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BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

FILED SEP 02, 2014
DOCUMENT NO. 04903-14
FPSC - COMMISSION CLERK

PETITION FOR DETERMINATION
OF NEED FOR CITRUS COUNTY
COMBINED CYCLE POWER PLANT,
BY DUKE ENERGY FLORIDA, INC.

DOCKET NO. 140110-EI

PETITION FOR DETERMINATION
OF COST EFFECTIVE GENERATION
ALTERNATIVE TO MEET NEED
PRIOR TO 2018, BY DUKE ENERGY
FLORIDA, INC.

DOCKET NO. 140111-EI

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VOLUME 6

Pages 761 through 908

PROCEEDINGS: HEARING

COMMISSIONERS
PARTICIPATING: CHAIRMAN ART GRAHAM
COMMISSIONER RONALD A. BRISÉ
COMMISSIONER LISA POLAK EDGAR
COMMISSIONER EDUARDO E. BALBIS
COMMISSIONER JULIE I. BROWN

DATE: Tuesday, August 26, 2014
TIME: Commenced at 2:00 p.m.
Concluded at 4:48 p.m.

PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: ANDREA KOMARIDIS, Court Reporter

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1 APPEARANCES: (As heretofore noted.)

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

2 (Transcript follows in sequence from
3 Volume 5.)

4 CHAIRMAN GRAHAM: Okay. Well, it looks like
5 Jon Moyle isn't here. So, we're going to skip him.
6 (Laughter.)

7 Mr. Cavros, do you have any questions? We'll
8 take yours and go back to Mr. Moyle.

9 MR. CAVROS: Yes, I do. If you could, give me
10 just one minute, Mr. Chairman.

11 CHARIMAN GRAHAM: Sure.

12 CROSS EXAMINATION

13 BY MR. CAVROS:

14 Q Good afternoon, Mr. Borsch.

15 A Good afternoon -- am I on now? There we go.
16 Good afternoon.

17 Q I'm going to change course a little bit here
18 and talk to you a little bit about energy efficiency.

19 If you could, turn to Page 24 of -- well,
20 before we go there, I guess I just want to establish
21 with you the legal threshold the company has to meet.
22 And maybe you can just tell me if you're familiar with
23 this.

24 But 403.519(3) states that, in part, "whether
25 renewable" -- these are the items that the Commission

1 must consider; "Whether renewable energy sources and
2 technologies, as well as conservation measures, are
3 utilized to the extent reasonably available."

4 Are you familiar with that provision?

5 A Yes.

6 Q Okay. Great. And then it goes on and says,
7 "The Commission also shall expressly consider the
8 conservation measures taken by or reasonably available
9 to the applicant or its members which might
10 reasonably" -- "which might essentially reasonably be
11 available to the applicant or its members which might
12 mitigate the need for the proposed plan."

13 Are you familiar with that language as well?

14 A Yes.

15 Q Okay. Great. On Page 24 of your testimony,
16 Line 22, you state that the demand-side resources are
17 evaluated in the same manner as supply-side resources;
18 is that correct?

19 A Let me consult my testimony. I believe it
20 says -- to read it directly, it says, "In a general
21 manager, demand-side resources are evaluated in much the
22 same manner as supply-side resources."

23 Q Okay. Thank you. And then, on Page 25,
24 Line 8, you state that, "The strategist model screens
25 the demand-side resources on an individual basis against

1 supply-side generation avoided units"; is that correct?

2 A It is.

3 Q Okay. And then on Line 20 of that same page,
4 you state that, "There are no demand-side resources
5 reasonably available to DEF to replace or mitigate the
6 need for additional generation capacity in 2018 to meet
7 the company's reliability needs," correct?

8 A Yes.

9 Q And if you could, for a second just -- if you
10 could just explain to me how the process that you
11 under- -- that the company underwent to develop its
12 proposed goals pending before this Commission aligns
13 with the strategist model that you used to determine the
14 need for this plan.

15 A Well, in the case of the analysis that was
16 performed for the need for this plant, we began by
17 assuming the demand-side management programs, which
18 were, in 2013, authorized by the Commission and their
19 extension -- and you know, there is a growth pattern
20 which, I believe, is demonstrated in our ten-year site
21 plan -- to those measures.

22 And as, I think, has been discussed at some
23 length here today, we used the 2014 ten-year site plan
24 as the basis for all of the analysis that's been
25 presented here. Although, the 2013 ten-year site plan

1 was used in the development of the initial RFP. So, in
2 both of those cases, the demand-side management
3 programs, then currently in force, were extended out
4 through the period of the analysis.

5 And having used that as a starting point, we
6 then tocked to our demand-side management team about
7 what additional measures, if any, they would propose
8 that we use to -- that would be providing significant
9 megawatts in the period, you know, up through 2018 that,
10 you know, we should screen.

11 And they, in fact, said they did not propose
12 any additional measures other than those which had
13 already been authorized that we should screen during
14 that period.

15 Does that answer your question?

16 **Q I think it does. So, you used your current**
17 **goals up until 2015. And then you considered the**
18 **proposed goals that you submitted to this Commission**
19 **for -- or rather up to 2014, the goals that you're**
20 **currently meeting.**

21 **And then, after 2015, you used the goals that**
22 **had been proposed to this Commission as available to**
23 **avoid capacity additions, correct?**

24 **A No. We used -- because of the timing of the**
25 **analysis that we were doing, the proposed goals were not**

1 prepared. So, we presumed the extension of the, then,
2 in-force goals with their expected growth rates extended
3 out over the period of the analysis. The goals which
4 have subsequently been proposed in the DSM docket were
5 not considered in this analysis.

6 **Q And the extension of those goals was based on**
7 **certain avoided capacity; is that correct?**

8 A Well, yeah -- in other words, those goals had
9 been deemed cost effective based on certain assumptions
10 of avoided capacity. However, given that they had been
11 approved by the Commission, the anticipated cumulative
12 ongoing impact of providing those incentives and
13 measures that were approved, you know, goes on and
14 builds up over time, irrespective of what additional
15 generation because you're no longer testing it each
16 year.

17 MR. CAVROS: Okay. Well, let me pass out an
18 exhibit, if I could. Maybe this will help clarify.

19 CHARIMAN GRAHAM: Sure. We will give it
20 Exhibit No. 142. Mr. Cavros, do you have a short
21 title or description for this?

22 MR. CAVROS: Sure. This is Duke Avoided
23 Generation Assumptions.

24 CHARIMAN GRAHAM: Okay.

25 MR. CAVROS: In Docket 130200.

1 And Chairman, I'm going to tread very lightly
2 here because I don't want to re-litigate issues
3 that are pending before the Commission and other
4 docket. But I do want to consider that legal
5 threshold of reasonably available.

6 CHARIMAN GRAHAM: Okay.

7 MR. CAVROS: I'm sorry, Commissioner. Was
8 that Exhibit No. 142?

9 CHARIMAN GRAHAM: 142, correct.

10 BY MR. CAVROS:

11 Q By way of background, Mr. Borsch, this is a
12 discovery request. It might have even been attached to
13 the testimony of Helena Guthrie --

14 A Yes.

15 Q -- in her testimony. And it shows the
16 avoidable generation assumptions to use to develop the
17 goals that are before this Commission.

18 A Uh-huh.

19 Q And it's chronological in order. And I would
20 just like to go through the first couple of assumptions
21 with you very, very quickly.

22 The first assumption that comes up is -- well,
23 first of all, there are no avoidable generation
24 assumptions for the years 2016 and 2017; is that
25 correct?

1 A Yes.

2 Q And the avoidable assumption in 2018, which is
3 the first avoidable unit, is a 214-megawatt unit; is
4 that correct?

5 A Yes.

6 Q The 1,640-megawatt unit is nowhere to be found
7 in that avoidable generation assumption, correct?

8 A That's correct.

9 Q So, therefore, it was not used as an avoidable
10 unit to develop achievable potential that later formed
11 the company's proposed DSM goals; is that correct?

12 A Well, let me say that, as I mentioned earlier,
13 in the analysis performed for this docket, the goals
14 which were developed based on this document you have
15 entered here had not been developed. That was still in
16 process, in parallel with the work that we were doing
17 for this.

18 So, we utilized in our planning for this
19 docket -- in both of these dockets -- the measures and
20 programs which were in force authorized by the
21 Commission in 2011, presupposing their ongoing growth
22 over the period of the analysis.

23 Q And what was the percentage of that ongoing
24 growth?

25 A Off the top of my head, I don't know. I would

1 have to, you know, go back and refer to charts and do
2 calculations. But you can look at it in the ten-year
3 site plan and see both in residential, commercial, and
4 industrial what the pattern of growth is at least for
5 the first ten years.

6 **Q Do you know how those growth estimates might**
7 **have changed if they had been recalculated to use an**
8 **avoided unit in 2018 of 1,640 megawatts?**

9 A No, I do not.

10 **Q And why was the 1,640 megawatts excluded from**
11 **the goals that were -- or the potential goals that were**
12 **submitted to this Commission?**

13 A Well, that's really a question that has been
14 asked and answered in the other docket, in the DSM
15 docket. But I think there were -- the answer to that
16 was twofold. One of the answers was that because the
17 unit in question was already the subject of a regulatory
18 proceeding, it was considered to be a committed unit.

19 And the second reason was that our DSM experts
20 did not identify measures which would produce megawatt
21 savings or megawatt-demand reductions such that they
22 would avoid or defer that unit.

23 **Q I would like to talk to you a little bit about**
24 **your reserve margin. You use a reserve margin of**
25 **20 percent; is that correct?**

1 A We do.

2 **Q Has the company considered using a reserve**
3 **margin of 15 percent?**

4 A We have not.

5 **Q Is the company aware that the Florida**
6 **Reliability Coordinating Council recommends a reserve**
7 **margin of 15 percent?**

8 A My understanding of that is that the FRCC
9 recommends a 15-percent reserve margin for the State as
10 a whole, but not necessarily for the individual
11 contributors; and particularly with the understanding of
12 the -- I don't remember the exact year -- but late-
13 nineties stipulation that the investor-owned utilities
14 would pro- -- share -- would provide a larger percentage
15 of that burden by providing a 20-percent reserve margin.

16 **Q And that stipulation was in 1999, subject to**
17 **check, correct?**

18 A I'll accept that.

19 **Q Sure. And we're in 2014. So, that**
20 **stipulation is about 15 years old, correct?**

21 A Yes.

22 **Q And have there been any studies related to**
23 **that reserve margin to determine if it's adequate by**
24 **Duke Energy Florida or Progress Energy, its predecessor?**

25 A Not to my knowledge.

1 **Q By any other utilities?**

2 A Not to my knowledge. I mean, I will say this:
3 You know, as indicated in my testimony, we do
4 periodically test the 20-percent reserve margin against
5 our loss of load projections -- LOLP, loss of load
6 probabilities -- to ensure that the 20-percent reserve
7 margin is a standard such that we will also meet our
8 LOLP criteria.

9 But we have not specifically done any kind of
10 a study to indicate that the reserve margin should be
11 changed beyond that.

12 **Q Would you agree that unit reliability has**
13 **increased since 1999?**

14 A Not necessarily. Unit reliability is a
15 function of a number of factors including fleet age.
16 And you know, the fleet age continues to change over
17 time. You know, some units are getting older; some
18 units are being replaced with newer units. So, I don't
19 know that that's really a straightforward comparison, as
20 far as I know.

21 **Q All right. Let me reask the question, then:**
22 **As the technology improves and these older units are**
23 **being replaced with the newer, more efficient units, the**
24 **reliability of those new units should presumably be**
25 **better from a performance perspective than the older**

1 units they replace, correct?

2 A In general, yes.

3 Q Have you studied to see what a reduction in
4 your reserve margin to 15 percent would do to your
5 resource-planning process?

6 A No.

7 Q Is it fair to say that you have about
8 11,258 megawatts of generation capacity? Currently.

9 A I believe that number is in the ten-year site
10 plan. But I'll say, subject to check, that that's in
11 the right ballpark.

12 Q Yeah, I believe I did get that from your ten-
13 year site plan.

14 A Okay.

15 Q And a 5-percent reduction of that would be
16 562 megawatts. Subject to check, would you agree to
17 that?

18 A Yes.

19 Q And you were here yesterday. And there was
20 some discussion today about the additional capacity that
21 will come online in the 2019-2020 period, approximately
22 150 additional megawatts from the Calpine plant; is that
23 correct?

24 A Well, I guess the right way to say that is:
25 There will be additional megawatts from the Calpine

1 plant available to us in that timeframe. I mean,
2 currently that capacity is online.

3 Q Correct. And what's the earliest that
4 capacity could come on? I think you had testified --
5 was it 2019 or --

6 A 2020.

7 Q And that's an additional 150 megawatts,
8 correct?

9 A Actually, it's an additional 200 -- north of
10 250 megawatts.

11 Q Okay. So, subject to check, the additional
12 megawatts that come on around the 2019-2020 time period
13 with a 15-percent reserve margin is an additional
14 712 megawatts. Subject to check, would you -- under the
15 assumption I'm providing to you.

16 A I'm not sure I really understand that math.
17 In other words, if you recalculated the reserve margin
18 to 15 percent and then, you know, added the megawatts
19 that would be added in 2019 or, more to the point, in
20 2020, once we have full availability of the Calpine
21 plant, there would be an increase in our reserves. I
22 mean, there will be an increase in our reserves either
23 way, which will affect our planning of units from 2020
24 forward.

25 Q But under the scenario I'm providing here,

1 which is a 15-percent reserve margin, given that your
2 capacity is about 11,000 megawatts, 5 percent would be
3 about 560 megawatts. Subject to check, would you agree
4 with my math?

5 A Yes, I'll agree with your math.

6 Q I want to talk a bit -- there has been a lot
7 of discussion about load projections here today. And
8 you're going from flat to declining. You've had
9 approximately flat to declining demand for a period of
10 about five years; is that accurate?

11 A I guess that depends on how you want to
12 measure it. But you know, in terms of per-customer
13 usage, yes.

14 Q And you're projecting annual increases of
15 1.4 percent; is that correct?

16 A That's about right, yes.

17 Q Would you agree that going into the Great
18 Recession, it was difficult to predict load from year to
19 year?

20 A Yes, I -- well, yes, from 2008 forward, as we
21 have worked our way through the recession and the
22 beginning part of the recovery, I would say that that
23 has been more difficult than usual.

24 Q Would you agree that it's also equally as
25 challenging to determine when that recovery from the

1 **Great Recession will happen and how that will affect**
2 **load forecast?**

3 A We have been working with that now for --
4 since 2009. So, we are -- we continue each year to look
5 at the economic progress, economic indicators, and the
6 forecasts of economic recovery from a number of
7 predictors and services and fold those into our load
8 forecast going forward.

9 Q **And are you using primarily the same load-**
10 **projection process that you've used in past years?**

11 A In essence, yes.

12 MR. CAVROS: Commissioners, at this time, I
13 would like to pass out another exhibit.

14 CHARIMAN GRAHAM: Okay. We're at No. 143.

15 MR. CAVROS: Sorry. I apologize. I don't
16 have a cover page on it. Commissioners, I
17 apologize, I do not have a cover page --

18 CHARIMAN GRAHAM: That's all right.

19 MR. CAVROS: -- for this exhibit.

20 CHARIMAN GRAHAM: Do you have a title for it?

21 MR. CAVROS: We can label it 2013 ten-year
22 site plan excerpt.

23 CHARIMAN GRAHAM: Okay. Mr. Cavros, next time
24 you print, let me recommend the landscape function.

25 (Laughter.)

1 MR. CAVROS: Yes. I -- yes, I apologize about
2 that. I know the numbers are hard to read.

3 But this is -- by way of background, this is a
4 similar table that was referenced earlier by
5 Mr. Brew. This is Table 3.1. And it's located on
6 Page 18 -- well, this is a 2013 version of the 2014
7 table, which is in Mr. Borsch's direct testimony as
8 Exhibit BMHB-2, Page 18 of 76.

9 MR. WALLS: This document is also in Exhibit
10 BMHB-1, Page 164 of 294.

11 CHARIMAN GRAHAM: Okay.

12 MR. CAVROS: All right. Apologies. And we
13 may not have to label it as a --

14 CHARIMAN GRAHAM: Well, for simplicity, we'll
15 just deal with it the way it has labeled. We may
16 not have to enter it.

17 MR. CAVROS: Okay.

18 BY MR. CAVROS:

19 **Q Mr. Borsch, do you think it's prudent to**
20 **consider post-overestimation of demand in resource**
21 **planning?**

22 A I think the way I would answer that question
23 is to say that we consider how previous predictions --
24 not only our own, but the predictions that are used in
25 our underlying data -- have changed from year to year in

1 terms of their, you know, forecasting of the underlying
2 factors that develop our load forecast.

3 Q I want to direct your attention to 2013, the
4 year -- I'll call it Exhibit 143 for right now.

5 A Okay.

6 Q If you look over to the line which forecasts
7 2013 --

8 A Uh-huh.

9 Q That megawatt projected need is 10,462; is
10 that correct?

11 A That is the total number, yes.

12 Q Total, correct. Thank you. This is in the
13 "total" column.

14 And if you look at your current ten-year site
15 plan, the 2014 ten-year site plan --

16 A Yes.

17 Q -- the total actual was 9,581; is that
18 correct?

19 A Yes.

20 Q And subject to check, would you agree that
21 that's an overestimation of 881 megawatts?

22 A Well, I guess the way I would say that is that
23 it is to the extent that the actuals may not have
24 reflected the same conditions under which the
25 assumptions were made, particularly where weather was

1 concerned. But I mean, from a mathematical standpoint,
2 yes.

3 Q Okay. Would you say that that's a significant
4 deviation from your projected sales forecast?

5 A Significant is in the eye of the beholder, but
6 I'll -- I'll concede that.

7 Q And as I go through in comparing the later
8 years, 2014 to 2018, there are similar overestimations
9 made in the -- there are certain forecasts made in the
10 2013 ten-year site plan. And when you look at the
11 forecast for the 2014 ten-year site plan, those
12 forecasts have been downgraded quite a bit, anywhere
13 from 200 to 300 megawatts. Would you agree with that?

14 A Well, I think it's a little bit misleading to
15 look only at the total line, which encompasses not only
16 our projected, you know, residential demand, but as we
17 discussed at some length here earlier today, changes in
18 wholesale contracts and also reflects changes in our
19 projections of available load control and so forth.

20 So, when I compare the 2013 numbers to the
21 2014 numbers, I would look typically at Column 10, at
22 the net firm demand and make the comparison between
23 those two sets of numbers.

24 Having said that, I will agree that, in most
25 years -- not all, but in most years, the 2014 numbers

1 are slightly down from the 2013 numbers, but not by the
2 amount that you're suggesting.

3 **Q So, the deviation projected in actual in 2013**
4 **is -- well, let me back up. Were you here yesterday**
5 **when there was some discussion about power blocks and**
6 **how the proposed unit is -- the actual, physical**
7 **structure of the proposed unit -- that there will be**
8 **200 -- there will be two 850 megawatts blocks,**
9 **essentially?**

10 **A** Actually, I had stepped out during
11 Mr. Landseidel's testimony. But I'm familiar with the
12 proposed unit.

13 **Q And would you agree that the deviation from**
14 **projected to actual in 2013 is about the size of one**
15 **power block for the unit?**

16 **A** I would agree that if you take that number of
17 megawatts and simply subtract them from each other,
18 you'll get a roughly equivalent number.

19 But I think, as I discussed with some of the
20 other questioners earlier on in the afternoon -- or in
21 the morning, I should say -- I don't think it's
22 appropriate to directly compare the projected values to
23 the actual values from any single year.

24 **Q But the Commission is relying on your**
25 **projections for this need determination, correct?**

1 A Yes. And as we discuss in our ten-year site
2 plan, and as is shown in data requests, if not in this
3 docket, then in other dockets and certainly in the
4 ten-year site-plan planning process, the projected
5 forward-going demand is based on a number of projections
6 of customer growth, economic activity, usage per
7 customer, behavior patterns, penetration of new
8 technologies and, you know -- as well as our wholesale
9 forecast and a number of other factors, which, developed
10 together, form the basis of this projection.

11 **Q But those are the same criteria that you used**
12 **in past projections, correct?**

13 A Well, certainly the value has changed from
14 year to year, but the overall planning process is much
15 the same.

16 MR. CAVROS: And I would like to just offer
17 one more exhibit.

18 CHARIMAN GRAHAM: Sure.

19 MR. CAVROS: For the time being, I will mark
20 this as 144.

21 CHARIMAN GRAHAM: 144, correct.

22 MR. CAVROS: And I apologize again. This does
23 not have a cover page.

24 CHARIMAN GRAHAM: Do you have a title for
25 this?

1 MR. CAVROS: And the short title can be review
2 of 2013 ten-year site plans.

3 CHARIMAN GRAHAM: Okay.

4 BY MR. CAVROS:

5 Q Do you have that document --

6 A I do.

7 Q -- Mr. Borsch? Great.

8 And this is a review by the Public Commission
9 staff of load projections by the State's utilities. And
10 the table shows that if you look at the middle column,
11 bottom row, that there has been approximately a
12 15-percent forecast error in forecast that essentially
13 has been incorrect by overstating forecasts from year to
14 year. Do you see that 15.1 percent?

15 A Yes, I do.

16 MR. CAVROS: Chairman, I have no further
17 questions.

18 CHARIMAN GRAHAM: Okay. Thank you.

19 Mr. Moyle.

20 MR. MOYLE: Thank you. Thank you,
21 Mr. Chairman.

22 CROSS EXAMINATION

23 BY MR. MOYLE:

24 Q Good afternoon, Mr. Borsch.

25 A Good afternoon.

1 Q Jon Moyle on behalf of the Florida Industrial
2 Power Users Group. And I want to talk to you about the
3 old family car.

4 A I think you threatened that in your --
5 MR. BREW: I object.

6 A -- opening statements.
7 (Laughter.)

8 BY MR. MOYLE:

9 Q And just so we're clear, when I use the phrase
10 "old family car," what do you understand that to be?

11 A I'm waiting for you to describe it to me.

12 Q Crystal River Units 1 and 2.

13 A Okay.

14 Q And I want to just spend a little time talking
15 about Crystal River Units 1 and 2, which I'm going to
16 refer to as the "old family car" because I think there
17 are a lot of similarities to that.

18 And I want to ask you if you can work in the
19 context of that analogy. Are you comfortable with that?

20 A I guess I'll wait until you ask specific
21 questions. And then we'll see.

22 Q Okay. Well, let's start with old. You would
23 agree that it's old.

24 A Those units date from around the 1970s, yes.

25 Q Okay. And I had in my opening statements that

1 **it's largely paid for. Would you agree with that?**

2 A I am not familiar with the remaining book
3 value of those units.

4 Q **Okay. In a general context, units that have**
5 **been on the books for a long time -- you would agree**
6 **those are depreciated and would not have the same book**
7 **value as, say, a new unit coming in, correct?**

8 A Well, that depends necessarily on what capital
9 investments have been made along the way that would be
10 added to the book value.

11 Q **Okay. Can you agree as a general proposition**
12 **that something that's a power plant that's been on the**
13 **books for a long time, hasn't had a tremendous amount of**
14 **capital investment -- that that would likely have a**
15 **lower book value than, say, a new \$1.5 billion four-on-**
16 **two combined cycle unit that you're proposing in this**
17 **case?**

18 A I will agree with a premise that a unit which
19 has been depreciated for a long time has a lower book
20 value.

21 Q **And specifically, how many megawatts is the**
22 **old family car? What does that give you for your system**
23 **presently?**

24 A I believe the number is 893.

25 Q **And you understand FIPUG is suggesting that**

1 the deferral of the combined cycle unit that you're
2 proposing now is worthy of consideration, correct?

3 A I understand that's your assertion, yes.

4 Q I said in my opening statement that there were
5 some additional miles that could be gained from the old
6 family car that has largely been paid for and still
7 could -- still could run. Would you agree with that
8 statement?

9 A I'll agree that you said that.

10 (Laughter.)

11 Q Well, how about for the truth of it?

12 A Well, I will say this: We have looked at the
13 availability, reliability, and the environmental
14 pressures which are on those units and have concluded
15 that there are a number of factors which motivate us to
16 retire those units sooner rather than later which have
17 to do with -- principally with reliability impacts that
18 are caused by the MATS rule and also with our
19 understanding of existing rules which are in the process
20 of being implemented over the next few years.

21 So, we have concluded, based on those factors,
22 that our intention -- that it is appropriate for us to
23 retire those units sooner rather than later.

24 Q Did you tell that to DEP when you were in for
25 your air permit recently that, hey, we need to be done

1 **with this in 2018?**

2 A Well, what we said to DEP is that we have an
3 air permit which is effective under its -- on its
4 current face through the end of 2020. I think both we
5 and DEP understand that there are other considerations
6 which will be developed, you know -- well, reliability
7 is, of course, not an issue far as DEP is concerned.
8 So, we didn't discuss that side of it.

9 But you know, there are also other
10 environmental considerations which are going to be
11 effective moving forward which may change the facts on
12 the ground as we get closer to 2018.

13 Q Sure. And I don't really want to spend a lot
14 of time talking about environmental regulations that may
15 or may not become effective. I mean, I would rather
16 deal with the facts as we have them today because there
17 are a lot of uncertainties surrounding this.

18 And you know, I guess the Administration just
19 proposed some regulations; isn't that true? Are you
20 talking about those?

21 A No, in fact, we're not. We're talking about
22 rules which are already promulgated, but which have yet
23 to fully take effect.

24 Q And what is that?

25 A Well, the chief one of those that we have our

1 eye on is the one-hour SO2 National Ambient Air Quality
2 Standard. We believe that full implementation of that
3 rule in that area will put additional operating pressure
4 on those units.

5 **Q Isn't it true that that rule is designed**
6 **primarily to get it mobile pollution sources as compared**
7 **to stationary generation sources?**

8 A The SO2 ambient air quality standards?

9 **Q Yeah.**

10 A No, I don't believe so.

11 **Q The one-hour -- the one-hour NOx ruling?**

12 A Well, no, we're talking about SO2, not the --
13 not the nitrogen oxide rule that you're thinking of it.

14 **Q All right. Well, let me -- the Commission --**
15 **you recently -- the old family car needed some repairs**
16 **recently. And I think you came in front of the**
17 **Commission and asked for \$28 million to repair the**
18 **family car; isn't that true?**

19 MR. WALLS: Can I object to this line? Can we
20 actually use CR1 and 2 instead of just "old family
21 car"? That's the appropriate --

22 MR. MOYLE: Come on. I mean, this stuff is
23 pretty dry as we go. It's, you know, trying to
24 have a little lev- -- a little fun. I mean, I
25 think he said he understands the reference.

1 CHARIMAN GRAHAM: I have no reason to overrule
2 his objection. So, let's just stick with CR1 and
3 CR2.

4 BY MR. MOYLE:

5 Q Didn't you come in and ask for a bunch of
6 money from this Commission to keep CR1 and 2
7 operational?

8 A If you are referring to our request under the
9 ECRC docket that was closed this past December, we did
10 request consideration of funds to provide environmental
11 upgrades in order to allow us to run those units in
12 compliance with the MATS rule, which became effect- --
13 well, which will become effective in 2015. I feel like
14 it's already effective, but it will come effective in
15 2015.

16 Q How much money did you -- did you seek
17 approval for?

18 A You appear to have the document in front of
19 you and I don't. So, I'll let you say that number.

20 Q Would you be more comfortable if I gave you
21 the document?

22 A I mean I don't --

23 Q You're a smart guy.

24 A I don't have the number off the top of my
25 head. I'll say that. But you know, it was in that

1 range that you're talking about.

2 Q Well, let me just give you a copy of the
3 document.

4 A Okay.

5 Q And consistent with Mary Anne's remarks
6 previously on the orders -- I mean, I understand that
7 they can be cited and don't need to be introduced as
8 exhibits. So, I'm just going to refer to them in that
9 context.

10 CHARIMAN GRAHAM: I guess the question I have
11 is: Do you plan on spending a lot of time with
12 that document? Because I don't think we have it in
13 front of us.

14 MR. MOYLE: There are a couple of points I
15 want to make with it.

16 CHARIMAN GRAHAM: I think we probably need to
17 have some copies of it.

18 MR. MOYLE: All right.

19 BY MR. MOYLE:

20 Q Mr. Borsch while the copies are made, we'll
21 make efficient use of our time. And I want to go on to
22 another area, briefly, if I could.

23 A Okay.

24 Q You were asked some questions about -- about
25 the reserve margin and the FRCC number and Duke's number

1 in terms of reserve margin. And I want to just spend a
2 minute and explore that a little bit as to your
3 understanding of that.

4 A Okay.

5 Q You're responsible for planning for Duke in
6 Florida; is that right?

7 A Yes, it is.

8 Q Do you have interactions with others who have
9 responsibilities for planning for Duke in other
10 jurisdictions that Duke operates or has subsidiary
11 companies operating?

12 A We talk.

13 Q Do you know what the reserve margin is in
14 North Carolina -- that they use in North Carolina?

15 A Not exactly, but it's approximately 15 or
16 16 percent.

17 Q South Carolina?

18 A I believe the number is similar, but I don't
19 know for sure.

20 Q Indiana?

21 A I don't have any idea.

22 Q Do you know of any other State that uses a
23 20-percent reserve margin for planning --

24 MR. WALLS: I'm going to object for relevance.

25 MR. MOYLE: For planning purposes.

1 CHARIMAN GRAHAM: I'll allow it.

2 THE WITNESS: I will say that State planning
3 processes vary significantly. I think there was a
4 discussion yesterday about the difference between
5 regulated utility states and RTOISO states. So,
6 I'm not aware of any, but I also would not begin to
7 suggest that I have a comprehensive knowledge of
8 those processes across the whole country.

9 BY MR. MOYLE:

10 Q And I think in response to a question from
11 Mr. Cavros, you said, well, FRCC uses 15 percent, but
12 you reference the stipulation -- I think you said, well,
13 that's an understanding that the investor-owned
14 utilities -- they need to step up to 20 percent; is that
15 fair?

16 A I do not have the stipulation in front of me,
17 but that's been my understanding of it.

18 Q And do you have an understanding as to why the
19 investor-owned utilities would need to step up to
20 20 percent?

21 A I was -- I'll just say that that stipulation
22 was made a long time before I came to work in this area.
23 So, exact details of how that was hammered out are
24 before my time.

25 Q So -- so --

1 A So, I'll go with no.

2 Q From an overall perspective with respect to
3 the State of Florida, do you have a sense whether -- if
4 you looked at the State as a whole, whether it would be
5 long on power? Short on power? Just about right?

6 A I was unable to attend this year's ten-year
7 site-plan workshop held a couple of weeks ago, but it is
8 my understanding that the FRCC reported in that workshop
9 that the planning is suitable to meet the needs of the
10 State going forward.

11 Q Okay. And look, your job is to be up to speed
12 on planning, right, for the company?

13 A For the company.

14 Q And -- well, I know you can review all of the
15 ten-year site-plan filings. I understand the FRCC said
16 suitable. I'm asking you, as you sit here today -- you
17 know, you talked about Seminole wholesale contracts.

18 If you could, just answer the question as to
19 whether you have any understanding that the State, as a
20 whole -- whether it's long in power, short in power, or
21 just about right.

22 A Well, I would say -- let me say this: My
23 focus is on the power available to serve DEF. So, you
24 know, my interest isn't necessarily in how the State as
25 a whole performs unless FRCC comes to us and tells us

1 that there is some kind of an issue one direction or the
2 other, which they have not done.

3 So, in terms of the power available to DEF, my
4 sense is that we are about right. But you know, I
5 recognize that we have significant constraints. You
6 know, for instance, if there were long supplies in some
7 areas of the State or, you know, in Georgia or whatever,
8 that may not be relevant to my planning process because
9 they may not be able to be delivered into our service
10 territory.

11 **Q And I'm just asking you about Florida.**

12 A Yeah. Well, so my answer -- my answer is I
13 have not focused on how long or short the other
14 utilities in Florida may be except inasmuch as it
15 impacts, you know, the relatively modest amount of power
16 that's actually deliverable to us from those other
17 interfaces.

18 **Q Don't the utilities work with each other and**
19 **help each other and lean on each other if one of them is**
20 **short on an operational basis?**

21 A In emergency situations, yes.

22 **Q And does FRCC help in that? Or do you all**
23 **just, you know, deal with each other bilaterally in**
24 **those situations?**

25 A Those kinds of short-term operational

1 activities are pretty much outside the scope of my area.

2 **Q So, do you have information about it or no?**

3 A Not specific information about how that's
4 coordinated, no.

5 **Q Do you know the duration by which those**
6 **transactions can take place? I mean, days? Months?**
7 **Years?**

8 A It's my understanding that typically those are
9 more on the order of hours than any of those other
10 measures. I mean, if we're going to have a contract for
11 months or years, we'll contract that, you know, in a
12 wholesale forum.

13 **Q Right. So, I guess the point would be, you**
14 **know, if you are short -- you know, if your estimate is**
15 **a little off and you're a little short, there is the**
16 **ability to look to other utilities in Florida to help**
17 **you meet on exigent circumstance, correct?**

18 A Well, we don't plan for that because each of
19 the utilities plans to serve their own load. And the
20 ability of the other utilities -- I mean, and you know,
21 similarly, the other utilities do not plan to support
22 us. So, the ability of the various utilities to supply
23 each other power on an emergency basis -- and even that
24 is limited by the transmission constraints at the moment
25 of the emergency.

1 Q Okay. So, I'm not sure I got a yes or no to
2 that question.

3 A Well, ask me the question again. I'll try
4 again.

5 Q So, you answered about we don't plan for this.
6 My simple question was: If you're short on a daily --
7 on an operational basis -- tomorrow, y'all are short,
8 you need some power, the utilities work with each other
9 and will help each other out and provide power and will
10 sell power if there is an emergency situation that
11 requires Duke to get additional power, correct?

12 A To the extent that there is capability, both
13 in terms of capacity available from another utility and
14 transmission capability available, the utilities will
15 sell each other power on a short-term basis, usually at
16 a rather exaggerated rate, I believe.

17 Q And back to my question about long or short --
18 you understand long to be excess power, correct?

19 A I did understand that, yes.

20 Q And short to be, you know, there is not excess
21 power out there.

22 A I did understand that.

23 Q Okay. And as we sit here today, there are a
24 number of entities at this table that, I think, have
25 power for sale. Would you agree with that?

1 A Clearly.

2 Q So, NRG -- what are they at, 400 megawatts?

3 A Roughly. Although --

4 Q What does Shady Hills have?

5 A Well, Shady Hills has -- is under contract to
6 us. It has 300 and some megawatts. But those -- those
7 megawatts are fully contracted to us. They are part of
8 and they are included in our reserves and reserve
9 margin.

10 Q Do they go beyond 2018?

11 A Yes, they do. Our Shady Hills contract
12 extends through 2024.

13 Q What about L and S Power?

14 A Which facility are you referring to?

15 Q A peaking facility. Are you familiar with
16 L and S Power?

17 A Are you referring to the DeSoto facility?

18 Q Yes.

19 A Okay. I am familiar that that facility
20 exists, yes.

21 Q How much power do they have?

22 A 300 and some megawatts, I believe.

23 Q Did you consider the L and S Power
24 availability and facility in your resource planning?

25 A They, in fact, in the bids -- in the number of

1 bids made to us during the planning process, which led
2 to our 2016 and '17 evaluations, they were among the
3 entities who bid to us.

4 Q I want to follow up on one other line and then
5 we'll come back to this --

6 A Okay.

7 Q -- document.

8 You were asked a number of questions by OPC
9 about Seminole.

10 A Uh-huh.

11 Q And I just want to make sure that I understand
12 how you consider Seminole when you're planning and when
13 you're asking this Commission to approve a \$1.5 billion
14 capital spend that the ratepayers will finance.

15 To the extent that some of that power is going
16 to be supplied wholesale to Seminole --

17 A Yes.

18 Q Does Seminole pay for the capital costs
19 associated with the Citrus County combined cycle? I
20 mean, will they make any contribution toward that
21 effort? Or is that something that the ratepayers pay
22 for and Seminole gets to enjoy some power coming out of
23 that facility?

24 A I am not the witness -- I'm not fully
25 conversant with the issue of ratemaking and separation

1 factors. But I know that those very issues were debated
2 at some length by parties, including yourself, during
3 the settlement negotiations.

4 Q Right. And we can't really talk about
5 those --

6 A Well, neither can I.

7 Q -- here in terms of those specific
8 conversations. I just want to get your general
9 understanding because I think -- I think to the extent
10 that you're proposing this power plant in part because
11 of a need that Seminole has, I want to make sure that
12 the ratepayers and my clients aren't being asked to pay
13 for that need.

14 Can you assure me that that's the case; that
15 your proposal here with the 1.5 billion -- that
16 ratepayers aren't being asked to fund that for the
17 benefit of Seminole in any way, shape, or form?

18 A I am not conversant with how those costs are
19 translated to rates one way or the other.

20 Q So -- okay. So --

21 A Or what the separation factors are between
22 wholesale and retail.

23 Q So, you just don't know.

24 A I just don't know.

25 Q Okay. That's fair enough.

1 **So, let's go back to the order.**

2 A Yes.

3 Q **That is in Docket No. 130301.**

4 A Uh-huh.

5 Q **And I was asking you some questions about**
6 **this.**

7 A Yes.

8 Q **You all just were recently in front of the**
9 **Commission asking for \$28 million to be spent to help**
10 **Crystal River 1 and 2 continue to run; is that right?**

11 A Yes. That was requested in order to ensure
12 that those units could continue to operate in compliance
13 with the MATS rule, which I think, as we said a moment
14 ago, comes into effect in 2015.

15 Q **And with respect to the ability of the Crystal**
16 **River 1 and 2 to continue to operate, let me refer you**
17 **to Page 3, up under "B" where it says DEF's proposed**
18 **activities.**

19 A Uh-huh.

20 Q **The orders says, "Current air permits allow**
21 **the unit to continue operating on coal through 2020,**
22 **presuming compliance with all applicable regulations."**
23 **And there is a footnote. "Currently applicable**
24 **regulations include MATS and CAVR, which DEF asserts are**
25 **the governmental-imposed restrict-" -- "regulations that**

1 **require the activities proposed in the petition."**

2 A Uh-huh.

3 Q The footnote goes on. And the portion that I
4 wanted to draw your attention to is it says, "DEF
5 notified the Florida Department of Environmental
6 Protection of its decision to shut down CR1 and 2 by
7 December 31, 2020." Is there anything factually that I
8 just read that you believe is not correct?

9 A No. I would suggest that that's not the whole
10 story. But there is nothing factually incorrect in the
11 statement that you just read.

12 Q The Commission also said that by spending
13 \$28 million now -- and these ratepayers are going to
14 start paying for it now, right? This is in the
15 environmental cost recovery clause; is that right?

16 A Well, that's my understanding; if not now,
17 certainly in the next year or so, yes.

18 Q They said on Page 6 that the compliance
19 requirements for MATS -- let me refer you down to the
20 bottom where it says "decision."

21 "The compliance requirements for MATS are
22 known at this time. And proceeding with the proposed
23 activities is estimated to result in more than
24 \$300 million in savings when compared to retiring
25 Crystal River 1 and 2 in 2016 with net savings as soon

1 as 2017."

2 Do you have any reason to disagree with that
3 statement?

4 A No.

5 Q So, if there is going to be 300 million in
6 savings with a net savings as soon as 2017, would it be
7 a fair assumption to suggest if Crystal River 1 and 2
8 continued to operate in 2018, '19, '20, that there would
9 be savings associated with that as well?

10 A Not necessarily, no. Those are not the same
11 direct comparison.

12 Q Right, but with respect -- I mean, y'all put
13 on evidence that said you're going to save 300 million.
14 And the Commission relied on that and made this
15 decision. It doesn't all of a sudden just do a 180 and,
16 now, all of a sudden, you know, this is a bad deal
17 that's going to cost ratepayers money.

18 A Well, this is not a bad deal that's going to
19 cost ratepayers money. The point here was and the point
20 of the analysis that was presented to the Commission in
21 this docket -- I don't want to reargue this docket
22 that's already closed.

23 But I will make this one point. The analysis
24 that was provided to the Commission in the docket that
25 you're putting in front of me here was to make a

1 decision between investing a modest amount of money in
2 those units to allow compliance for those units going
3 forward over the next few years as compared to the
4 immediate need to shut them down, depending on DEP's
5 decision at that time on our extension request in either
6 the spring of 2015 or the spring of 2016.

7 That decision, had it happened, or had we not
8 been able to develop a compliant strategy, would have
9 resulted in triggering a large number of different
10 costs, both for replacement power and most especially
11 for transmission impacts, which end up, you know,
12 constituting the bulk of that \$300 million that you
13 referred to.

14 That's a different question than the question
15 of whether or not it's cost effective to, now, turn --
16 come back and replace those units at a later date in
17 2018 when we have developed a project which is, you
18 know, designed specifically to fill that transmission
19 gap going forward over the long haul.

20 **Q So, are you familiar with the term "zig and**
21 **zag"? I mean, it seems to me that here is this order**
22 **from the Commission -- you tell me if I'm wrong. Here**
23 **is an order from the Commission, April 16th, 2014, that**
24 **says ratepayers pay 28 million. It's a good deal**
25 **because you're going to save 300 million by 2017.**

1 Now, you're in front of the Commission today
2 saying, you know what, we need to retire Crystal River 1
3 and 2, even though it can continue to operate, as we
4 have represented, through 2020. We need to continue to
5 operate it because it's really not that good of a deal
6 compared to the Citrus County project.

7 Have I said anything that's --

8 A Well --

9 MR. WALLS: Objection. Asked and answered and
10 mischaracterization of his immediately prior
11 answer.

12 CHARIMAN GRAHAM: I'll let him answer the
13 question.

14 THE WITNESS: I think that it does
15 mischaracterize what I said a moment ago. I also
16 think it mischaracterizes the discussion that was
17 had in the Crystal River South docket that you're
18 referring to.

19 We recognized in that docket, and in a variety
20 of other filed testimony, that the solution which
21 we came up with to comply with MATS is not a
22 solution which we believed was an appropriate long-
23 term solution and that it was specifically designed
24 with the intention of bridging the time gap to the
25 addition of new generation. And in particular,

1 that new generation is the Citrus combined cycle.

2 BY MR. MOYLE:

3 **Q Isn't it true that you went to DEP and**
4 **suggested that you could -- you had conversations with**
5 **them about running Crystal River 1 and 2 through 2025?**

6 A I'm not aware of those conversations.

7 **Q So, you're not in those meetings or in those**
8 **conversations directly; is that right?**

9 A No, but I will say as a matter of general
10 knowledge, that it has been true for some time now that
11 DEP has talked to us about the appropriate measure of
12 compliance with the clean-air visibility rule being
13 cessation of coal-fired operation at Crystal River by
14 the end of 2020 or the installation of new scrubbers at
15 that plant, which was clearly not a cost-effective
16 option.

17 MR. MOYLE: Well, Mr. Chairman, I'm spending
18 quite a time on this, but it's important for
19 FIPUG's case in terms of --

20 CHARIMAN GRAHAM: Understandable.

21 MR. MOYLE: You know, so I have another
22 exhibit that I would like to ask staff to help me
23 pass out.

24 CHARIMAN GRAHAM: Okay. So, are we going to
25 call this --

1 MR. MOYLE: Excerpt, current draft air permit.

2 CHARIMAN GRAHAM: No. 145.

3 BY MR. MOYLE:

4 Q Sir, do you know that DEP, just within the
5 last couple of weeks, provided your company with a draft
6 air permit for their review?

7 A I have not reviewed the document, but I was
8 aware that it was issued.

9 Q Okay. And I would represent to you that I've
10 gotten this off FDEP's website with respect to the draft
11 air permit.

12 I just wanted to refer you -- this is an
13 excerpt, but on Page 6 of 72 -- it's the last page of
14 the excerpt.

15 A Yes.

16 Q Ask you to read into the record Paragraph A.2.

17 A "Cessation of coal combustion. Units 1 and 2
18 shall cease to be operated as coal-fired units by
19 December 31st, 2020."

20 Q And it references a number of permits,
21 correct?

22 A That's right.

23 Q So, as far as the most -- a recent publication
24 by DEP with respect to your draft air permit, DEP
25 appears to be saying that Units 1 and 2 shall be able to

1 continue to operate through the end of 2020, correct?

2 A This air permit contemplates that as a
3 possibility, yes.

4 Q I mean, I think it does more than contemplate
5 it, right? I mean, if DEP is the permitting agency that
6 governs your air operations in the State of Florida,
7 it's kind of telling you you can operate through 2020,
8 right?

9 A Well, allow me to suggest that that is
10 absolutely true, but it is also -- we also recognize
11 that, you know, there are going -- there are additional
12 rules in force which may change this consideration going
13 forward.

14 Q Right. And I mean, I don't want to get into
15 shades of gray, but absolute truths are death and
16 taxes -- and maybe not even taxes, right, so --

17 A But I mean, yes, we have requested that DEP
18 give us a permit which would provide us with the
19 flexibility to operate these units as long as 2020, if
20 that appeared to be the appropriate thing to do.

21 Q So, if you continue to operate Crystal River 1
22 and 2 in 2018, in 2019, and 2020, and you consummate
23 this deal with Calpine, you don't have a need for the
24 proposed combined cycle, correct?

25 A No, I wouldn't say that. First of all, I will

1 disagree with your premise because I don't believe that
2 it is a prudent decision on our behalf to operate those
3 units longer. There is an exhibit, which has already
4 been discussed in my testimony showing an analysis of
5 pushing back those units by one year, which actually
6 costs the customers money to the tune of some
7 \$90 million.

8 Second of all, I think, as we have discussed
9 previously, we have serious reliability concerns about
10 the long-term acceptability of the site-averaging
11 approach at Crystal River. You know, we believe that it
12 is something that we can manage over a reasonable number
13 of years. But you know, the longer that it goes on, the
14 higher the risk associated with that approach.

15 And third of all, there are already rules in
16 place, which, once the DEP fully implements them, will
17 cause additional costs, you know, and compliance
18 difficulties for those units. So, you know, I disagree
19 with the premise that you could extend those units
20 longer.

21 Now, to answer your specific question, you
22 know, I would have to sit down with a chart under the
23 hypotheticals to try to figure out, you know, to what
24 degree, you know -- I mean, you're talking about
25 remaking the entire resource plan when you make those

1 kinds of assumptions broadly, which are, you know, not
2 in tune with facts on the ground.

3 Q Well, let's just spend a minute talking about
4 that. I haven't come out and said, well, what you if
5 you bought the L and S Power plant, or what if you
6 bought the NRG power plan.

7 I've asked you two things. And I think, you
8 know, we've had discussions with your lawyers yesterday
9 about, well, this is in the record. We can talk about
10 this; one is, assuming the Calpine deal gets
11 consummated, which you guys have said that's an
12 operating assumption. Even though we don't have any
13 details about it --

14 A Yeah.

15 Q -- we'll go forward.

16 And then the second is the retirement of
17 Crystal River 1 and 2. And that's something that you
18 all put on the table, right, the retirement of Crystal
19 River 1 and 2?

20 A Yeah, we believe it's appropriate to retire
21 those units in the timeframe we've discussed.

22 Q Right. And you just gave me a bunch of
23 reasons why you needed to do it --

24 A Yes.

25 Q -- including reliability. But you convinced

1 the Commission just recently that continuing to operate
2 Crystal River 1 and 2 is reliable, right? And they were
3 aware that the unit could run through 2020. I mean,
4 they cited it in their order.

5 A Well, we told the Commission that we believed
6 that accepting that reliability risk for a period of
7 time was appropriate given the large amount of savings
8 that would accrue over a very short period of years.

9 Q Okay. So, let me just go to Page 5 of the
10 order at the bottom. And I'm going to quote, "Based on
11 the information provided by DEF, we find that the
12 proposed changes to the electrostatic precipitators are
13 necessary for DEF to continue the reliable operation of
14 CR1 and 2 under the environmental requirements including
15 CAVR."

16 A Uh-huh.

17 Q I read that correctly, right?

18 A I believe you did.

19 Q Did the Commission get it wrong when they used
20 the word "reliable" in there?

21 A No, they did not inasmuch as that was a
22 comparison to an alternative in which we did not do the
23 electrostatic-precipitator work and operated the units
24 with essentially no compliance margin relative to the
25 incoming MATS rule.

1 **Q Your title -- it says "analytics." You're the**
2 **director of planning and analytics. What does that**
3 **mean? What do the analytics mean?**

4 A Well, actually, in that context, that title
5 refers to a -- an organization within the Duke
6 structure, which encompassed both integrated resource
7 planning -- my specific responsibilities -- and
8 wholesale and renewable analytics, which was managed by
9 one of my colleagues -- a subgroup of the Department,
10 which was managed by one of my colleagues in Charlotte.

11 **Q So, it's more of an organizational type thing**
12 **as compared to saying, hey, you're the guy in charge of**
13 **figuring out what analytics to run, PROMOD or anything**
14 **like that; is that fair?**

15 A Well, in the context of the Florida Integrated
16 Resource Planning and working in concert with my
17 colleague, who runs the specific modeling entity for us,
18 I am in charge of working on reviewing -- setting up,
19 reviewing, and vetting the modeling for all of these
20 kinds of analyses that we're discussing here.

21 **Q You were here -- you were here yesterday when**
22 **Mr. Hibbard was on the stand?**

23 A Yes.

24 **Q He talked about optionality or flexibility as**
25 **a concept or policy that he believed had value to the**

1 Commission, to be able to be nimble, to adjust as things
2 changed.

3 Was there anything that he testified to with
4 respect to the value of the flexibility that you
5 disagreed with?

6 A I can't think of anything in particular, but I
7 would say that my impression on listening to his
8 testimony -- and we would have to ask the Court Reporter
9 to read it back for any specific quotations, but my
10 impression on listening to his testimony was that he was
11 talking at a very high level about the value of
12 flexibility and did not provide any particular examples.

13 Q Well, let me explore that a little bit with
14 you. You would agree that, you know, once you sign an
15 EPC contract to build something that costs \$1.5 billion,
16 whether it be a combined cycle unit or whether it be a
17 nuclear unit, that once you sign a contract like that,
18 that there are -- you're kind of locked in. And there
19 are consequences if you say, no, I don't think we want
20 to do this; is that fair?

21 A There are costs to changing your mind, yes.

22 Q So, in that context, flexibility -- I mean,
23 flexibility would have been nice if you had had it with
24 respect to Levy, agreed?

25 A Most of the Levy --

1 MR. WALLS: Object to the relevance.

2 A -- decisions were before my time.

3 Q Your rebuttal testimony, Page 24, Line 16 --

4 A Which docket?

5 Q This is the 10.

6 A Okay. So, page 24?

7 Q Right. Line -- Line 16. You're asked the
8 question -- tell me when you're there.

9 A Yes.

10 Q You're asked a question, "Do the NRG and
11 Calpine witnesses assert any other reason for the
12 Commission to defer the Citrus County Combined Cycle
13 Power Plant beyond 2018," right?

14 A Yes. I see that question.

15 Q Okay. And there is an answer. You say, yes,
16 both of them are saying you ought to defer. But I was
17 curious when it was -- the question said, any other
18 reason.

19 What is your understanding as to the reasons
20 that NRG and Calpine witnesses are suggesting to the
21 Commission that the Citrus County combined power plant
22 be deferred?

23 A I think if you look in the testimony before
24 that, there is a discussion about assertions made by
25 both Mr. Hibbard and Mr. Pollock about our load

1 forecast. There is a series of questions and answers in
2 regard to the assertions that those witnesses have made.

3 So, the question that you are pointing to is a
4 summary to identify whether there were things not
5 covered in those previous questions.

6 Q Okay. So, you would agree that both
7 witnesses -- expert witnesses for NRG and Calpine have
8 said, consistent with Mr. Hibbard, flexibility -- you
9 ought to look at the deferring the combined cycle unit,
10 correct?

11 A Both witnesses have suggested that, for
12 various reasons, it would be possible to defer the unit.
13 Those are not assertions that we agree with, as
14 demonstrated in my testimony.

15 Q Okay. Let me see if we can agree on this.
16 Would you agree that Duke is attempting to do what is in
17 the best interest of their customers in this case?

18 A I would agree with that.

19 Q Okay. And I want to spend just a minute and
20 explore that with you, if I could.

21 A Okay.

22 MR. MOYLE: Mr. Chairman, I was going to hand
23 the witness a copy of the pre-hearing order, if I
24 could. There are other copies over there. Staff
25 has copies if the Commissioners need them to follow

1 along. I'm going to ask him about some points.

2 It's the pre-hearing order in the case.

3 BY MR. MOYLE:

4 Q You have that in front of you?

5 A I do.

6 Q Okay. Let me refer you to Page 17. If you go
7 up, 16 is FIPUG's position.

8 A Uh-huh.

9 Q Page 17, the last sentence -- if you could,
10 just read that into the record, please.

11 A I'm sorry? At very bottom of the page?

12 Q Page 17.

13 A Yes, under the --

14 Q Where it says, "Deferring the Citrus County,"
15 right above "PCS Phosphate's position."

16 A Oh, the last -- the last sentence of FIPUG's
17 position?

18 Q Yes, sir.

19 A The last sentence of FIPUG's position says,
20 "Deferring the Citrus County need determination decision
21 will benefit ratepayers and ensure that the Commission
22 has better information about Duke's future needs for
23 energy to serve its loads."

24 Q And if you go down to PCS Phosphate's
25 position -- if you would, just read into the record the

1 **last two sentences starting with "in fact."**

2 MR. WALLS: We can stipulate that the parties
3 took these positions in the pre-hearing order.

4 MR. MOYLE: No, I appreciate that. I mean, I
5 think I have the ability to have him publish it.
6 I'm crossing him. I just wanted to make sure we
7 understand where we are.

8 CHARIMAN GRAHAM: Okay.

9 THE WITNESS: The PCS -- I found the sentence
10 you're referring to, which actually isn't quite the
11 end of the sentence, but -- of the statement, but
12 the sentence you're referring to says, "In fact, it
13 appears that the project should be deferred by at
14 least three years."

15 BY MR. MOYLE:

16 **Q Continue.**

17 A "Also, considering the ongoing rate impacts on
18 Duke's customers imposed by the utility's three failed
19 nuclear ventures at Crystal River and Levy County, Duke
20 should pursue all available options for meeting its
21 capacity needs while minimizing customer impacts."

22 **Q And if you flip over to Calpine's position on**
23 **Page 19 --**

24 MR. LAVIA: Mr. Chairman, I'm going to object.
25 That is Calpine's positon. It is what it is. It

1 may not be its position post-hearing briefs. We'll
2 stipulate that that was our pre-hearing position.
3 It's going to take a while if he's going to read
4 everyone's position into the record.

5 MR. MOYLE: Well, Calpine surely had the
6 opportunity to put on witnesses and say that they
7 changed their position. They opted to withdraw all
8 their witnesses except Mr. Hibbard. So, if they
9 wanted to say, well, our position has changed, they
10 should have done it when they had a witness.

11 CHARIMAN GRAHAM: I understand that. He's
12 saying he's stipulating that that was their
13 position at the beginning.

14 I guess my question to you is: Are you just
15 going to ask a question after you get to the end of
16 this or where are we getting to?

17 MR. MOYLE: Yeah, what I was going to do is go
18 through and have him acknowledge, hopefully, that
19 every party in this case has said in some way or
20 shape, you ought to defer this thing. You ought
21 not to get locked in to the 1.5 billion, you know,
22 in 2018.

23 I mean, if everyone wants to stipulate that
24 that's the position every party has taken, then I
25 can ask him, you know, my kind of ultimate

1 question.

2 CHARIMAN GRAHAM: Ask him the ultimate
3 question.

4 MR. MOYLE: Okay.

5 BY MR. MOYLE:

6 Q So, we just agreed that you want what's -- you
7 being Duke -- want what is in the best interest of its
8 customers.

9 A Yes.

10 Q And I think we've established that the
11 customers in this case, maybe with the exception of
12 OPC -- to be fair, though, they did introduce that
13 exhibit today with the deferral -- but that the
14 customers appear to be saying you should defer the
15 construction of the Citrus County plant. We agree?

16 A I would say that the intervening parties have
17 asserted that, as established in this pre-hearing order.

18 Q Okay. And the intervening parties here
19 represent a variety of interests, right? I mean, mine
20 represent large industrial customers. Mr. Rehwinkle
21 represents all the customers, right?

22 A You do.

23 Q Are --

24 MR. CAVROS: Excuse me, Mr. Chairman. I just
25 want to make clear that SACE did not file a pre-

1 hearing order in this docket.

2 CHARIMAN GRAHAM: Fair enough.

3 MR. CAVROS: Prehearing statement. Thank you.

4 THE WITNESS: And since --

5 BY MR. MOYLE:

6 Q So, really, what I -- I just want to --
7 notwithstanding the fact that Duke said we want to do
8 what's in the best interest of the customers, and all
9 the customers are saying, we think you ought to defer
10 Citrus County, you would say, well, the customers -- you
11 don't understand. You got it wrong; is that fair?

12 A I think that the point of this case is for
13 Duke to show, as I believe we have shown, that the
14 construction of the Citrus County unit on the schedule
15 proposed is the most cost-effective alternative and that
16 we have analyzed other options.

17 And notwithstanding the assertions of various
18 intervening parties, our analysis does not support the
19 idea that any of those options provide more cost-
20 effective solutions by delaying the Citrus plant in
21 addition to the other considerations that you and I have
22 been talking about with respect to Crystal River 1 and
23 2.

24 Q So, the customers got it wrong.

25 A I think the point here is that the analysis

1 that we have -- I mean, let me say this: None of the
2 intervenors that you suggest have provided any specific
3 economic analysis that demonstrates that point fully
4 taking into account all of the costs in question.

5 So, I would say that the question at hand here
6 is whether the analysis that we have provided is
7 complete and to the satisfaction of the Commission to
8 show that the petition, as it is put forward, is the
9 most cost-effective solution.

10 **Q To be fair, I mean, with respect to the**
11 **recently-announced Calpine deal -- I mean, you haven't**
12 **taken into account all of the economics either, have**
13 **you?**

14 A Well, we have actually a pretty good sense of
15 what the economics of the Calpine deal are because we
16 have been analyzing that deal. And I think there is a
17 substantial amount of the information in the record.

18 **Q Do you know the purchase price of the Calpine**
19 **asset?**

20 A I do.

21 **Q Well, I'm not going to ask you what it is.**

22 A That's good.

23 (Laughter.)

24 CHARIMAN GRAHAM: I didn't think you were
25 going to get away with it anyway.

1 BY MR. MOYLE:

2 Q One more line, and I think we'll wrap up.
3 Your transmission-line expert was on the stand yesterday
4 and said he thought you could build a transmission line
5 from the Osprey plant in three years, if he hustled.

6 A Yes, he did.

7 Q All right. And we're expecting a decision
8 from this Commission in October of this year, right, on
9 this petition?

10 A With regard to the Citrus and Hines Chiller
11 projects, yes.

12 Q So, let's assume that you let some time go for
13 appeal, November -- November 2014 -- if you had three
14 years to that, you're in, what, November of '17, right?

15 A Well, you would -- yes.

16 Q Okay. You testified earlier today in
17 questions in response to Mr. Rehwinkle that I found to
18 be a little surprising given that the deal was just
19 announced yesterday morning, that you all, apparently,
20 have already made a decision with respect to building
21 the transmission line. Is that -- is that right?

22 A Well, I think what I said this morning and
23 what I will say again is that, you know, we have been
24 looking at this deal in various forms for a number of
25 months now; and that, as a part of the deal, we

1 recognized that there where will come a day in the
2 future when we will close the acquisition of the unit.

3 We believe that, as a matter of prudent
4 planning, we would begin construction in -- we might do
5 some planning ahead of time. But we would begin
6 construction in earnest on that transmission line once
7 we own the unit in question.

8 **Q And you would agree that having that**
9 **transmission line, having that direct connect is**
10 **beneficial to Duke. It's beneficial to reliability. It**
11 **helps, correct? Because you get --**

12 A It allows --

13 **Q You get --**

14 A It allows us access to the power, the full
15 output of the plant.

16 **Q Which is 600 kilowatts, if you do duct firing.**

17 A Give or take, yes.

18 **Q Wouldn't it make sense to you to try to get**
19 **that transmission line built sooner rather than later?**

20 A Well, the point being that while both we and
21 Calpine presumably intend to work towards successful
22 completion of the deal and the final acquisition of the
23 plant, it is my expectation, you know, subject to the
24 negotiation of the final terms and conditions, that
25 there will be opportunities for either party to get out

1 of the deal if certain performance criteria are not met.

2 And so, it would not be prudent of us to begin
3 a major investment in transmission for that project
4 prior to the actual ownership of the unit.

5 Q Were you involved in the negotiations?

6 A Not directly.

7 Q Okay. I was not either. But it seems to me
8 that if you, rather than waiting, you know, four years
9 to begin a construction line or three years to begin the
10 construction, two years -- what is it? Two years?

11 A Essentially, it's two years.

12 Q Two years. Rather than waiting two years, if
13 this is such an important thing that can help address
14 things like the need for a Citrus County unit, I don't
15 know why you wouldn't do a six-month PPA and then
16 acquire it and move forward.

17 Can you help me with that?

18 MR. WALLS: I'm going to object to the form of
19 the question as vague and ambiguous.

20 MR. MOYLE: I can try to rephrase it.

21 CHARIMAN GRAHAM: Please.

22 BY MR. MOYLE:

23 Q We've agreed that having this direct
24 transmission line is a benefit to Duke and its
25 ratepayers, correct?

1 A In the context of the overall deal in which we
2 eventually own the unit, yeah.

3 Q Right. And Mr. Rehwinkle walked you through
4 an exhibit that he was asking you, well, when are you
5 going to have your transmission lines in. And I think
6 you told him 2020 because you're not going to start
7 building until 2016, correct?

8 A '17, yes.

9 Q Okay. And my question simply is: Well, if
10 this is a benefit and can maybe defer Citrus, did they
11 consider, would you consider, does it not make any sense
12 to consider taking down the plant, acquiring it after,
13 say, a six-month PPA, rather than acquiring it in 2016;
14 acquire it at the end of '15 so you have control of it
15 and you can build a transmission line?

16 MR. WALLS: I'm going to object to the form of
17 the question. It assumes facts that are not in
18 evidence and mischaracterizes the testimony.

19 MR. MOYLE: I think all the facts were in
20 evidence.

21 CHARIMAN GRAHAM: Mary Anne --

22 MR. MOYLE: He can disagree, if he believes
23 I'm mischaracterizing it.

24 Do you want me to rephrase?

25 MS. HELTON: Yes, please.

1 CHARIMAN GRAHAM: I'll allow him to answer the
2 question, if he can.

3 THE WITNESS: Well, the execution of the deal,
4 or the consummation of the acquisition, since that
5 seems to be what you're after, hinges on our
6 seeking, you know, not only the approval of this
7 Commission, but Federal regulatory approval. And
8 the deal is structured in a way which we believe
9 will best give us the opportunity to achieve those
10 approvals.

11 BY MR. MOYLE:

12 Q The reason you don't want to start -- if I
13 understand your testimony, the reason you don't want to
14 start on the transmission line before you own it --
15 because that would be an unacceptable risk; you're spending
16 a lot of capital on a transmission project to a plant
17 that you -- you know, you haven't taken title to; is
18 that right?

19 A Yes.

20 Q Okay. And essentially, I'm just saying, well,
21 why couldn't you take title to it sooner to get around
22 that problem?

23 A Well, I think if you'll refer to the testimony
24 of Ms. Solomon in this case, you will find that she
25 describes a number of hurdles to consummating an

1 acquisition of this type on an immediate kind of a basis
2 as you're describing.

3 **Q But I think those have all gone away, right,**
4 **the FRCC issues? I mean, you've figured out how to --**

5 A Well --

6 **Q -- I think, address those because you have the**
7 **deal. I mean, they were the problems Ms. Triplett**
8 **identified about FERC and transmission and natural gas.**

9 A Well --

10 **Q And now, they've been mitigated.**

11 A I think if you read collectively the testimony
12 of the various FERC experts, what they will suggest to
13 you is that an immediate acquisition of, you know, any
14 of the facilities that we considered was going to
15 present a problem in receiving approval from FERC.

16 That's not the way the current proposed deal
17 is structured, as I have described. So, we're talking
18 about a different scenario.

19 **Q Do you know if any party has agreed to assume**
20 **the risk of the FERC up-or-down decision with respect to**
21 **an acquisition?**

22 MR. LAVIA: Mr. Chairman, I'm going to object.

23 We have given some latitude here, but we are now
24 into FERC testimony that has been withdrawn from
25 this docket. The parties have agreed it's

1 withdrawn. These are issues that are not in this
2 docket. And I think he's gone too far.

3 CHARIMAN GRAHAM: Are the FERC issues brought
4 up in any other places other than with the Calpine
5 witnesses?

6 MR. MOYLE: I think Mr. Borsch has it.
7 Ms. Rule is saying it's in Mr. Borsch's testimony.

8 MR. REHWINKLE: Mr. Chairman, Public Counsel,
9 I would respond to that in support of Mr. Moyle's
10 being able to inquire because the FERC contingency
11 is similar in function to the transmission
12 contingency and other contingencies that are being
13 testified about.

14 So, I think it should be within the latitude
15 to understand the timing of the availability of the
16 unit and its impact on Citrus, if at all.

17 MR. WALLS: Can I insert an objection here?

18 CHARIMAN GRAHAM: Sure.

19 MR. WALLS: A different one. And that's to
20 the confidentiality of the present deal between
21 Calpine. I agree with what Mr. Rehwinkle
22 suggested. And I think Mr. Borsch has already
23 testified several times here today about the
24 structure of the deal and how it relates to
25 regulatory approval.

1 This specific question, though, was: Who
2 bears the risk. And that is a substance that's a
3 confidential part of the deal.

4 CHARIMAN GRAHAM: Well, I guess you can
5 address if we're going down a confidential path or
6 not. But short of breaking any confidentiality, I
7 don't have a problem with him answering the
8 question. So, I guess you can keep your finger on
9 that pulse.

10 MR. LAVIA: Well, the -- Mr. Chairman, the
11 answer to the question is confidential.

12 CHARIMAN GRAHAM: Who --

13 MR. LAVIA: Who bears the risk -- that's part
14 of the confidential terms of the deal.

15 CHARIMAN GRAHAM: Okay. So --

16 MR. MOYLE: I might be able to ask the
17 question in a way that won't require him to reveal
18 it in a way that would be maybe problematic to
19 Mr. Lavia.

20 CHARIMAN GRAHAM: I'll let you reask the
21 question.

22 MR. MOYLE: Okay. And --

23 CHARIMAN GRAHAM: And they have the fingers on
24 the pulse.

25 MR. MOYLE: Thank you.

1 BY MR. MOYLE:

2 Q And you did talk about FERC, I meant, on
3 Page 42?

4 CHARIMAN GRAHAM: He didn't deny it.

5 MR. MOYLE: Okay.

6 THE WITNESS: Yeah, I talked about it.

7 BY MR. MOYLE:

8 Q Yeah, and I just -- and I'm going to ask you
9 this because it's a little bit related to what I just
10 asked you. You said in your testimony, DEF and its
11 customers, obviously, should not be responsible for the
12 cost of obtaining FERC approval of Calpine's July 3rd
13 proposal.

14 And we've gotten into this because I'm pushing
15 you and saying, hey, let's get the transmission line
16 done sooner rather than later because we think it can
17 solve a lot of problems. And you said, well, we can't
18 because we've got this FERC deal.

19 My question is: Are the ratepayers going to
20 be responsible, you know, if FERC says no? I mean, are
21 we -- are the ratepayers taking the risk? Or is that
22 risk being allocated between you and Calpine?

23 THE WITNESS: Let me answer that question this
24 way --

25 MR. BURNETT: No. No. Do not answer that

1 question.

2 THE WITNESS: Okay. I will not answer that
3 question. Thank you.

4 CHARIMAN GRAHAM: Maybe the question should
5 be: Are the ratepayers taking a risk, yes or no.
6 Does that affect --

7 MR. MOYLE: Yes, that's fine.

8 THE WITNESS: I guess --

9 MR. LAVIA: This is getting real close to
10 highly confidential information that is part of a
11 deal that just was consummated yesterday. He is
12 pushing the envelope. I would say that gets in --
13 that answer will yield to divulging confidential
14 information. So, I would have to object.

15 MR. MOYLE: I'm getting some help.

16 CHARIMAN GRAHAM: Okay.

17 BY MR. MOYLE:

18 Q You said in your testimony that -- you said --
19 I'm just going to scratch the DEF. You said customers,
20 obviously, should not be responsible for the cost of
21 obtaining FERC approval for Calpine's July 3rd proposal.

22 A I did say that, yes.

23 Q When you said that, were the costs that you
24 envisioned were costs of denial if FERC says no? When
25 you use the term "cost," did you assume that as well?

1 A We assumed the possibility that FERC would say
2 yes or no.

3 Q Right. And when you said a customer shouldn't
4 be on the hook for the cost, you weren't just talking
5 about the cost of a lawyer. You were talking about, you
6 know, the cost that if you go in that direction and it
7 doesn't work out, there may be other downstream costs,
8 correct?

9 A We contemplated those costs, yes.

10 Q And so, given that, has there been any change
11 in your testimony with respect to you saying that
12 customers should not be responsible for the cost of
13 obtaining FERC approval?

14 A No.

15 Q That's still a true and accurate statement.

16 A Yes.

17 MR. MOYLE: Thank you.

18 Are you good?

19 MR. WALLS: (Inaudible.)

20 BY MR. MOYLE:

21 Q Just a couple of other questions. In response
22 to a question from Mr. Brew, you said that you were
23 mystified by something that he was showing you. My
24 impression was everything he showed you was out of your
25 documents. What were you mystified about?

1 A Well, I guess, looking -- without an
2 opportunity to reproduce Mr. Brew's math, I -- just on
3 the face of it, looking at the trends of the numbers
4 particularly with regard to the load factor that's
5 presented in our ten-year site plan and the trends of
6 the numbers -- I don't know -- now I've forgotten
7 exactly what Mr. Brew called them. But the average-to-
8 maximum megawatt ratios that Mr. Brew calculated --
9 there is a discrepancy in the trends of those numbers,
10 at least when you eyeball them.

11 So, you know, subject to sitting down and, you
12 know, doing some math and, you know, comparing the way
13 the two sets of numbers have been calculated, I said
14 that I couldn't understand, you know, at least at a high
15 level, why there appeared to be a discrepancy in the
16 trends and the numbers.

17 **Q Over a break or over lunch, did you have a**
18 **chance to find out whether there was any discrepancy?**

19 A I did not spend time doing that.

20 **Q All right. So, just to wrap up, you would**
21 **agree with me, would you not, that the Citrus County**
22 **combined cycle unit -- that there are a lot of questions**
23 **associated with it as we sit here today, correct?**

24 A No, I would not necessarily agree with that.
25 I believe that the record lays out in considerable

1 detail the analysis supporting our selection of that
2 unit.

3 Q So, you would not agree that there is a
4 question that is out there with respect to whether
5 transmission lines from Calpine can be put in place and,
6 if they are put in place, whether that might be an event
7 that would argue for deferral of the Citrus County unit.
8 You wouldn't agree that's a question.

9 A No. I think I've testified here that, you
10 know, we don't see that, you know, a nearer-term
11 construction of those transmission lines is feasible;
12 nor necessarily that, even if that were accomplished,
13 that pushing back the Citrus unit would be an
14 appropriate decision.

15 Q You would agree that there is a question as to
16 whether the Calpine deal would be consummated.

17 A I agree that -- you know, that we'll bring
18 that forward as part of a subsequent proceeding.

19 Q So, you would -- do you know whether the deal
20 is going to get done or not?

21 A I don't.

22 Q Okay. So, that's an open question.

23 A It is.

24 Q If the deal does get done, it's fair to say
25 that there is an open question about what when a

1 **transmission line would be constructed between the**
2 **Osprey unit to tie in to Duke's system, correct?**

3 A I think I've testified here that we have a
4 planning assumption, which I believe is very reasonable;
5 that we would begin construction in earnest on that line
6 once we take title to the plant.

7 **Q When did you make that assumption?**

8 A Well, actually, that assumption is made in a
9 number of places in our analyses of the various
10 iterations of the Calpine deal which are presented in
11 one of the exhibits to my rebuttal testimony.

12 **Q Would you agree that there are some questions**
13 **potentially as to what Seminole's needs are in the**
14 **future related to wholesale?**

15 A Well, as I have testified earlier, we have
16 firm contracts with Seminole that span the various years
17 that are identified in our ten-year site plan and which
18 have been introduced in some detail by Mr. Rehwinkle.
19 And we do not have in our ten-year site plan or our
20 future planning speculative assumptions regarding future
21 contracts with Seminole.

22 **Q Right -- and that wasn't my question. My**
23 **question was whether Seminole's needs could change. I**
24 **mean, I think you testified that you don't -- you're not**
25 **aware of anybody sitting down with Seminole and saying**

1 what are you guys looking like on a go-forward basis,
2 correct?

3 A Conversely, I'm not aware that Seminole has
4 called us with any desire to change their executed
5 contracts.

6 Q So, we just don't know.

7 A We just don't know. We do know that we have
8 executed contracts for the amounts --

9 Q Right.

10 A -- that are projected in the --

11 Q And the fact that we don't know is a question
12 mark. You would agree with that.

13 A Well, I think --

14 MR. WALLS: Object. Vague. Ambiguous.

15 THE WITNESS: Yeah, there --

16 MR. WALLS: Don't know about what?

17 BY MR. MOYLE:

18 Q Well, let me just -- let me just wrap it up
19 this way: Seminole, transmission, Calpine, the deal,
20 Mr. Hibbard's testimony about keeping your powder dry,
21 retaining flexibility -- wouldn't you think that this
22 Commission, if they could figure out a way to defer a
23 \$1.5 billion spin, which is going to hit ratepayers in
24 2018 -- that they ought to do their best to try to
25 figure out how it could be deferred?

1 A Well, it's the Commission's judgment to decide
2 what the Commission should do. However, I would say
3 that the case that we have presented shows that we did a
4 number of analyses around the alternatives to the Citrus
5 plant. And all of those analyses supported the
6 selection of the unit and in the timing in which they
7 are proposed.

8 MR. MOYLE: It's always good to talk with you.
9 Thank you for your time.

10 THE WITNESS: Sure.

11 CHARIMAN GRAHAM: Staff?

12 MR. LAWSON: Thank you.

13 CROSS EXAMINATION

14 BY MR. LAWSON:

15 Q Mike Lawson for staff. I appreciate all the
16 time you've put in. So, fortunately, we just are down
17 to one question for you.

18 A Okay.

19 Q This will be brief. The question is very
20 simple. If, for the sake of argument, we assume the
21 approval of the proposed Hines Uprate, what does DEF
22 anticipate the base rate increase would be when the
23 proposed project is placed into service? And if you
24 could, give us an answer in terms of the base rate
25 increase in terms of dollars per 1,000 -- an average

1 **1000-kilowatt bill.**

2 A Yes. 61 cents.

3 MR. LAWSON: Thank you very much. No further
4 questions.

5 CHARIMAN GRAHAM: Commissioners?

6 Commissioner Balbis.

7 COMMISSIONER BALBIS: Thank you, Mr. Chairman.
8 Thank you, Mr. Borsch. I have two lines of
9 questioning. And I just want to be clear there
10 is -- concerning Crystal River 1 and 2.

11 THE WITNESS: Yes.

12 COMMISSIONER BALBIS: I know there have been
13 some schedules created assuming slippage. But in
14 your proposal, what is the anticipated retirement
15 date of Crystal Rivers 1 and 2?

16 THE WITNESS: In our proposal, Crystal River 1
17 and 2 would retire probably sometime in the second
18 quarter of 2018.

19 COMMISSIONER BALBIS: Okay. And in your
20 testimony on Page 20 -- you indicate that the
21 retirement is when Citrus County comes into
22 operation.

23 THE WITNESS: Yes.

24 COMMISSIONER BALBIS: Okay. And going back to
25 the previous decision that we made on the

1 improvements to Crystal Rivers 1 and 2, there was
2 an Attachment A that indicated what the estimated
3 ECRC retail factor impacts of the order that, I
4 believe, Mr. Moyle handed out.

5 THE WITNESS: Uh-huh.

6 COMMISSIONER BALBIS: So, in your proposal,
7 would the Crystal Rivers 1 and 2's retiring in
8 2018 --

9 THE WITNESS: Yes.

10 COMMISSIONER BALBIS: Are you anticipating
11 that customers would continue to pay in 2019, 2020,
12 and 2021?

13 THE WITNESS: I would have to say that how we
14 manage the -- that rate impact is not really in my
15 area. So, I can only say that given the order in
16 existence, you know, I would presume that that
17 would be the case, but I'm not a rate expert.

18 COMMISSIONER BALBIS: Okay. Because I know --
19 and I've read the transcript -- that the discussion
20 was that those units would continue mid-2018 to
21 2020 to realize the full savings. So, it will be
22 interesting to see if -- whatever happens when we
23 move forward, if customers are going to continue to
24 pay even though those units are offline.

25 The other quick couple of questions I have --

1 so, you indicated the bill impact for the \$1.5
2 billion Citrus County project. What would the bill
3 impact be for the Hines Chiller project and also
4 the Suwannee? Do you know that offhand?

5 THE WITNESS: I knew the number about the
6 Hines Chillers because I anticipated the
7 Mr. Lawson's question as -- the answer to that
8 question was 61 cents per thousand.

9 The answer with regard to Suwannee, there
10 is -- I don't have off the top of my head, but I
11 can tell you that there are schedules that were
12 provided in response to staff interrogatories that
13 show the bill impacts both for the Citrus combined
14 cycle project and for the combination of the
15 proposed Suwannee peakers and the Hines Chillers.

16 COMMISSIONER BALBIS: Okay. But is there
17 anywhere in your testimony or offhand what the
18 Citrus County bill impact would be? Or could we
19 just ultimate multiply the 61 cents by ten?

20 THE WITNESS: No, it's not that simple, I
21 don't believe; although, again, I don't calculate
22 rates for a living.

23 However, that question was asked by staff.
24 And we could probably find it for you in the
25 interrogatories that have already been filed.

1 COMMISSIONER BALBIS: Okay. And maybe staff
2 can find that. Let me just continue on because,
3 you know, we have the opportunity here to look at
4 an integrated plan and -- that implements
5 conservation in a unit that's -- that may or may
6 not be needed.

7 You indicated in your testimony that you
8 incorporated the existing goals for conservation,
9 and when you -- correct?

10 THE WITNESS: I believe I said we incorporated
11 the existing approved programs.

12 COMMISSIONER BALBIS: Okay. Which were
13 modified to be -- maintain the existing programs as
14 prior to 2009. So, my question is: What if the
15 goals or the conservation as we move forward -- the
16 goals are lowered or the conservation is less? How
17 does that impact your need-determination analysis?

18 THE WITNESS: Well, if the goals are lower
19 than the ones we used in the projection, then
20 presumably, there will be a need for us to provide
21 additional megawatts to meet firm load.

22 In the very near term, the delta, for
23 instance, between the numbers that we used in this
24 evaluation and, you know, say, our proposed goals
25 in the DSM docket is small enough that it does not

1 have an impact on the reserve margin such that it
2 would trigger additional build in the timeframe
3 that we're talking about here.

4 You know, down the line -- you know, say,
5 post-2020, you know, we would have -- be
6 reevaluating future units out at that time.

7 COMMISSIONER BALBIS: Okay. And then,
8 alternatively, if the goals were higher, how would
9 that affect the need?

10 THE WITNESS: Well, you know, I don't really
11 have a reference point for what higher might look
12 like. You know, I think that the estimates of our
13 DSM experts have been that, given any realistic
14 implementation schedule for achievable DSM
15 measures, that they would not produce a delta above
16 the numbers that we have already used that would
17 change our resource plan.

18 COMMISSIONER BALBIS: Okay. So, then, did you
19 perform an analysis to increase the conservation
20 such that it would delay any one of the three
21 projects by a year?

22 THE WITNESS: Not specifically, no.

23 COMMISSIONER BALBIS: Okay. Okay. That's all
24 I have.

25 CHARIMAN GRAHAM: Commissioners?

1 Redirect?

2 MR. WALLS: Thank you.

3 REDIRECT EXAMINATION

4 BY MR. WALLS:

5 Q Just a few items. I'll try to work backward.
6 I believe you were asked a question about Attachment A
7 to the order that was marked from Docket No. 130301?

8 A Yes.

9 Q Is it your understanding that the -- that the
10 table reflects the spread of the costs that would incur
11 for the MATS compliance program to extend CR1 and 2
12 beyond '15 and '16 to 2018?

13 MR. MOYLE: I'm just going to object. The
14 document speaks for itself. It's a Commission
15 order. And now he's interpreting a Commission
16 order. The best people to do that is the
17 Commission, not the witness.

18 CHARIMAN GRAHAM: I'll see where this is
19 going.

20 BY MR. WALLS:

21 Q You can answer the question, Mr. Borsch.

22 A Yeah, I guess it's my understanding that the
23 costs referenced in this document are the costs required
24 to allow us to continue to operate Crystal River 1 and 2
25 beyond 2016 for any length of time.

1 But I am not -- you know, as I have said
2 before, I'm not a ratemaking expert. So, to speak
3 specifically in any way how those costs would be spread
4 into rates is beyond my area.

5 **Q But those costs -- were those in the -- what**
6 **you presented to the Commission for approval of those**
7 **costs -- was there a benefit to those -- incurring those**
8 **costs?**

9 A Absolutely.

10 **Q What was that to those customers?**

11 A It was more than \$300 million.

12 **Q And while we're on this order, Mr. Moyle asked**
13 **you a bunch of questions about this order. And he**
14 **directed you to specific lines that he had underlined in**
15 **the order and suggested, I think, even using the term**
16 **"zig and zag," that somehow you had come in and**
17 **presented a plan to the Commission in this order that's**
18 **different from the plan you submitted to the Commission**
19 **with respect to the Citrus project.**

20 **Do you recall those questions?**

21 A I do.

22 **Q Could you turn to Page 4 of the order?**

23 A Yes.

24 **Q And in the middle of the page, where it says**
25 **"DEF identified," could you review those first two**

1 paragraphs there and tell me if your compliance program
2 you presented to the Commission that was approved in
3 this order referenced the MATS compliance plan being
4 part of the plan that included the Citrus CC unit or
5 not?

6 A Yes, it does.

7 Q Mr. Moyle also asked you a bunch of what he
8 called open-ended questions; questions that he had. Did
9 any of the questions he related relate to any testimony
10 of any witness in this case?

11 A In general, I would say that I don't remember
12 there being specific references to witness testimony in
13 many of the questions; although, perhaps, not all.

14 Q He also referenced in a question that he
15 referred to you about the FERC issues going away because
16 you have a deal with Calpine.

17 A Right.

18 Q Do you recall that?

19 A I do.

20 Q Had the FERC issues gone away, do you have
21 approval from FERC for that deal at this point?

22 A No, we do not have approval from FERC of the
23 deal at this point. And in point of fact, it is the --
24 it's specifically in recognition of the need for FERC
25 approval that we have worked with Calpine to design the

1 deal that we have.

2 Q And Mr. Moyle also asked you a bunch of
3 questions where he talked about his suggestion that you
4 hurry up and build the transmission line to connect the
5 Calpine Osprey plan to DEF's system to obtain benefits
6 and defer Citrus. Do you recall those questions?

7 A I do.

8 Q Does the connection of the Calpine Osprey
9 plant to DEF's system through these transmission
10 projects defer Citrus CC unit in any way?

11 A No.

12 Q I suppose one of the best ways, I guess, to do
13 this is to go back to the exhibits that Mr. Brew used
14 since you got a bunch of questions on load forecast from
15 SACE, FIPUG, Mr. Brew, and others.

16 A Okay. Give me a moment to organize my papers
17 here and dig those out again (examining document).

18 Q Do you have that in front of you or -- I guess
19 the first one is exhibit -- or --

20 A Sorry. Can you give me the title of the
21 exhibit you're referring to?

22 Q Yeah, the first one was Exhibit 139.

23 A I admit that I didn't number them, so you'll
24 have to give me -- as they were being handed to me. So,
25 you'll have to give me a title.

1 Q Well, this was the one we had to correct the
2 title on. We corrected the title from forecasted annual
3 growth rates summary net firm demand to actual and
4 forecasted --

5 A So, this would be the one with the chart in
6 it.

7 Q Yes.

8 A Okay.

9 Q And Mr. Borsch, this exhibit and his
10 comparison exhibit, which we'll turn to in a second,
11 140, as well as a number of the questions focused on
12 asking you to compare actuals to projected periods,
13 right?

14 A Yes.

15 Q Okay. And can you tell the Commission whether
16 that is the appropriate way to do load forecasting? Do
17 you go back and look at your actuals and then project
18 forward for your load forecasts?

19 A Well, I believe I've answered this to some
20 degree. But no, the projected load forecast is based on
21 a forward-looking assessment of a number of factors
22 which we've discussed, including a number of customers,
23 usage per customer, economic conditions, and so forth,
24 which provide us with an estimate and an analysis of
25 what the future demand requirements are likely to be.

1 You know, certainly, we look back at how those
2 numbers translated in the past, but the actual
3 projection is based on the forward-looking assessment by
4 ourselves and by a number of services which we subscribe
5 to of those future-going conditions.

6 **Q And if we could turn to Exhibit 140,**
7 **Mr. Brew's historic percentage of summer net firm demand**
8 **to average system demand and adjusted summer net firm**
9 **demand forecast --**

10 A Yes.

11 **Q And just so we want to make clear here is,**
12 **when he looks at Column B, the adjusted summer net firm**
13 **demand -- those are not the company's numbers, right?**

14 A Oh, absolutely not.

15 **Q And so, when you agree with him about the**
16 **calculations being accurate, were you agreeing with the**
17 **mathematical calculations on this chart or what these**
18 **numbers represented?**

19 A I was agreeing that he was -- that -- I don't
20 think I agreed with those particular numbers, but I was
21 agreeing that it appeared to me that he was multiplying
22 numbers and coming out with the, you know, right answer
23 in his multiplication. I was not agreeing with the
24 underlying assumption that built up the numbers.

25 **Q And in fact, I'm just reviewing this chart**

1 that he prepared in Exhibit 140 -- and actually, all of
2 the charts. And essentially, what he is saying in his
3 calculations, if we just look at it in simple terms
4 is --

5 MR. BREW: Objecting. He's testifying.

6 MR. WALLS: I'm asking a question.

7 CHARIMAN GRAHAM: Go ahead and ask your
8 question.

9 BY MR. WALLS:

10 Q Is he representing in this chart -- well, let
11 me ask it this way -- I'll start over. What is he
12 comparing when he looks at his adjusted numbers and
13 assumes for the future? Is he relying on a future
14 period? Or is he looking at the past period and
15 projecting that into the future?

16 A Well, again, I have not had the opportunity to
17 attempt to replicate Mr. Brew's mathematics or his
18 assumptions. But he is, I mean, demonstrably, I think,
19 looking at a past period, which, you know, specifically
20 is the last one, two, three, four, five years, and using
21 that as the basis to make a future projection.

22 Q And is an underlying assumption of that that
23 the five-year period will be reflective in every
24 situation, every circumstance of the future period?

25 A Well, I would certainly say that within the

1 range of all these numbers he's presented, he has
2 clearly suggested that the behavior of the relationship
3 between load and demand that has occurred over the last
4 five years is likely to be replicated in the foregoing
5 ten years.

6 **Q And is that a realistic or an unrealistic**
7 **assumption?**

8 A I believe --

9 MR. BREW: If he knows. Has he studied it?

10 MR. WALLS: That's his expertise.

11 THE WITNESS: I'll just say this: You know, I
12 think that we have talked about the fact that the
13 last five years have presented some unusual and
14 challenging economic conditions for everybody. And
15 we certainly don't -- I mean, none of the
16 projections that we have of economic behavior
17 within our service territory going forward
18 anticipate a repeat or a continuation necessarily
19 of what's happened over the last five years.

20 BY MR. WALLS:

21 **Q And how do you do load forecasting? Do you go**
22 **back and replicate the past periods of time and assume**
23 **that's going to be the same in the future? Or do you do**
24 **something else?**

25 A No, we -- we have a method which, as I have

1 said, I think several times now, encompasses taking into
2 account projections of future conditions. You know, the
3 only condition in which we, you know, clearly use long-
4 term past trending is weather, which we trend over 20 or
5 30 years.

6 But you know, going forward, we're looking at
7 economic conditions, at the number of customers, at
8 customer usage. So, you know, those trends are
9 projected forward by -- first of all, in their raw
10 numbers, by a number of economists and economic survey
11 groups to which we subscribe and, then, translated into
12 their impact on projected demand going forward by our
13 load-forecasting team.

14 **Q And moving on to another set of questions, you**
15 **were asked a number of questions about your wholesale**
16 **load and your contracts with Seminole Electric by a**
17 **number of people. Do you recall that?**

18 A Yes.

19 **Q Are you building the Citrus combined cycle**
20 **power project plan to meet wholesale demand?**

21 A No.

22 **Q Can you explain why you're proposing to build**
23 **the Citrus combined cycle?**

24 A Yes. We're proposing to build the Citrus
25 Combined Cycle Plant because we have demonstrated need

1 for that plant based in part on projected load growth,
2 but also on the recent and projected retirements of
3 major units on our system.

4 We analyzed a variety of alternatives, as
5 demonstrated in the testimony and, I believe, have
6 demonstrated that the Citrus Combined Cycle was the most
7 cost effective to meet that identified need.

8 Q And if I can turn you to Exhibit BMHB-3 in
9 Docket 141110, which is your reserve-margin calculation
10 with Citrus and without Citrus --

11 A Yes.

12 Q You recall being asked questions about this
13 document by Mr. Brew?

14 A Yes, I do.

15 Q And I believe he had asked you if the Suwannee
16 CT project was included in the calculation of the with-
17 Citrus and without-Citrus reserve margin?

18 A I believe he did.

19 Q And he asked you if the Calpine Osprey plant
20 was included in that calculation, too, right?

21 A He did.

22 Q Okay. And I believe your answer was no,
23 right?

24 A That's correct.

25 Q Okay. What was the megawatts for the Suwannee

1 CT project?

2 A The megawatts for the Suwannee CT project are
3 a nominal 320 megawatts --

4 Q And what is the firm peak demand that
5 contributes to the reserve margin that you get from the
6 Calpine Osprey plant?

7 A In the period between now and 2020,
8 249 megawatts.

9 Q Okay. And so, 249 would be less than 320,
10 right?

11 A Yes.

12 Q So, how would that impact the chart here with
13 the with-Citrus and without-Citrus reserve margin?

14 A There would be a small reduction in the
15 reserve margin in both tables, you know, for the period
16 between 2015 and 2020 -- actually, I shouldn't say that.
17 It's between 2016 and 2020. Thank you.

18 Q And I believe I have one final question, if I
19 can find the exhibit. It's the exhibit Mr. Rehwinkle
20 showed you of his two-page Citrus delay with Osprey
21 scenario, Exhibit No. 138.

22 A I know the one you're referring to. Here it
23 is. Yes.

24 Q And again, how long does it take to build the
25 transmission projects to connect the Calpine Osprey

1 plant to the DEF system?

2 A A minimum of three years. And certainly
3 Mr. Scott has testified three to four years.

4 Q Okay. If you look on the second page of
5 Mr. Rehwinkle's exhibit here where he's included the
6 Osprey plant at Line 15 -- do you see that?

7 A Yes.

8 Q What year does he have it in?

9 A 2016.

10 Q And by that, he's reflecting here, at least,
11 his assumption that that 515 would be available in 2016,
12 right?

13 A Yes.

14 Q If you move back a minimum of three years,
15 when would you have had to start the construction
16 project for the transmission interconnection between
17 Calpine Osprey plant and DEF system to get the full
18 capacity assuming -- using Mr. Rehwinkle's assumption?

19 A Well, certainly, no time later than sometime
20 last year.

21 Q Is it safe to say that you did not start the
22 construction project to connect the Calpine Osprey
23 system to the DEF system last year?

24 A Yes.

25 MR. WALLS: No further questions.

1 CHARIMAN GRAHAM: Okay. Exhibits?

2 MR. REHWINKLE: Mr. Chairman -- I'm sorry.

3 CHARIMAN GRAHAM: Yes.

4 MR. REHWINKLE: May I have one further
5 question on recross to follow on Mr. Walls's
6 question on the wholesale power question?

7 CHARIMAN GRAHAM: Let's hear what the question
8 is.

9 MR. REHWINKLE: My question is: Are you
10 ignoring wholesale demand completely in your
11 presentation of your need for the Citrus County
12 unit in 2018.

13 CHARIMAN GRAHAM: I'll allow the question.

14 THE WITNESS: No. I think --

15 MR. REHWINKLE: That's all I have. Thank you.

16 CHARIMAN GRAHAM: Did you need any redirect?

17 MR. WALLS: No.

18 CHARIMAN GRAHAM: Okay. I just wanted to make
19 sure.

20 MR. LAWSON: Mr. Chairman?

21 CHARIMAN GRAHAM: Staff, yes.

22 MR. LAWSON: Earlier, Commissioner Balbis had
23 asked a question and the witness had referred to a
24 discovery response. We've located that. If you
25 would like, we could just take a moment to just let

1 everyone know what that is. It's just one
2 sentence.

3 It's currently on the comprehensive-exhibit
4 list as Exhibit 95, which has been entered in the
5 record. The question was, "Assuming approval of
6 the proposed project -- meaning the Citrus County
7 project -- what does DEF anticipate the base rate
8 increase would be when the proposed project is
9 placed into service?"

10 The answer that was provided by Duke at that
11 time was, "DEF estimates a residential base-rate
12 increase of approximately \$6.55 on a 1000-kilowatt
13 bill."

14 CHARIMAN GRAHAM: Thank you.

15 Exhibits.

16 MS. TRIPLETT: Hi. Sorry to change up, but
17 just because we had the withdrawals -- so, we would
18 move Exhibits 48 through 68; to be clear, not 69
19 through 72. And then also, Exhibits 125, 126, 128,
20 131, 132, 133, 134, and 135; but not 127, 129, or
21 130.

22 CHARIMAN GRAHAM: Okay. Did you say 135 was
23 moved?

24 MR. GAMBA: Yes.

25 (Whereupon, Exhibit Nos. 48-68, 125, 126, 128,

1 131, 132, 133, 134, and 135 were received in
2 evidence.)

3 CHARIMAN GRAHAM: Okay. Other exhibits.

4 MR. REHWINKLE: Public Counsel would move 136,
5 137, and 138.

6 (Whereupon, Exhibit Nos. 136-138 were received
7 in evidence.)

8 MR. BREW: PCS would move 139, 140, and 141.

9 (Whereupon, Exhibit Nos. 139-141 were received
10 in evidence.)

11 CHARIMAN GRAHAM: Mr. Cavros?

12 MR. CAVROS: SACE would move in Exhibits 142,
13 143, and 144.

14 CHARIMAN GRAHAM: 142, 143, and 144?

15 MR. CAVROS: Correct.

16 (Whereupon, Exhibit Nos. 142-144 were received
17 in evidence.)

18 CHARIMAN GRAHAM: Mr. Moyle?

19 MR. MOYLE: FIPUG would move 145, which was
20 the excerpt of the air permit. And since we handed
21 out copies of the order, go ahead and make it easy;
22 move 146 in as well.

23 CHARIMAN GRAHAM: Do we have to move the order
24 in? I don't think we do. The order is the order.

25 MR. MOYLE: Okay. So, we'll just proffer 145,

1 then.

2 (Whereupon, Exhibit No. 145 was received in
3 evidence.)

4 CHARIMAN GRAHAM: Okay. Do you want to excuse
5 your witness?

6 MS. TRIPLETT: Yes, please.

7 (Laughter.)

8 If I can't be excused, I guess he -- we'll
9 have to settle with him. Thank you.

10 CHARIMAN GRAHAM: Thank you, sir. Travel
11 safe.

12 THE WITNESS: Thank you.

13 CHARIMAN GRAHAM: NRG.

14 MS. RULE: If you're ready, we're ready.

15 CHARIMAN GRAHAM: I'm ready.

16 MS. RULE: And Chairman, Mr. Pollock has not
17 been sworn.

18 NRG will call Jeffrey Pollock and ask that he
19 be sworn.

20 CHARIMAN GRAHAM: Mr. Pollock, if you will,
21 raise your right hand.

22 Whereupon,

23 JEFFREY POLLOCK

24 was called as a witness, having been first duly sworn to
25 speak the truth, the whole truth, and nothing but the

1 truth, was examined and testified as follows:

2 DIRECT EXAMINATION

3 BY MS. RULE:

4 Q Will you please state your name and address
5 for the record.

6 A Jeffrey Pollock. My address is 12647 Olive
7 Boulevard, Suite 585, St. Louis, Missouri.

8 Q How are you employed?

9 A I'm employed as president of J. Pollock, Inc.,
10 as an economic regulatory analyst.

11 Q Did you cause to be filed prefiled direct
12 testimony on July 14th, 2014?

13 A Yes.

14 Q Did you also file some errata pages on
15 August 25th that revised several of those pages?

16 A Yes.

17 Q And if I ask you those same questions today,
18 would your answer be the same?

19 A Essentially, yes.

20 MS. RULE: I would like Mr. Pollock's prefiled
21 testimony and errata moved into the record as
22 though read. Have you --

23 CHARIMAN GRAHAM: We will enter Mr. Pollock's
24 prefiled direct testimony and errata into the
25 record as though read.

DIRECT TESTIMONY OF JEFFRY POLLOCK

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A Jeffry Pollock; 12647 Olive Blvd., Suite 585, St. Louis, MO 63141.

3 **Q WHAT IS YOUR OCCUPATION AND BY WHOM ARE YOU EMPLOYED?**

4 A I am an energy advisor and President of J.Pollock, Incorporated.

5 **Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

6 A I have a Bachelor of Science Degree in Electrical Engineering and a Masters in
7 Business Administration from Washington University. I have also completed a
8 Utility Finance and Accounting course.

9 Upon graduation in June 1975, I joined Drazen-Brubaker & Associates,
10 Inc. (DBA). DBA was incorporated in 1972 assuming the utility rate and
11 economic consulting activities of Drazen Associates, Inc., active since 1937.
12 From April 1995 to November 2004, I was a managing principal at Brubaker &
13 Associates (BAI).

14 During my tenure at both DBA and BAI, I have been engaged in a wide
15 range of consulting assignments including energy and regulatory matters in both
16 the United States and several Canadian provinces. This includes preparing
17 financial and economic studies of investor-owned, cooperative and municipal
18 utilities on revenue requirements, cost of service and rate design, and conducting
19 site evaluation. I have also advised clients on electric restructuring issues
20 including procuring and managing electricity in both competitive and regulated
21 markets, developed and issued requests for proposals (RFPs), evaluated RFP
22 responses, supported contract negotiations, and developed and presented
23 seminars on electricity issues.

1 I have worked on various projects in over 20 states and several Canadian
2 provinces, and have testified before the Federal Energy Regulatory Commission
3 and the state regulatory commissions of Alabama, Arizona, Colorado, Delaware,
4 Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Louisiana, Minnesota,
5 Mississippi, Missouri, Montana, New Jersey, New Mexico, Ohio, Pennsylvania,
6 Texas, Virginia, Washington, and Wyoming. I have also appeared before the
7 City of Austin Electric Utility Commission, the Board of Public Utilities of Kansas
8 City, Kansas, the Bonneville Power Administration, Travis County (Texas) District
9 Court, and the U.S. Federal District Court. A partial list of my appearances is
10 provided in **Exhibit___(JP-1)**.

11 **Q PLEASE DESCRIBE J. POLLOCK, INCORPORATED.**

12 A J.Pollock assists clients to procure and manage energy in both regulated and
13 competitive markets. The J.Pollock team also advises clients on energy and
14 regulatory issues. Our clients include commercial, industrial and institutional
15 energy consumers. J.Pollock is a registered Class I aggregator in the State of
16 Texas.

17 **Q ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

18 A I am testifying on behalf of NRG Florida LP (NRG). NRG participated in the
19 process that led to Duke Energy Florida, Inc.'s (DEF) decision to pursue its own
20 self-build projects (*i.e.*, Suwannee Simple Cycle and Hines Chiller Uprate) to
21 meet its purported capacity needs prior to 2018.

22 **Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

23 A My testimony addresses Issues 9, 10, 13, 14, and 15 identified in Order No.

1 PSC-14-0341-PCO-EI issued in the combined proceedings.¹ Specifically, I will
2 demonstrate how Acquisition 1 is a better choice to meet DEF's capacity needs
3 than DEF's proposed self-build projects.

4 **Q ARE OTHER WITNESSES TESTIFYING ON NRG'S BEHALF IN THIS**
5 **PROCEEDING?**

6 A Yes. NRG is sponsoring the testimony of Mr. Jim Dauer and Mr. John Morris.
7 Mr. Dauer's testimony addresses the firm transportation costs associated with
8 Acquisition 1 and how DEF's assumptions understate the benefits and overstate
9 the cost of Acquisition 1 relative to its self-build projects. Mr. Morris's testimony
10 will address DEF's market power analysis. Specifically, he will demonstrate that
11 contrary to DEF's assumptions, Acquisition 1 does not fail FERC's Competitive
12 Analysis Screen if the acquisition is properly structured.

13 **Q ARE YOU SPONSORING ANY EXHIBITS IN CONNECTION WITH YOUR**
14 **TESTIMONY?**

15 A Yes. I am sponsoring **Exhibit__(JP-1)** through **Exhibit__(JP-6)**. These
16 exhibits were prepared by me or under my supervision and direction.

17 **Summary**

18 **Q PLEASE SUMMARIZE YOUR TESTIMONY.**

19 A My testimony discusses the reasons why Acquisition 1 is a better and more cost-
20 effective choice for meeting DEF's purported capacity needs prior to 2018 than
21 DEF's proposed Suwannee Simple Cycle and Hines Chiller Uprate projects. The

¹ Docket Nos. 140110 and 140111, *Third Order Establishing Procedure And Order Granting Motion For Alternate Testimony Filing Dates*, Appendix A.

1 reasons are:

- 2 • Acquisition 1 is less costly and more cost-effective than DEF's
- 3 proposed self-build projects;
- 4 • Acquisition 1's 471 MW of generating capacity is sufficient to
- 5 meet DEF's capacity needs prior to 2018;
- 6 • Acquisition 1 is less risky for DEF's customers; and
- 7 • Acquisition 1 restrains the steadily increasing upward pressure
- 8 on DEF's already high electricity rates as compared to the
- 9 proposed self-build projects.

10 **Acquisition 1**

11 **Q WHAT IS ACQUISITION 1?**

12 A Acquisition 1 is NRG's Osceola generating station. It consists of three simple
13 cycle combustion turbines (CTs), each having a summer rated capacity of 157
14 Megawatts (MW). The units are GE Frame 7FA gas turbines. According to GE:

15 The reliability of the 7FA gas turbine has been consistently 98
16 percent or better. This high reliability provides customers more
17 days of operation per year while minimizing the overall life cycle
18 cost of the gas turbine.²

19 Osceola station is located in DEF's service area, in Osceola County, Florida. It is
20 interconnected to DEF and operates within DEF's balancing authority. The three
21 units have been in commercial operation since 2001 and 2002. They have
22 demonstrated the ability to efficiently provide 465 MW (summer) of reliable
23 capacity. The primary fuel source is natural gas. However, the units are also
24 capable of operating on distillate fuel oil.

25 **Q HAS THE OSCEOLA GENERATING STATION SUPPLIED CAPACITY TO**
26 **UTILITIES IN FLORIDA?**

27 A Yes. According to SNL Financial, the Osceola station supplied capacity to

² http://site.ge-energy.com/prod_serv/products/gas_turbines_cc/en/f_class/ms7001fa.htm.

1 Seminole Electric Cooperative (Seminole) under a five-year contract that ended
2 in May 2014. I understand that the Station previously sold power to DEF's
3 predecessor, Progress Energy Florida (PEF) from 2006 to 2009 and to Seminole
4 for the five years after achieving commercial operation. This experience
5 demonstrates how the Osceola station has provided a reliable source of power in
6 Florida.

7 **Cost-Effectiveness**

8 **Q IS ACQUISITION 1 COST-EFFECTIVE?**

9 A Yes. DEF admits that Acquisition 1 is a lower cost and more cost-effective option
10 than the proposed self-build projects. This is demonstrated in Exhibit____(BMHB-
11 8), which provides a summary of DEF's cost-effectiveness analysis. Specifically,
12 this exhibit quantifies the 30-year cumulative net present value revenue
13 requirement (NPVRR) differential between each "package" of alternative
14 resources and a package consisting of the proposed self-build projects. Based
15 on DEF's analysis, Acquisition 1 is \$49 million less costly than DEF's proposed
16 self-build projects. Acquisition 1 is also the only non self-build alternative that is
17 more cost-effective, according to DEF's analysis.

18 **Q DOES NRG AGREE WITH THE ASSUMPTIONS USED BY DEF IN** 19 **EVALUATING ALTERNATIVE RESOURCES, SUCH AS ACQUISITION 1?**

20 A No. As discussed later, there are three errors in DEF's evaluation. The three
21 errors are:

- 22 • DEF over-stated the fixed costs associated with Acquisition 1
23 | ~~by about \$60 million~~ because it ignored the existing fuel supply
24 arrangements and assumed that additional firm gas

- 1 transportation capacity would be needed.³
- 2 • It misapplied FERC's Competitive Analysis (market power)
- 3 Screen in eliminating Acquisition 1 as a viable alternative.
- 4 • It ~~would included equity costs by imputing impute~~ additional
- 5 debt to the projected cost ~~of under long-term~~ purchased power
- 6 agreements (PPAs).

7 Further, DEF erred because it did not include any incremental fuel delivery or

8 service costs in its analysis of the self-build projects.⁴ Collectively, these errors

9 bias the evaluation in favor of DEF's self-build projects. However, when the

10 correct assumptions are used, Acquisition 1 is not only more cost effective, it is a

11 lower cost, low risk, viable alternative to DEF's self-build projects.

12 **Q DID DEF CONSIDER ANY OF THE ADVANTAGES OF ACQUISITION 1**

13 **RELATIVE TO NEW SELF-BUILD CAPACITY IN ITS EVALUATION?**

14 A DEF apparently overlooked some of the advantages of Acquisition 1. As

15 previously stated, Acquisition 1 is an existing facility. It has been operational

16 since 2001. Further, it is a more modern facility than the 261 MW of capacity that

17 DEF is planning to retire over the next three years, including the three existing

18 steam units at the Suwannee site. Thus, Acquisition 1 can provide the peaking

19 capacity that DEF alleges it needs more efficiently than DEF's existing CTs and

20 would avoid the significant additional capital costs associated with DEF's

21 proposed new self-build generation capacity.

22 **Q IS THERE ANY OTHER ADVANTAGE OF ACQUISITION 1?**

23 A Yes. The purchase price of Acquisition 1 would be fixed; that is, the amount paid

³ DEF's Response to NRG Interrogatory No. 76.

⁴ DEF's Response to Calpine's Production of Documents Request No. 6 and DEF's Response to NRG's Production of Documents Request No. 7, which contain competitively sensitive confidential information.

1 by DEF would be negotiated and this amount would be reflected in DEF's rate
2 base. By contrast, DEF will seek recovery of the entire cost of constructing the
3 Suwannee and Hines projects. Thus, even though DEF is now estimating a total
4 construction cost of \$197 million for the Suwannee CTs and \$160 million for the
5 Hines Chiller Uprate, because these projects are not subject to the determination
6 of need process, DEF may seek recovery of any additional costs actually
7 incurred if it can demonstrate that they were prudently incurred. Thus,
8 Acquisition 1 avoids the risk to DEF and its customers associated with cost over-
9 runs.

10 **Q HOW DID DEF OVERSTATE THE GAS TRANSPORTATION COSTS**
11 **ASSOCIATED WITH ACQUISITION 1?**

12 A DEF apparently ignored the existing fuel supply arrangements at Osceola station.
13 The existing fuel supply arrangements are discussed in Mr. Dauer's testimony.
14 Mr. Dauer explains that the combination of firm gas transportation and oil backup
15 would suffice to provide a cost-effective and reliable supply of peaking capacity.
16 Further, Mr. Dauer concluded that the additional firm transportation capacity that
17 DEF had assumed in its evaluation of Acquisition 1 was unnecessary and too
18 costly. Thus, correcting DEF's first error, Acquisition 1 would be ~~about \$60~~
19 ~~million~~ more cost-effective than is shown in Exhibit___(BMHB-89).

20 **Q IF ACQUISITION 1 HAS SO MANY ADVANTAGES, WHY DID DEF REJECT**
21 **IT?**

22 A In addition to over-stating the fixed costs, DEF's second error was the
23 assumption that Acquisition 1 could not be consummated because of market
24 power concerns. However, as discussed in Mr. Morris's testimony, these

1 concerns are unfounded. According to Mr. Morris, if the transaction is properly
2 structured, it will pass FERC's Competitive Analysis Screen. Thus, market power
3 is not the risk that DEF asserted it to be and DEF should not have rejected this
4 option outright in favor of its own self-build projects.

5 **Q SHOULD DEF CONTINUE TO PURSUE ACQUISITION 1?**

6 A Yes. Correcting the two errors discussed previously, Acquisition 1 is a viable,
7 low-cost option, and it deserves full and careful consideration.

8 **Q DOES THE FACT THAT ACQUISITION 1 WOULD BE AT LEAST \$49 MILLION**
9 **LESS EXPENSIVE OVER THE NEXT 30 YEARS JUSTIFY SELECTING IT**
10 **OVER OTHER RESOURCE OPTIONS?**

11 A No, not entirely. Although the results of DEF's cost-effectiveness analysis are
12 instructive, it should be recognized that all models, such as those used in the
13 analysis, are subject to uncertainties, particularly in the later years of an
14 evaluation. Further, a seemingly large difference in NPVRR would translate into
15 only a relatively small rate impact. For example, every \$100 million NPVRR over
16 a 30-year planning horizon would affect rates by just \$0.08 per 1,000 kWh—a
17 number which could easily fall within the range of a model's accuracy. Thus, the
18 cost-effectiveness analysis should not be the sole deciding factor.

19 **Q HOW SHOULD THE COST-EFFECTIVENESS ANALYSIS BE USED IN**
20 **DETERMINING THE BEST RESOURCES TO MEET DEF'S CAPACITY**
21 **NEEDS?**

22 A Recognizing the relative impact and the inherent limitations of any costing model,
23 the Commission should use qualitative criteria in addition to the quantitative cost-
24 effectiveness analysis to determine the resources best suited for meeting DEF's

1 purported capacity needs.

2 **Imputed Debt Adjustment**

3 **Q DOES DEF MAKE ANY OTHER ADJUSTMENTS IN DETERMINING THE**
4 **COST-EFFECTIVENESS OF ALTERNATIVE RESOURCES?**

5 A Yes. DEF asserts that the fixed payments associated with PPAs are the
6 equivalent of a future debt obligation (*i.e.*, “imputed debt”). Accordingly, to
7 maintain the same debt-to-equity ratio, DEF calculates the incremental cost of
8 equity that would be needed to support the imputed debt.⁵ This incremental
9 equity cost is added to the other “tangible” costs associated with PPAs.

10 **Q HAVE YOU BEEN ABLE TO DETERMINE SPECIFICALLY HOW DEF**
11 **CALCULATED THE INCREMENTAL COST OF EQUITY?**

12 A No. Although NRG requested the detailed calculations supporting DEF’s
13 evaluation of alternative PPAs, DEF’s responses did not reveal how the
14 incremental cost of equity was calculated. This includes the other NRG
15 Production of Documents Requests referenced in DEF’s response.⁶
16 Consequently, I reserve the right to supplement my testimony based on
17 discovery requests and responses thereto filed after the testimony due date.

18 **Q IS THE INCREMENTAL EQUITY COST SIGNIFICANT?**

19 A Yes. ~~In-Although DEF’s did not impute additional costs due to the short-term~~
20 ~~nature of the cost-effectiveness analysis, - the incremental equity cost~~

⁵ Docket No. 140111, Direct Testimony of Benjamin M. H. Borsch at 39.

⁶ Docket No. 140111, DEF’s Response to NRG’s Interrogatory No. 111 and Production of Documents Request No. 20.

1 ~~associated with~~ PPAs evaluated, the impact on longer-term PPAs can be
 2 significant. ranged from \$175 million to \$562 million NPVRR.⁷ But for this
 3 adjustment, other PPAs (including a PPA with NRG) would have been more cost-
 4 effective.

5 **Q DO YOU AGREE WITH DEF'S IMPUTED DEBT ADJUSTMENT?**

6 A No. As discussed below, this adjustment assumes that DEF will incur real costs
 7 associated with a long-term PPA, which is not the case. Further, it erroneously
 8 assumes that PPAs are the sole cause of a utility's deteriorating credit metrics.
 9 Finally, the Commission has previously rejected an imputed debt adjustment for
 10 PPAs in past rate cases, including PEF's 2009 rate case.

11 **Q DOES A UTILITY AUTOMATICALLY INCUR ADDITIONAL EQUITY COSTS**
 12 **WHEN IT ENTERS INTO LONG-TERM PURCHASED POWER AGREEMENTS,**
 13 **AS INFERRED BY DEF'S COST-EFFECTIVENESS ANALYSIS?**

14 A No. DEF will not automatically incur additional equity costs to support long-term
 15 PPAs. The additional equity cost is purely hypothetical. It is not a real cost.

16 **Q DOES DEF ISSUE ANY ADDITIONAL CAPITAL WHEN IT INCURS**
 17 **OBLIGATIONS UNDER A PURCHASED POWER AGREEMENT?**

18 A No. DEF does not issue either additional debt or equity associated with a PPA.
 19 Further, there are no actual PPA-related debt and equity costs under normal
 20 regulatory accounting.

⁷ ~~Docket No. 140111, Direct Testimony of Benjamin M. H. Borsch at Exhibit _____ (BMHB)-8 (Errata).~~

1 **Q ARE THERE ANY CIRCUMSTANCES WHEN A UTILITY THAT PURCHASES**
2 **POWER COULD EXPERIENCE HIGHER BORROWING COSTS?**

3 A Yes. All other things being equal, a lower credit rating would increase DEF's
4 borrowing costs. However, this does not mean that higher borrowing costs are
5 caused by the utility's PPAs and further, it does not mean or imply that DEF
6 would experience higher borrowing costs if it entered a PPA with Acquisition 1.

7 **Q PLEASE EXPLAIN.**

8 A Lower credit ratings reflect the long-term deterioration of a utility's credit metrics.
9 Typically, this happens when the utility is engaged in a major capital spending
10 program that will significantly increase rate base, and it is unable to timely and
11 adequately increase rates to avert a further decline. Higher rates would provide
12 additional cash earnings, which would increase the amount of internally-
13 generated funds available to support construction. In the absence of sufficient
14 internally generated funds, the utility would have to issue substantial amounts of
15 new long-term debt, thereby increasing its financial risk and further jeopardizing
16 financial integrity. If a credit rating agency perceives that the utility will not have
17 the necessary regulatory support to reverse its deteriorating metrics, it might find
18 it necessary to lower the utility's credit rating.

19 **Q WOULD A UTILITY EXPERIENCE HIGHER BORROWING COSTS WHEN IT**
20 **SIGNS A PURCHASED POWER AGREEMENT?**

21 A No. There is no direct connection between higher borrowing costs and a PPA.
22 Higher borrowing costs would be realized only after a utility's credit rating has
23 been lowered. Further, the increase would also depend on the lower rating
24 assigned by the credit-rating agencies.

1 **Q DO PURCHASED POWER AGREEMENTS ALONE CAUSE A UTILITY'S**
2 **CREDIT METRICS TO DETERIORATE?**

3 A No. PPAs are an operating expense, not an investment. Thus, there are no
4 financing costs associated with a PPA.

5 Further, there is little or no credit risk associated with PPAs. For
6 example, under Rule 25-17.0832, Florida Administrative Code, once the
7 Commission has approved a PPA, the utility is allowed full cost recovery.
8 Specifically, purchased power capacity costs are subject to dollar-for-dollar
9 recovery through the Capacity Cost Recovery (CCR) clause. This includes a
10 true-up procedure that establishes a forward-looking charge, which is then
11 reconciled based on actually incurred costs, with interest. The recovery
12 mechanism is nearly identical to DEF's Fuel Charge. Though the costs incurred
13 under Commission-approved PPAs are reviewed in the annual fuel adjustment
14 proceeding, there is minimal recovery risk associated with PPAs.

15 Thus, if a utility that also purchases capacity experiences deteriorating
16 credit metrics, the probable cause is an over-reliance on leverage to finance
17 capital improvements.

18 **Q HAS THE COMMISSION PREVIOUSLY RECOGNIZED THE ADDITIONAL**
19 **EQUITY COST ASSOCIATED WITH IMPUTED DEBT IN DETERMINING A**
20 **UTILITY'S REVENUE REQUIREMENTS?**

21 A No. The Commission rejected a proposal by Tampa Electric Company (TECO)
22 to impute additional equity in determining its capital structure to recognize the so-
23 called imputed debt associated with PPAs. The Commission stated that:

24 The pro forma adjustment to equity proposed by TECO is not an
25 actual equity investment in the utility. If this adjustment is
26 approved for purposes of setting rates in this proceeding, the

1 Company would essentially be allowed to earn a risk-adjusted
 2 equity return without having actually made the equity investment.
 3 The revenue requirement impact of recognizing this pro forma
 4 adjustment to equity in the capital structure is approximately \$5
 5 million per year.⁸

6 The Commission also found that:

7 Companies with PPAs are not required by the rating agencies to
 8 make the pro forma adjustment in question. As the following
 9 passage explains, the Standard & Poors' (S&P) practice with
 10 respect to PPAs described in witness Gillette's testimony is strictly
 11 for the rating agency's own analytical purposes:

12 We adjust utilities' financial metrics, incorporating PPA fixed
 13 obligations, so that we can compare companies that finance and
 14 build generation capacity and those that purchase capacity to
 15 satisfy customer needs. The analytical goal of our financial
 16 adjustments for PPAs is to reflect fixed obligations in a way that
 17 depicts the credit exposure that is added by PPAs. That said,
 18 PPAs also benefit utilities that enter into contracts with suppliers
 19 because PPAs will typically shift various risks to the suppliers,
 20 such as construction risk and most of the operating risk. PPAs can
 21 also provide utilities with asset diversity that might not have been
 22 achievable through self-build. The principal risk borne by a utility
 23 that relies on PPAs is the recovery of the financial obligation in
 24 rates.⁹

25 Further, in rejecting TECO's adjustment, the Commission also held:

26 With this proposed adjustment, we find that the Company is
 27 attempting to take a portion of S&P's consolidated credit
 28 assessment methodology and use it for a purpose it was never
 29 intended.¹⁰

30 **Q WAS A SIMILAR ADJUSTMENT ALSO PROPOSED IN A PRIOR PROGRESS**
 31 **ENERGY FLORIDA RATE CASE?**

32 **A** Yes. In its 2009 rate case (Docket No. 090079-EI), PEF also proposed adjusting
 33 its equity ratio to reflect the amount of equity necessary to offset the effect of the

⁸ *In re: Petition for rate increase by Tampa Electric Company*, Docket No. 080317-EI, Final Order Granting in Part and Denying in Part Petition for Rate Increase (Apr. 30, 2009) at 35.

⁹ *Id.*

¹⁰ *Id.* at 36.

1 imputed debt associated with long-term PPAs. This adjustment had the effect of
2 increasing PEF's equity ratio as a percentage of investor capital from 50.3
3 percent to 53.9 percent. The annual revenue requirement impact of this
4 adjustment was \$24.7 million.¹¹

5 **Q WAS PROGRESS ENERGY FLORIDA'S IMPUTED DEBT ADJUSTMENT**
6 **ACCEPTED?**

7 A No. PEF's imputed debt adjustment was rejected. In rejecting the adjustment,
8 the Commission stated:

9 PEF witness Sullivan acknowledged that, given the cost recovery
10 mechanism in Florida and the fact that PEF has never been
11 denied recovery of PPA costs, there is a very low risk of non-
12 recovery of PPA costs. He also agreed that Moody's does not
13 make an explicit adjustment for PPAs like S&P does and that
14 there is no guarantee PEF's bond rating would be upgraded by
15 any rating agency if this pro forma adjustment were approved for
16 rate setting purposes. Witness Sullivan acknowledged that the
17 proposed pro forma adjustment is not consistent with GAAP
18 accounting. He also agreed that the Commission recently denied
19 a request by TECO for a similar adjustment in its rate case.
20 Finally, witness Sullivan agreed that, while the 2005 Stipulation
21 included a pro forma adjustment to PEF's capital structure for
22 ratemaking purposes to account for S&P's methodology related to
23 the treatment of PPAs, said approval did not constitute binding
24 precedent in any future proceeding.

25 Based on the record evidence and for the reasons discussed
26 above, we find that PEF's requested pro forma adjustment to
27 equity shall be denied for purposes of setting rates in this
28 proceeding. Thus, the \$711 million (system) adjustment shall be
29 removed from the capital structure through a specific adjustment
30 to common equity on a system basis.¹²

¹¹ *In re: Petition for increase in rates by Progress Energy Florida, Inc.*, Docket No. 090079-EI, Order No. PSC-10-0131-FOF-EI, (Mar. 5, 2010), at 74-76.

¹² *Id.*

1 **Q SHOULD ADDITIONAL EQUITY COSTS BE INCLUDED IN EVALUATING THE**
2 **COST-EFFECTIVENESS OF PURCHASED POWER AGREEMENTS?**

3 A No. For all of the reasons stated above, additional equity costs should not be
4 included in evaluating the merits of PPAs as alternatives to DEF's proposed self-
5 build projects. Thus, the Commission should reject this component of DEF's
6 cost-effectiveness analysis.

7 **Qualitative Assessment**

8 **Q WHAT QUALITATIVE CRITERIA SHOULD BE USED IN ASSESSING DEF'S**
9 **RESOURCE OPTIONS?**

10 A The proposed self-build projects are predicated on the assumption that DEF
11 needs additional capacity prior to 2018. The need for capacity, in turn, is
12 predicated on a load forecast that assumes DEF will experience significant load
13 growth, particularly in the next several years. However, load could grow faster or
14 slower than DEF is projecting. If load growth exceeds DEF's projections, it may
15 not have sufficient capacity to meet the 20% reserve margin criterion established
16 by the Commission. Alternatively, if load growth fails to materialize, customers
17 will be saddled with excess capacity and higher electricity rates. Thus, in
18 evaluating DEF's capacity additions, the Commission must balance both the
19 costs and risks (such as load forecasting error) because ultimately, regardless of
20 the resource selected, DEF's customers will pay the associated costs.

21 **Q ARE THERE ANY OTHER QUALITATIVE CRITERIA THE COMMISSION**
22 **SHOULD USE IN ASSESSING DEF'S SELF-BUILD PROPOSALS?**

23 A Yes. The self-build projects proposed in these two dockets represent an
24 "extreme makeover" of DEF's generation fleet. As discussed later, this makeover

1 will cause very significant upward pressure on DEF's already high electricity
2 rates. Thus, DEF's proposal should be evaluated not just in terms of the impact
3 on rates associated with the self-build projects. The Commission must also
4 consider the broader rate impact—*i.e.*, the potential consequences of
5 exacerbating what are already among the highest electric rates in Florida and the
6 Southeast.

7 **Q WHY DO YOU CHARACTERIZE THE TRANSFORMATION OF DEF'S**
8 **GENERATION FLEET AS AN EXTREME MAKEOVER?**

9 A The proposed transformation will essentially replace DEF's older facilities with
10 newer more modern ones. As discussed later, it will require retail electric rates to
11 support more than \$4 billion of capital to supply less than 200 MW of additional
12 generation capacity.

13 **Q WHAT ARE THE PRIMARY COMPONENTS OF THE EXTREME MAKEOVER?**

14 A The extreme makeover of DEF's generation fleet is comprised of three primary
15 components.

16 First, in February 2013, DEF announced that it was retiring Crystal River
17 Unit No. 3 (CR3), DEF's only operating nuclear plant. CR3 provided 850 MW of
18 base load capacity. Recently, in Docket No. 130208-EI the Commission
19 approved a Settlement (2013 Settlement) that addressed the recovery of the
20 remaining cost of CR3.¹³ The same Settlement also addressed the cancellation
21 of the Engineering, Procurement and Construction (EPC) contract associated

¹³ *In re: Petition for Limited Proceeding to Approve Revised and Restated Stipulation and Settlement Agreement by Duke Energy Florida, Inc, d/b/a Duke Energy*; Docket No. 130208 EI, Final Order Approving Revised and Restated Stipulation and Settlement Agreement (Nov. 12, 2013).

1 with the proposed Levy Nuclear Plant (Levy). As discussed later, the terms of
 2 the Settlement that pertain to both CR3 and Levy will affect future electricity
 3 rates.

4 Second, DEF has also decided to retire two large coal units at Crystal
 5 River Units 1 and 2, also known as CR South. These units provide about 869
 6 MW of base load capacity. Originally, CR South was going to be retired in 2015
 7 to comply with the EPA's MATS Rule, but their retirement was extended to 2018.
 8 As the condition for extending operation past 2015, the CR South units will be
 9 derated by 129 MW in 2016.¹⁴

10 Third, DEF is also proposing to "modernize" its natural gas fleet. If
 11 approved by the Commission, DEF's rates will reflect "modernization costs" of:

- 12 • Retiring the oldest CTs at Avon Park, Turner and Rio Pinar by
 13 2016 (133 MW of summer generation capacity)¹⁵;
- 14 • Accelerating the retirement of the three Suwannee steam units
 15 from 2018 to 2016 (128 MW of summer generation capacity)¹⁶;
- 16 • Replacing the existing Suwannee units with the proposed CTs,
 17 which will provide up to 316 MW of summer generation
 18 capacity)¹⁷;
- 19 • The Hines Chiller Uprate (220 MW)¹⁸; and
- 20 • The proposed Citrus County combined cycle project (1,640
 21 MW)¹⁹.

22 The table below summarizes DEF's planned retirements and modernization
 23 proposals. As can be seen, the extreme makeover of DEF's generation fleet

¹⁴ Docket No. 140111, DEF's Response to NRG Interrogatory No. 47.

¹⁵ *Id.* and Exhibit ___(BMHB-2) at 11.

¹⁶ Docket No. 140111, DEF's Response to NRG Interrogatory No. 47.

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*

1 would produce less than 200 MW of additional capacity.

Net Capacity Changes (Summer MW)²⁰			
Year	Addition	Retirement	Cumulative Impact
2013		850	-850
2014		53	-903
2016	316	338	-925
2017	220	0	-705
2018	820	740	-625
2019	820	0	195

2 **Q HOW SHOULD THE RISKS ASSOCIATED WITH THIS EXTREME MAKEOVER**
3 **OF DEF'S GENERATION FLEET BE MANAGED?**

4 **A** To manage these risks, the resources selected in these proceedings should:

- 5
- 6
- Not provide more than the minimum amount of needed capacity;
 - Preserve flexibility in the event of load forecasting error (*i.e.*, either higher or lower than anticipated growth);
 - Minimize DEF's future capital commitment; and
 - Have the least impact on rates.
- 7
- 8
- 9
- 10

11 **Q WHY IS LOAD FORECASTING ERROR A SIGNIFICANT RISK?**

12 **A** DEF's need for capacity prior to 2018 is largely driven by a more than 1,000 MW
13 increase in both wholesale and peak demand in 2014-2015. This is by far more
14 load growth than DEF has experienced in two consecutive years since 2005.
15 Thus, there is a significant risk that load growth could be far less than DEF
16 anticipates.

²⁰ Docket No. 140111, DEF's Response to NRG Interrogatory No. 47 and Exhibit ____ (BMHB-2) at 11.

1 **Q HAVE YOU PREPARED AN ILLUSTRATION SHOWING THE POTENTIAL**
2 **RISK OF LOAD FORECASTING ERROR?**

3 A Yes. **Exhibit___(JP-2)** illustrates how load forecasting error (in this case, lower-
4 than-anticipated load growth) would affect DEF's projected firm summer peak
5 demand over the period 2014 through 2023. Specifically, I quantified the
6 summer peak demand assuming only 50% of DEF's projected load growth
7 materializes (the blue bars) and compared this to DEF's load growth projections
8 (the blue/pink bars). As can be seen, if load growth is only 50% of DEF's
9 projections, DEF's firm summer peak demand would be between 400 MW and
10 1,083 MW lower in the 2014-2023 timeframe.

11 **Q HOW WOULD LOAD FORECASTING ERROR AFFECT DEF'S PROJECTED**
12 **CAPACITY NEEDS?**

13 A DEF's projected capacity needs are based on achieving a *minimum* 20% reserve
14 margin relative to projected firm summer peak demand. Thus, the lower the
15 projected firm summer peak demand, the lower the amount of needed capacity.

16 **Q HOW MUCH OF DEF'S PLANNED CAPACITY ADDITIONS WOULD NOT BE**
17 **NEEDED IF IT EXPERIENCED ONLY 50% OF THE PROJECTED LOAD**
18 **GROWTH?**

19 A DEF would be significantly over-built in the years 2016 and 2017. This is shown
20 in **Exhibit___(JP-3)**. As can be seen, DEF's capacity needs would be 844 MW
21 and 915 MW less in the years 2016 and 2017, respectively.

22 **Q WHAT IS THE CONSEQUENCE OF BUILDING NEW CAPACITY THAT IS**
23 **SURPLUS TO DEF'S CAPACITY NEEDS?**

24 A The consequence is that DEF's retail electricity rates will be significantly higher

1 during the period of surplus capacity. This is because DEF will experience
2 higher costs, but these higher costs would be spread over fewer billing units.
3 Further, these rates will remain higher until load has grown to a level that more
4 closely matches DEF's installed capacity. This would, in turn, raise rates further,
5 thus encouraging slower sales growth.

6 **Q IS IT ALSO POSSIBLE THAT LOAD GROWTH COULD BE HIGHER THAN**
7 **DEF ANTICIPATES?**

8 A Yes. If DEF has understated its projected firm summer peak demand, then the
9 system would be under-built, all other things being equal.

10 **Q HOW CAN THE RISK OF LOAD FORECASTING ERROR BE ADDRESSED IN**
11 **THE EVENT THAT DEF EXPERIENCES HIGHER-THAN-ANTICIPATED**
12 **GROWTH?**

13 A There are several actions that DEF could individually or collectively take to hedge
14 load forecasting error while maintaining system reliability. These actions include:

- 15 • Acquiring capacity from the resources offered in Acquisition 1
16 and/or Acquisition 2;
- 17 • Entering into firm PPAs with Acquisitions 1 and/or 2 or other
18 Florida utilities with surplus capacity; and
- 19 • Deferring the retirement of DEF's older gas generators.

20 **Q WHICH OF THE ABOVE OPTIONS WOULD BE BETTER FOR DEF'S**
21 **CUSTOMERS?**

22 A Consistent with the criteria presented earlier, Acquisition 1 would offer lower cost,
23 less risk, and greater flexibility than DEF's proposed self-build projects. First, as
24 previously discussed, Acquisition 1 is more cost-effective than the proposed self-
25 build projects. Second, the combination of Acquisition 1 and the Hines Chiller
26 Uprate would provide about 690 MW. This compares to only 408 MW of net

1 additional capacity by pursuing both the Suwannee CTs and Hines Chiller
2 Projects because DEF would lose about 128 MW of capacity by retiring the
3 existing Suwannee units. Third, if the projected 2014-2015 load growth fails to
4 materialize, the Hines Chiller Project could be deferred.

5 In summary, Acquisition 1 has the advantages of lower cost, greater
6 flexibility and lower risk than the Suwannee/Hines self-build projects.

7 **Q HOW WOULD ACQUISITION 1 REDUCE DEF'S FUTURE CAPITAL**
8 **COMMITMENTS?**

9 A The Suwannee/Hines self-build projects would commit ratepayers to paying an
10 estimated \$357 million of additional capital costs over the estimated 35 and 29-
11 year lives, respectively, of these facilities. Acquisition 1 would require less
12 capital commitment. Further, there is no risk of a cost over-run (because the
13 purchase price, terms and conditions would be firmly established up-front), and
14 the facility has provided a reliable supply of power to other Florida electric
15 utilities, including DEF's predecessor, Progress Energy Florida. Minimizing
16 capital commitments is important because DEF's customers are already facing
17 higher rates to provide for the recovery of \$2.1 billion of capital costs associated
18 with DEF's retired/retiring generation facilities over the next 23 years.

19 **Q WHAT CAPITAL COSTS WILL DEF'S CUSTOMERS BE RESPONSIBLE FOR**
20 **IN FUTURE ELECTRICITY RATES?**

21 A DEF can seek the recovery of the capital costs shown in **Exhibit___(JP-4)**
22 pursuant to the terms of the 2013 Settlement. Lines 1-10 show the capital items
23 related to the retirement of existing generation facilities. As can be seen, that
24 commitment alone could exceed \$2.1 billion. The projects comprising the \$2.1

1 billion capital recovery are summarized in the table below.

Capital Recovery of Existing Generation Assets Pursuant to the 2013 Rate Settlement		
Item	Amount (\$Millions)	Date Cost Recovery To Commence
Point of Discharge Cooling Towers	\$18	Jan. 2013
CR3	Up to \$1,466	Jan. 2017
CR3 EPU	\$323	2013-2019
CR3 Dry Cask Storage	TBD	Jan. 2017
Levy EPC Contract Cancelation	\$350	2013-2017
CR South Remaining Book Value	TBD	Jan. 2021

2 **Q ARE THESE THE ONLY COMMITMENTS THAT DEF'S RETAIL CUSTOMERS**
3 **ARE OBLIGATED TO FUND IN FUTURE ELECTRICITY RATES?**

4 **A** No. The 2013 Settlement also addressed the ratemaking treatment of any new
5 generation resources that might be approved in these proceedings. As can be
6 seen in **Exhibit___(JP-4)**, beginning on line 11, the self-build projects that DEF
7 is proposing in these proceedings are estimated to cost \$1.87 billion, assuming
8 that any cost over-runs are not incurred or allowed to be included in rates.

9 Thus, the extreme makeover of DEF's generation fleet, if approved for
10 cost recovery by the Commission, could result in a total capital recovery of over
11 \$4.0 billion. To put this in context, in its 2009 rate case (D-090079-EI), the
12 Commission found that PEF's rate base was \$6.3 billion, including CR3. Thus,
13 the proposed \$4 billion capital recovery would exceed 60% of its rate base.

1 **Q DOES THE \$4 BILLION INCLUDE ALL PROJECTED CAPITAL RECOVERY**
 2 **THAT WILL HAVE TO BE SUPPORTED IN DEF'S ELECTRICITY RATES?**

3 A No. The \$4 billion of capital recovery is associated only with the extreme
 4 makeover of DEF's generation fleet. It does not include generation capacity
 5 additions after 2018 or any transmission, distribution or other plant additions to
 6 accommodate load growth, attach new customers, modernization, and
 7 replacement.

8 **Q HOW WILL FUTURE CAPITAL RECOVERY AFFECT RATES?**

9 A Electricity rates include all of the costs associated with future capital recovery,
 10 which include:

- 11 • Incremental non-fuel operation and maintenance expenses
 12 associated with new generation, transmission and distribution,
 13 and general plant;
- 14 • Return on investment;
- 15 • Depreciation expense;
- 16 • Property taxes; and
- 17 • State and federal income taxes.

18 **Q WHY SHOULD THE COMMISSION ALSO BE CONCERNED ABOUT THE**
 19 **RATE IMPACTS ASSOCIATED WITH DEF'S EXTREME GENERATION**
 20 **MAKEOVER?**

21 A DEF's electricity rates are already among the highest in Florida and in nearby
 22 southeastern states. This is demonstrated in **Exhibit___(JP-5)**, which shows
 23 typical electricity rates for customers served by investor-owned electric utilities
 24 (IOUs), including DEF (the red bars) and other Florida IOUs (the blue bars)
 25 based on rates in effect on January 1, 2014. The rate comparisons include:

- 26 • Page 1: Residential 1,000 kWh per month;
- 27 • Page 2: Small Commercial 40 kW at 48% load factor;

- Page 3: Large Commercial 500 kW at 49% load factor; and
- Page 4: Industrial 1,000 kW at 89% load factor.

A similar comparison for rates in effect as of July 2013, is provided in **Exhibit__(JP-6)**. Both exhibits were prepared from data provided by the Edison Electric Institute.

As can be seen in **Exhibits__(JP-5) and (JP-6)**, even before the extreme makeover of DEF's generation fleet, DEF's electricity rates are among the highest of the Florida IOUs. This makes DEF's planned makeover of its generation fleet not only costly, but risky. The risk is that DEF's rates will increase if projected load growth fails to materialize. This is because DEF would incur the higher costs of the capacity additions, but these costs would be spread over a lower sales base. Higher electricity rates can also be expected to constrain load growth, thus increasing the probability that rates could spiral even higher.

Conclusions and Recommendation

Q BASED ON YOUR ANALYSIS OF DEF'S FILED TESTIMONY AND RESPONSES TO VARIOUS DISCOVERY REQUESTS, WHAT CONCLUSIONS HAVE YOU DRAWN?

ADEF's proposed extreme makeover of its generation assets, including the recovery of costs associated with retiring generation assets (e.g., CR3, CR South, older gas units) and with its proposed self-build generation projects (e.g. Suwannee CTs, Hines Chiller Uprate and Citrus County combined cycle gas turbines) will commit customers to paying over \$4 billion for less than 200 MW of new capacity. With DEF's current electricity rates already among the highest among IOUs in Florida and in surrounding states, DEF's customers can ill-afford

1 the high price tag. Further, if DEF proceeds with its self-build projects and the
2 substantial projected load growth fails to materialize, rates would spiral further
3 upwards in a self-sustaining customer reaction to high electricity rates (*i.e.*, the
4 “death spiral”). This is too great a risk to impose on DEF’s customers for the little
5 benefit received.

6 Therefore, based on the lower projected costs, lower rate impact, greater
7 flexibility and lower risk, Acquisition 1 is clearly a better choice for DEF’s
8 customers. For all of these reasons, DEF’s request in this proceeding should be
9 denied.

10 **Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

11 **A** Yes.

1 BY MS. RULE:

2 Q Have you prepared a summary?

3 A I have.

4 Q Will you please give your summary.

5 A Yes. Thank you.

6 Good afternoon, Commissioners. My filed
7 testimony addressed the combined impact of Duke's
8 proposed Suwannee Simple Cycle and Hines Chiller Uprate
9 projects and concluded that Duke had not met its burden
10 of proof that these projects as a package are more cost
11 effective than the alternatives.

12 The announcement of the tentative deal between
13 Duke and Calpine raises many questions that cannot --

14 MR. WALLS: Objection.

15 A -- be answered today.

16 MR. WALLS: Objection. This is beyond the
17 scope of his direct testimony. He's not testified
18 anything about this.

19 MS. RULE: He has testified to what he's
20 testified about. We've been faced with a different
21 situation. You said you would give us some leeway
22 and we would ask for it.

23 CHARIMAN GRAHAM: Is this -- this summary is
24 all your prefiled direct testimony?

25 THE WITNESS: It is -- part of my prefiled

1 testimony is modified to reflect the circumstances
2 I'm now testifying to.

3 CHARIMAN GRAHAM: Well, now you're not
4 testifying. Now, you're being cross examined.
5 You're given a five-minute summary of your prefiled
6 direct testimony.

7 THE WITNESS: Yes.

8 CHARIMAN GRAHAM: So, it's not modified. It
9 should be what you already have in the record.

10 THE WITNESS: Yes, as to the address the
11 issues we now face, which are a little different
12 than the issues that were in my original summary.

13 CHARIMAN GRAHAM: But your five-minute summary
14 is what you -- before things changed.

15 MS. RULE: If I may --

16 CHARIMAN GRAHAM: Sure.

17 MS. RULE: Part of the reason that we objected
18 to severing Hines and Suwannee was because it was
19 offered as a package deal. And I believe the
20 response to the objection was that we would get
21 some leeway. We need to address the situation as
22 it, now, lies, which includes the effect that we've
23 been talking about all day of how taking Suwannee
24 out of the mix affects things.

25 Mr. Pollock's testimony did talk about load

1 forecasts. It talked about need. And he will
2 still talk about those same subjects.

3 CHARIMAN GRAHAM: But the whole purpose of his
4 direct testimony that's already in the record --
5 his purpose here today is to defend his testimony
6 that's in the record, not to testify again.

7 MS. RULE: I agree with you. On the other
8 hand, the situation he's testifying to has changed.

9 CHARIMAN GRAHAM: That's fine, but right now,
10 he is here just to defend what he's already
11 testified to, not to add to it.

12 MS. RULE: I believe he would be entitled to
13 modify to the extent that his testimony now only
14 affects Citrus and Hines. It doesn't affect
15 Suwannee. He's not going to testify to that.

16 MR. WALLS: If I may respond, he was
17 specifically referring to the new Calpine Osprey
18 deal, which he never testified about in his direct
19 testimony, never directly has even been here during
20 the discussion of that.

21 He is a new witness now. And that's what
22 they're purporting to do is have him, in his
23 summary, add to his direct testimony in the case
24 from what was filed. And we object to that.

25 MR. LAVIA: Calpine would join the objection.

1 MS. RULE: I would say until -- until he
2 testifies to that, there is nothing to strike.

3 CHARIMAN GRAHAM: One more time? I missed
4 that.

5 MS. RULE: Okay. Are you moving to strike his
6 summary? And if so, specifically which part?

7 MR. WALLS: I'm objecting to him testifying
8 now, which he's already indicated he's going to
9 do --

10 CHARIMAN GRAHAM: What he's supposed to be
11 doing right now is summarizing these pages that are
12 right here from his direct testimony. If the
13 things that he's summarizing is not in direct
14 testimony, then that should not be part of his
15 five-minute summary.

16 MS. RULE: Can you --

17 MR. MOYLE: Can I be heard on this,
18 Mr. Chairman?

19 CHARIMAN GRAHAM: Sure.

20 MR. MOYLE: I think the legal principle of if
21 it's good for the goose, it's good for the gander
22 should apply here, in that, you have allowed
23 certain witnesses to talk about the new deal.

24 I mean, Mr. Borsch just spent a lot of time
25 talking about it --

1 CHARIMAN GRAHAM: If somebody wants to ask
2 questions about his testimony and defense about
3 other things, that's fine. But his five-minute
4 summary is a summary of the pages that are here.

5 MR. MOYLE: Yeah, I mean, a lot has changed
6 quickly here.

7 CHARIMAN GRAHAM: I understand that.

8 MR. MOYLE: So, Mr. Kiser talked about due
9 process and --

10 CHARIMAN GRAHAM: Once again --

11 MR. MOYLE: -- make sure --

12 CHARIMAN GRAHAM: I completely understand
13 that. And if people start asking questions and
14 they want to go down that path, I will let the
15 flexibility be there. But this is his five-minute
16 summary. This is not him retestifying.

17 MR. MOYLE: Fair enough.

18 THE WITNESS: Okay. That's fine.

19 In particular, Duke carries the burden of
20 proof to provide clear and unambiguous evidence
21 that the combined Hines Chillers and other self-
22 build projects are the most cost-effective
23 alternative and that Citrus County is still needed.

24 The remaining -- the self-build projects
25 proposed in these dockets represent an extreme

1 makeover of Duke's generation fleet that will
2 essentially replace Crystal River Unit 3, Crystal
3 River Units 1 and 2, and Duke's older generating
4 facilities with newer ones. Removing the proposed
5 Suwannee peakers, Duke's retail electric rates
6 would have to support 3.8 billion of capital
7 investment to supply 121 megawatts less total
8 installed capacity.

9 Thus, Duke's proposal should be evaluated not
10 just in terms of the impact associated with the
11 self-build projects, the Commission should also
12 consider the broader impact that is the potential
13 consequences of exacerbating what are already among
14 the highest electric rates in Florida and the
15 southeast.

16 In particular, the potential for load-forecast
17 error could result in Duke overbuilding or
18 overspending. If the spending occurs, but the load
19 growth fails to materialize, which is a significant
20 risk, in my opinion, rates will be excessive.
21 Duke's customers can ill afford the high price tag.
22 This is just too great a risk to impose on the
23 customers for the little benefit received.

24 Finally, although the results of cost_
25 effectiveness analyses are instructive, it should

1 be recognized that all such models require numerous
2 assumptions; the big one, of course, being how much
3 load, how much energy is the company going to serve
4 in the future. These are subject to uncertainties
5 particularly in the later years of an evaluation.

6 To put it in context, every hundred-million-
7 dollars change in cumulative net present value
8 revenue requirement over a 30-year planning horizon
9 would affect rates by just eight cents per 1,000
10 kilowatt hours, a number that could easily fall
11 within the range of the model's accuracy.

12 The point is that the cost-effective analysis,
13 although instructive, should not be the sole
14 deciding factor.

15 That concludes my summary.

16 CHARIMAN GRAHAM: Thank you, sir.

17 THE WITNESS: Thank you.

18 MS. RULE: The witness is available for cross
19 examination.

20 CHARIMAN GRAHAM: Thank you.

21 Mr. Rehwinkle?

22 MR. REHWINKLE: Yes, Mr. Chairman. Just a few
23 questions. And I want to preface my questions by
24 stating, I take your admonition about friendly
25 cross seriously. The questions I wrote, except for

1 the one I just wrote down, I prepared last night
2 and not in collusion with NRG.

3 And I just want to state that for the record
4 because I'm going to ask questions that may or may
5 not be perceived that way. But our interests and
6 NRG's interests are not aligned, as you can see in
7 the prehearing statement -- prehearing order.

8 CHARIMAN GRAHAM: Well, as I said, I'll give a
9 lot of latitude here. So, let's start down the
10 path and see where we go.

11 MR. REHWINKLE: Thank you.

12 CROSS EXAMINATION

13 BY MR. REHWINKLE:

14 Q Mr. Pollock, Charles Rehwinkle with the Office
15 of the Public Counsel.

16 A Afternoon.

17 Q Hi. Can you tell me, do you have a degree in
18 electrical engineering?

19 A I do.

20 Q Are you a professional engineer in any State?

21 A I'm not.

22 Q Do you know whether the public counsel has
23 aligned itself with NRG in this docket in any way?

24 A I don't recall that they have on every issue.

25 Q Have you been provided details of the Calpine

1 deal that was announced yesterday? I have to -- and I
2 wrote today, but that was yesterday.

3 A No.

4 Q Do you have any information about the Calpine
5 deal that would allow you to know whether the purchase,
6 if consummated, of the Calpine unit would have any
7 impact on the need from the combined cycle unit at
8 Citrus County in 2018?

9 A Well, I don't have any specific information
10 about the specific deal other than what I've heard at
11 the hearings. And I certainly have not had a decent
12 enough time to absorb the information to be able to
13 determine how that affects all the other things going
14 forward.

15 And surely, there will be an effect.

16 Q Okay. So, I think I can anticipate your
17 answer to my last question, which is: Do you have an
18 opinion as to whether the addition of a 515- to
19 599-megawatt combined cycle generation unit would have
20 any impact on the 2018 or 2019 reserve margin of Duke in
21 Florida?

22 A I think the large part of that is going to
23 depend upon how much of that capacity is initially
24 available and how it's going to be utilized over the
25 period of time that it's there.

1 I think the other question, of course, is, you
2 know, since we were originally dealing with, essentially
3 two peakers, and now we're dealing with a base-load
4 option, I think that's another effect that we need to
5 look at now because that hasn't been modeled.

6 MR. REHWINKLE: Thank you, Mr. Pollock.

7 CHARIMAN GRAHAM: Calpine?

8 MR. LAVIA: No questions. Thank you.

9 CHARIMAN GRAHAM: Ms. Shelley.

10 MS. SHELLEY: No questions. Thank you.

11 CHAIRMAN GRAHAM: Mr. Brew?

12 MR. BREW: No questions, Your Honor.

13 CHARIMAN GRAHAM: Ms. Rule -- I'm sorry.

14 Nevermind. It's your witness.

15 Mr. Moyle.

16 MR. MOYLE: Yes, I do have a few. And they
17 are kind of along what Mr. Rehwinkle asked, I
18 think.

19 CROSS EXAMINATION

20 BY MR. MOYLE:

21 Q Just do you -- based on what you've heard
22 since you've been here or listening in on the internet
23 or anything -- I think there has been a description of
24 some general terms of a Calpine arrangement. Can you
25 share what you know to date about it?

1 A I would hazard only a guess. And I really
2 wouldn't want to take a guess of something that I don't
3 fully understand.

4 What I can understand is it significantly
5 changes the calculus of the case since we're really
6 essentially starting with a clean slate.

7 **Q You're familiar with need determinations,**
8 **correct?**

9 A Yes.

10 **Q Would you think -- I mean, in the Citrus --**
11 **I'm sorry -- in the Osprey option is up to 600 megawatts**
12 **with duct fire, right?**

13 A Yes.

14 **Q And Suwannee was how much?**

15 A Well, it was 320 megawatts, but you lose
16 128 megawatts because you can only have the three new
17 units if you retire the existing ones. So, on that, it
18 was less than 200 megawatts.

19 **Q All right. So, if you use simple math, if you**
20 **assume duct firing, 600 megawatts is going in and 200**
21 **megawatts is going out, that's a net increase of 400**
22 **megawatts?**

23 A It's 400 megawatts difference.

24 **Q Based on your professional experience in terms**
25 **of need determinations, would you think something where**

1 **there was a 400-megawatt difference would need to be**
2 **considered, modeled, studied, reviewed --**

3 MR. WALLS: Objection.

4 MR. MOYLE: -- before -- can I finish the
5 question?

6 MR. WALLS: Yes, you can.

7 MR. MOYLE: Before the Commission voted to
8 commit the ratepayers to \$1.5 billion?

9 MR. WALLS: Objection. Lack of foundation.

10 CHARIMAN GRAHAM: Mr. Moyle?

11 MR. MOYLE: Well, I think the foundation is in
12 the record. I mean, he just -- he just testified
13 about a 400-megawatt swing. And I'm not sure
14 that -- the foundation with respect to what?

15 MR. WALLS: He has no foundation to testify
16 what the impact would be when he hasn't done any
17 calculations or analysis whatsoever.

18 MR. MOYLE: Well, I don't think my question
19 asked him what the impact would be. I think my
20 question simply was, as an expert, you know, would
21 he think a 400-megawatt swing is something that
22 should be considered and analyzed and done, you
23 know, kind of in a studious fashion as compared to
24 just making a decision for a \$1.5 billion unit
25 with, eh, mas hermanos --

1 CHARIMAN GRAHAM: I will allow the question.

2 Will you restate it again so I can hear it?

3 BY MR. MOYLE:

4 Q You're an expert.

5 A Yes.

6 Q You've been around utility planning and
7 business for a long time.

8 A Yes.

9 Q Okay. Given your background, your history,
10 your experience, would you think if you added a new fact
11 into a need-determination proceeding where there was 400
12 megawatts -- there was a change in a 400-megawatt
13 arrangement announced while the hearing was going on --
14 in your professional opinion, would that be something
15 that the Commission should step back, analyze, get more
16 information on, have production-cost modeling, look at
17 reserve margins, understand the impact?

18 Or should the Commission just go ahead and
19 move forward and, you know, vote up or down on whether
20 to approve a \$1.5 billion project? In your opinion.

21 A Well, in my opinion, based on the information
22 I reviewed in this case, including the company's load
23 forecast, I don't think there is enough information to
24 make a decision.

25 I mean, clearly, the change from two peakers

1 to a peaker and a base-load option, coupled with the
2 other base-load option in the 110 docket, I think really
3 changes this case completely. And it's really a horse
4 of a different color. And we basically are having a
5 clean slate or need a clean slate to start with so that
6 everything can be thoroughly vetted.

7 In particular, I think there are some issues
8 with respect to load forecasting that I've raised in my
9 testimony that go directly to the need for this
10 additional capacity that needs to be reviewed.

11 And if none of the modeling is reflective of
12 anything other than what the company's load forecast is,
13 I think that's probably one of the most serious
14 shortcomings that I can see just having been in cases
15 like this in a number of places over the last, you know,
16 30 years.

17 **Q So, what would you recommend if the Commission**
18 **said, well, Mr. Pollock, you're an expert -- what do you**
19 **recommend we do with respect to load forecast? How**
20 **would you answer that question?**

21 **A** Well, it's been my experience that in
22 planning cases and need cases like this, the utility
23 typically presents more than one scenario for load
24 forecast. What we've seen in this case is just a single
25 scenario. I've identified several problems with that

1 scenario.

2 And the further facts that have come to my
3 attention since I filed my testimony -- I believe that
4 there are some significant risks that are not being
5 properly reviewed and should be reviewed.

6 Plus the fact that none of the modeling
7 reflects a different load-forecasting scenario. None of
8 the modeling reflects the combination of options that
9 we're now talking about including a stand-alone Hines
10 unit. I just think that there needs to be a little more
11 analysis in order to base a sound policy decision.

12 **Q Do you think that this announced deal makes**
13 **those risks that you identified in your testimony**
14 **greater, less, about the same, or can't tell?**

15 MR. WALLS: Objection. Lack of foundation.
16 He's already testified he doesn't know the details
17 of the deal. So, he can't possibly answer this
18 question.

19 CHARIMAN GRAHAM: I agree to the objection.
20 This one.

21 MR. MOYLE: Mr. Pollock -- I'll move on to
22 another topic.

23 CHARIMAN GRAHAM: Sure.

24 BY MR. MOYLE:

25 **Q Staff -- you make a comment -- I'll tie it in.**

1 **You make a comment on Page 23 of your testimony about**
2 **will commit customers to paying over four billion for**
3 **less than 200 megawatts.**

4 A Yes, that's correct.

5 **Q How do you get to that number?**

6 MR. WALLS: Objection. Friendly cross.

7 CHARIMAN GRAHAM: I'll allow it.

8 THE WITNESS: The four billion shown in
9 Exhibit 87, which is a summation of the terms of
10 the 2013 settlement that shows each of the various
11 cost items associated with the existing generation
12 facilities as well as the new ones that had been
13 proposed originally in these dockets, which,
14 together sum to \$4 billion.

15 In terms of the less than 200-megawatt portion
16 of that analysis, I presented a chart. And that
17 chart is on Page 21 of my testimony. Now, I would
18 add that those numbers and the capacity numbers are
19 assumed that the Suwannee units as originally are
20 filed in this case are implemented, and in service
21 as originally proposed.

22 BY MR. MOYLE:

23 **Q So, that chart you're referencing would have**
24 **to be revised based on recent events?**

25 A Yes. In my summary, I did revise it. I said

1 it was 3.8 billion for about 120 megawatts less
2 installed capacity.

3 Q The staff had just read to the Commission a
4 response of a question -- and you talk about rates in
5 here, but -- that it was -- if I understood it
6 correctly, there was a combined cycle -- the Citrus
7 County project would result in a \$6.55 increase, a
8 thousand KW customer bill. Did you understand that to
9 be a monthly increase? An annual increase?

10 A Well, it sounds like it would be on a monthly
11 basis since the thousand kilowatt hours is a typical
12 average monthly usage.

13 Q You would agree that most commercial users and
14 industrial users and large residential users use a lot
15 more than that thousand kilowatts?

16 A Well, certainly they do. And I haven't
17 reviewed the calculation. So, I don't know what the
18 basis for it is.

19 Q Would it be fair to say that that number is
20 probably larger for a lot of Duke's customers?

21 MR. WALLS: Objection. Lack of foundation.
22 He just said he hasn't looked at it.

23 THE WITNESS: I said I hadn't looked at the
24 calculation.

25 CHARIMAN GRAHAM: Let's move on.

1 BY MR. MOYLE:

2 Q Let me ask you this: Mr. Borsch said that you
3 were suggesting deferral -- you and the other witness
4 for Calpine -- and trying to retain optionality or
5 flexibility. Is that a correct summary from Mr. Borsch?

6 MR. WALLS: Objection. Friendly cross.

7 CHARIMAN GRAHAM: I'll allow it.

8 THE WITNESS: Well, I look at it from a little
9 different perspective. It addresses the same
10 point. And the point it gets to is is the capacity
11 really going to be needed or not.

12 If you look at the load forecast and do some
13 sensitivity around the load forecast, you can
14 arrive at a scenario that suggests, you know, if we
15 assume that the company's historical load factor
16 doesn't change, that that could swing as much as
17 1400 megawatts of load going forward.

18 If that, in fact, happens, that suggests that
19 the company is going to serve 1400 megawatts less
20 load in the future -- at some point in the future.
21 That certainly would have an effect on whether or
22 not the company needs all of the capacity it's
23 seeking in its dockets.

24 BY MR. MOYLE:

25 Q Final question. On Page 28 of your testimony,

1 Line 4, you use the phrase a "death spiral." And that's
2 not a phrase that I've seen a lot used in these
3 regulatory proceedings. Are you suggesting that there
4 will be serious, devastating consequences for ratepayers
5 if the Commission approves this project?

6 MR. WALLS: Objection. Friendly cross. Lack
7 of foundation.

8 CHARIMAN GRAHAM: I have to go with that
9 objection.

10 MR. MOYLE: I guess we'll not -- we'll kind of
11 wait and see on that.

12 Thank you, Mr. Pollock, for --

13 THE WITNESS: Thank you.

14 MR. MOYLE: For your testimony.

15 CHARIMAN GRAHAM: Mr. Cavros.

16 MR. CAVROS: Thank you, Chairman. I just have
17 one quick question.

18 CROSS EXAMINATION

19 BY MR. CAVROS:

20 Q Mr. Pollock, in relation to load forecasting
21 and specifically in this case, if the company projects
22 in 2012 that its megawatt capacity will need to be
23 10,462 megawatts, and then in 2014, it reports that its
24 2013 actual megawatt requirement was 9,581, which
25 results essentially in an overestimation of

1 **881 megawatts -- would that give you pause?**

2 MR. WALLS: Objection. Friendly cross.

3 CHARIMAN GRAHAM: I'll allow it.

4 THE WITNESS: Well, certainly if there are
5 indications that past forecasts have shown wide
6 degrees of difference, I would think that that
7 would be a good reason for the Commission to take a
8 better look at different load-forecast scenarios so
9 they can appreciate the impact that those scenarios
10 would have on the choice, not only in terms of the
11 type of capacity, but also the amount of capacity
12 that would be needed to serve reliably and at the
13 lowest reasonable cost.

14 MR. CAVROS: I'm done. Thank you.

15 CHARIMAN GRAHAM: Thank you.

16 Duke?

17 MR. WALLS: No questions.

18 CHARIMAN GRAHAM: Staff?

19 MR. LAWSON: We have no questions.

20 CHARIMAN GRAHAM: Commissioners?

21 Redirect?

22 MS. RULE: No redirect.

23 CHARIMAN GRAHAM: Okay. Exhibits.

24 MS. RULE: NRG would move Exhibits 84 through

25 89.

1 CHARIMAN GRAHAM: We're going to move Exhibits
2 84, 85, 86, 87, 88, and 89. Okay. I think that's
3 all those exhibits.

4 (Whereupon, Exhibit Nos. 84-89 were received
5 in evidence.)

6 CHARIMAN GRAHAM: Would you like to excuse
7 your witness?

8 MS. RULE: Thank you, Mr. Pollock. May he --

9 THE WITNESS: Thank you for your time,
10 Commission. I appreciate it.

11 CHARIMAN GRAHAM: Mr. Pollock, thank you for
12 coming. I didn't mean to interrupt your summary,
13 but that's one of the things that I had to stick to
14 tightly.

15 THE WITNESS: That's okay. You're the leader.
16 So, we'll follow the leader.

17 (Laughter.)

18 CHARIMAN GRAHAM: Thank you very much. Travel
19 safe, sir.

20 THE WITNESS: Thank you.

21 CHARIMAN GRAHAM: Okay.

22 Staff, additional procedure matters.

23 MR. LAWSON: Staff would just like to take a
24 moment to remind all the parties that post-hearing
25 briefs are due no later than September 10th.

1 Separate briefs should be prepared for each docket
2 that they are in. Combined total for both briefs
3 shall not exceed 80 pages; however, parties may
4 allocate the pages between the briefs as they
5 desire.

6 Also, just like to remind everyone of several
7 critical dates. The hearing transcript for today
8 and yesterday's hearing transcript should be
9 available on September 2nd, 2014.

10 And just a reminder that we are set to go to
11 agenda on this matter on October 2nd, 2014.

12 And I believe that's all the matters we have
13 to address. And unless anyone has anything else, I
14 believe we may be in the position to adjourn.

15 CHARIMAN GRAHAM: Are there any other matters
16 to come before us?

17 I want to thank you all for your patience. I
18 know I let some testimony in that probably I
19 wouldn't have normally, but going back to our
20 General Counsel's words of warning of due process,
21 I wanted to make sure that everybody had as much
22 ability as possible. You have staff's dates on
23 when everything is due.

24 So, if there is nothing else to come before
25 us, thank you for your time and your patience. I

1 hope y'all travel safe. We're adjourned.

2 (Whereupon, the proceedings were concluded at

3 4:48 p.m.)

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CERTIFICATE OF REPORTER

STATE OF FLORIDA)
COUNTY OF LEON)

I, ANDREA KOMARIDIS, Court Reporter, certify that the foregoing proceedings were taken before me at the time and place therein designated; that my shorthand notes were thereafter translated under my supervision; and the foregoing pages, numbered 761 through 907, are a true and correct record of the aforesaid proceedings.

I further certify that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED this 2nd day of September, 2014.



ANDREA KOMARIDIS
NOTARY PUBLIC
COMMISSION #EE866180
EXPIRES FEBRUARY 09, 2017