses is on travel until February first and,  
12 depending on exactly when the transcript would come  
13 in, that might, that 20-day period might not be able  
14 to work for getting it to them.

15 CHAIR GIBSON: Court reporter, have you  
16 got a rough idea when that transcript is going to be  
17 available? About three days from now. You think it  
18 will be ready Friday? You think it will be Friday?

19 He said he can have it ready for us on  
20 Friday.

21 MR. HARRIS: So, one of our witnesses  
22 wouldn't be able to review it in that 20-day period  
23 because they will be out on prescheduled travel until  
24 February first.

25 So, perhaps if we could have about five

1 days after February first to have the final transcript  
2 corrections due.

3 CHAIR GIBSON: That's fine. That will be  
4 fine.

5 So, can you still do that within -- we can  
6 give you 15 days if you need that to make that  
7 simpler.

8 Okay, so everybody has 15 days after the  
9 transcript is available to review the transcript.  
10 Well, you have more than that but Florida Power and  
11 Light and is, effectively, only going to have 15 days.  
12 You will look over the transcript, put together a list  
13 of proposed transcript corrections where you think the  
14 court reporter made an error. You will circulate that  
15 to Mr. White and Mr. Harris. We will then be getting  
16 -- they will circulate that and then 25 days from when  
17 the transcript becomes available. Okay? We will be  
18 getting a joint proposed transcript correction from  
19 everyone. Okay?

20 MR. HARRIS: Understood.

21 CHAIR GIBSON: And that sounds like that  
22 meets everyone's schedule.

23 MR. HARRIS: Yes, Your Honor, thank you.

24 CHAIR GIBSON: Okay. If for any reason  
25 one of the parties does not -- you all can't agree to

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1 a joint proposed transcript correction, you will have  
2 five days after it is filed to lodge any objections.  
3 Okay? I can't imagine that happening. It has never  
4 happened before but if it does, you have got five days  
5 to object and say no, those are not -- they really  
6 said that. The court reporter really transcribed it  
7 right or really transcribed it wrong and no one would  
8 agree with you.

9 Okay, you can contact the court reporter  
10 and get a tape, if that proves necessary. Hopefully,  
11 that won't.

12 But let me say this, and Florida Power and  
13 Light, since you have the laboring on this, I want to  
14 make sure you know whatever you submit to correct the  
15 transcript, please be sure to consult 10 CFR 2.327(d)  
16 as in dog and use that format. Okay?

17 MR. BLAIR: Understood.

18 CHAIR GIBSON: One final note. We cannot  
19 close the record in this matter until the transcript  
20 is corrected. Once the record is closed, the 90-day  
21 clock begins to run on this Board to issue its final  
22 decision -- it's initial decision.

23 Obviously, in order for us to prepare an  
24 initial decision, we will need your proposed findings  
25 of fact and conclusions of law. Under 10 CFR 2.1209,



1 each party is to submit its proposed findings of fact  
2 and conclusions of law within 30 days of the  
3 conclusion of this hearing or such different time as  
4 the Board deems appropriate.

5 So, recognizing that we are going to be  
6 taking 25 days to get our transcript corrections in  
7 from the date it is available, how much time do you  
8 need to prepare your proposed findings and  
9 conclusions?

10 Understand, too, if you take too long, you  
11 are going to be squeezing the Board on the amount of  
12 time we need to prepare our initial decision.

13 MR. WHITE: The statute says 30 days. Are  
14 asking us to do something less than that?

15 CHAIR GIBSON: Well, no, I wouldn't  
16 suggest anything less than that. But if you guys can  
17 get your proposed findings and conclusions within 30  
18 days from the date the record closes, that would be  
19 great. Is that okay?

20 MR. WHITE: That is adequate, sir.

21 CHAIR GIBSON: I mean they are only one  
22 contingent.

23 MR. HARRIS: Yes, Your Honor, that is  
24 adequate.

25 CHAIR GIBSON: Okay, very well. So, let's

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1 go for 30 days from the date that the transcript  
2 closes, the transcript is corrected and then 30 days  
3 from that date, you will get your proposed findings of  
4 fact and conclusions of law to us. Okay?

5 Before we close, I would just like to  
6 express the Board's appreciation to the parties, to  
7 their witnesses, and to their representatives, and to  
8 those that assisted them.

9 We also want to thank the Hampton Inn for  
10 making our stay here so pleasant. And I want to  
11 appreciate, let you all know how much I appreciate  
12 Nichole Pepperl, Jennifer Scro, and Andy Welkie for  
13 keeping us on track and ensuring that this hearing ran  
14 as smoothly as it did.

15 And we also want to thank the Homestead  
16 Police Department. You guys have been great to make  
17 sure our security was proper and we appreciate it to  
18 make sure we had a safe and well-conducted hearing.

19 I assume there is nothing else.

20 MR. HARRIS: One quick housekeeping  
21 matter, Your Honor.

22 CHAIR GIBSON: Yes.

23 MR. HARRIS: For the 30 days, are you  
24 counting that from when we submit the proposed  
25 corrections or from when you issue an order accepting

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1 the proposed questions in them?

2 CHAIR GIBSON: From the date that we  
3 accept the findings -- the proposed corrections.

4 MR. HARRIS: And then the second  
5 housekeeping matter is rebuttal, findings of fact, and  
6 conclusions of law, which you didn't cover, I don't  
7 think, when we were going over this.

8 CHAIR GIBSON: Do you all have a  
9 suggestion? Fifteen days after you submit your  
10 proposed findings and conclusions. Okay?

11 MR. HARRIS: That's fine, sir.

12 CHAIR GIBSON: Fifteen? Okay. Fifteen  
13 after that get your rebuttal in. That would be good.

14 Okay, with that, we stand adjourned. Good  
15 day.

16 (Whereupon, the above-entitled matter  
17 went off the record at 11:10 a.m.)

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