BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

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 5

Pages 660 through 761

PROCEEDINGS: HEARING

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

DATE: Wednesday, August 27, 2014

TIME: Commenced at 9:57 a.m.
Concluded at 12:56 p.m.

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

REPORTED BY: LINDA BOLES, CRR, RPR
Official FPSC Reporter
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APPEARANCES: (As heretofore noted.)

I N D E X

WITNESSES

EXHIBITS

NUMBER:		ID.	ADMTD.
136	Excerpt/Seminole 2013 Ten-Year Site Plan	669	
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P R O C E E D I N G S

(Transcript continues in sequence from Volume 4.)

MR. WALLS: We tender Mr. Borsch for cross-examination at this time.

CHAIRMAN GRAHAM: Thank you very much.

Mr. Rehwinkel.

MR. REHWINKEL: Thank you, Mr. Chairman. I don't know exactly how this is going to go, but I'm going to -- just to give you an idea of the time, if you, if you're interested, I think about an hour is what I would need. I'll try to stay to that.

CHAIRMAN GRAHAM: Okay.

MR. REHWINKEL: That's an Art Graham hour.

(Laughter.)

I can suck up when I need to.

CHAIRMAN GRAHAM: You're a wise, wise man.

EXAMINATION

BY MR. REHWINKEL:

Q Good after -- oh, no, it's still morning. Good morning, Mr. Borsch. I feel like I should call you Ben, but I think I'm supposed to call you Mr. Borsch.

I want to start by asking you about a statement you made in your summary with respect to what is and is not prudent with respect to the load forecast.

Do you recall making a statement about what --

A Yes.

Q Is it your testimony that it's not prudent to question the company's load forecast?

A No. It's my statement that it's not prudent to make arbitrary assumptions about how a load forecast might change that are not supported by direct analytics.

Q Okay. So you think it's fair for the Commission or Intervenor to challenge a load forecast based on principle and evidence; is that right?

A Yes. I believe that's in this docket and also presumably in the ten-year site plan workshops.

Q Okay. And you would also agree that the forecasting process that the company undertakes is not perfect; right?

A We do the best we can with the information we have.

Q Okay. For purposes of the need determination for the Citrus unit in 2018, would you agree with me that the forecast that you have used is the same one that is shown in the 2014 Ten-Year Site Plan that you filed with the Commission?

A Yes.

Q For purposes of demand?

A Yes.

Q Now would you also agree with me that a significant portion of the load that Citrus is designed to meet in 2018 in order to maintain a 20 percent reserve margin is related to your wholesale customers?

A I would agree that the wholesale customers or the wholesale demand is a portion incorporated into our overall load. I would point out that none of the projected wholesale demand is speculative in that to the extent that the wholesale demand reflected in our forward going projections of demand is based entirely on executed contracts with our various wholesale customers and not, does not reflect any speculation with regard to extension of those contracts.

Q Now isn't it true that Seminole Electric Cooperative constitutes the largest portion of your wholesale load?

A Yes.

Q Is Seminole your largest single customer?

A I am not certain of the answer to that question.

Q Okay. They certainly are in the top three?

A They are a large customer.

Q Okay. And as you alluded to in a prior answer to me, you sell power to Seminole based on a series of contracts that were entered into in 2006, 2009, and

2011; is that right?

A I don't know those exact dates, but it's fair to say that we have a series of contracts that have been executed over the last several years, yes.

Q Okay. Have you entered into any after the, since the merger or any amendments, including any amendments after the merger on July 2nd, 2012?

A I am not specifically aware of any, but I -- that is not my area. When I look at those, I typically, you know, look at a composite number supplied to me by our wholesale generation group. So I'm, you know, not aware of the actual contract details.

Q Okay. Would you be able to turn to your, in your direct, your Exhibit 1 and your Exhibit 2? And I want to direct you to Table 3.1 of both of those.

A I'm sorry. Direct in which docket?

Q The 110 docket.

A Thank you. Mr. Rehwinkel, if you have pages --

Q I apologize. That's a good -- 164 of BMHB-1 and 18 of BMHB-2. And, again, this is tables -- Table 3.1 of both the 2013 and 2014 ten-year site plan, which is page 2-6 of the respective plans. Do you see that?

A Yeah. I'm working on it. I have the, I have the 2014 version.

Q Okay.

A I don't seem to have easily found the 2013 version.

(Pause.)

I'll have to apologize. There seems to have been a gap in my copying. I think we can provide that in just one moment for my reference.

(Pause.)

Okay. I apologize for the delay. I do have both of those in front of me.

BY MR. REHWINKEL:

Q No problem. There's a lot of paper here.

So what I'd like to ask you about is if you could just look at the values in the column three on each schedule, which is wholesale; correct?

A Yes.

Q And in 2013, you -- in the 2013 plan you had a forecast for that year and in 2014 you have an actual; right?

A Correct.

Q So is it fair to say that you projected in 2013 937 megawatts of sales to your wholesale customers and your actual was 581; right?

A Yes.

Q And that was driven by something that happened

at Seminole; correct?

A Well, more broadly that was driven by the difference between -- in other words, when we do the projections, what we show is what is the contracted capacity that we are expected to provide, expected to be able to provide on peak under the contracts that we have executed with various wholesale entities.

What's shown in the actuals is the amount of energy or the amount of capacity that those entities called upon on the peak in that actual hour, in that actual year. So they don't directly line up. They're not directly comparable numbers.

Q Okay. So based on that answer, my question to you is this. Do you ever sit down with one of your very largest customers and ask them what do you expect, or is it purely driven by the circumstances they face? What do they expect to take from you?

A Well, I think that in the purposes of our seasonal short-term planning we do have conversations of that nature. In the purposes of our long-term planning, you know, unless those customers have come back to us and suggested that they are interested in renegotiating those contracts and reducing their capacity take, we continue to plan to fulfill the contracts we have executed.

Q Okay. Would you agree that you have contracts with Seminole that allow them to take up to a certain amount of intermediate or peaking?

A That is how the contracts are structured, yes.

Q Okay.

MR. REHWINKEL: Mr. Chairman, I'd like to hand out an exhibit for cross-examination and ask that it be given a number.

CHAIRMAN GRAHAM: We will give it number 136. Do you have a short description, a title for that?

MR. REHWINKEL: Yeah. This is an excerpt, Seminole 2014 Ten-Year Site Plan.

CHAIRMAN GRAHAM: Okay.

(Exhibit 136 marked for identification.)

MR. REHWINKEL: And just while these are being passed out, Mr. Chairman, I have included the cover page and pages 4 and 5 of the Seminole Ten-Year Site Plan that is on file with the Public Service Commission.

CHAIRMAN GRAHAM: Okay. I think we're ready.

BY MR. REHWINKEL:

Q Okay. Mr. Borsch, do you have Exhibit, what's been marked as Exhibit 136 in front of you?

A Yes.

Q Despite the fact that they say --

MR. REHWINKEL: Actually, I apologize, Mr.

Chairman. I have provided an excerpt from the 2013 Seminole Ten-Year Site Plan. It's labeled 2014, but --

CHAIRMAN GRAHAM: Okay. The short title we put down was 2013.

MR. REHWINKEL: Oh, okay.

BY MR. REHWINKEL:

Q Okay. So I guess I would ask you, Mr. Borsch, are you familiar with the representations of the types of purchases that Seminole makes of Duke?

A Not the specifics of them. I, as I said before, while I do typically, you know, review at least at a high level the totals and the underlying makeup of those totals for the contracts going forward, I don't familiarize myself with the specifics of the contracts.

Q Okay. Does -- well, let's look at the first item here under PEF system intermediate. It says up to 625 megawatts of firm system intermediate and/or combined cycle capacity in 2012, 450 megawatts in 2013, and 150 megawatts from January 2014 through December 2020.

A Yes.

Q Do you know whether that's still in effect for --

A As far as I know that is still in effect.

Q So would you project the full 625 megawatts?

A No. We would project the amounts contracted in the specific individual years that they are contracted. I believe that, as laid out here, they have varying amounts in different years, and those numbers are supplied to me on an annual basis by our wholesale team. And the actual annual commitments fall into our Ten-Year Site Plan each year. And if there are updates from year to year based on new contracts or renegotiation of existing contracts, then the results of those updates are folded into the next year's Ten-Year Site Plan.

Q Okay. So if I go down to the PEF system base, 150 megawatts of firm system base from January 2012 to 2013, that's in the past; 250 megawatts from January 2014 through May 2016; and 50 megawatts from June 2016 through December 2018.

A Yes.

Q Would your answer be the same, is that those would still be based on an annual amount of contracted for power?

A Yes. As I said, the specific amounts for each year are provided to me and used in the forward planning.

Q Okay. And the same would apply with respect to the seasonal peaking, the PEF system average, and the

PEF system combined cycle on that page and the next page; right?

A Yes.

Q And there is a -- the final item on this page, it says, PEF partial requirements.

A Uh-huh.

Q And we don't need to read this, unless you want to explain something about it. There was -- on the last two lines of that, of that bullet it says, Seminole did not purchase PR or partial requirements capacity in 2012. This agreement terminates on December 31, 2013. Do you see that?

A Yes.

Q So is this the only contract that Seminole has let expire in recent years?

A I can't say that I know that specifically. As I had mentioned before, typically the wholesale group will provide to me a group, you know, I mean, you know, a set of totals. I mean, the level of granularity that I would typically see in these contracts would be to see a capacity amount and a projected energy, you know, rolled up as a total, you know, by customer, not necessarily by contract. So and, you know, even that, typically, you know, the most important number for my resource planning purposes is what is the total

aggregate for all our customers. So I cannot speak to the details of any specific contracts one way or the other.

Q Okay. Were you aware that Seminole lost Lee County Electric Co-op to FPL in 2013? In 2014 really.

A At a high level I understand that that was an issue, yes.

Q Okay. And did that affect the demand, the wholesale demand?

A I guess the only way that I can reflect that is to say they have, as far as I know, not come to us and changed any of the contracts that we have in place that are, you know, reflected in our planning.

Q Okay. So in your deposition you said that you have not had any material conversations with Seminole with respect to changing their contracts. Do you recall that?

A I did. And that was, I have to admit, based on, you know, a limited amount of conversation I have had with our wholesale group, you know, basically at the level of asking them are there any changes that I should expect that might affect the plan, and they said no.

Q Okay. Do you know whether there are conversations that have been had with Seminole with respect to the amount of power that they would purchase

under the contract?

A Beyond what I just said, I'm not aware.

Q Okay. Well, let's go to the, your 2014 Ten-Year Site Plan, page 18 of your BMHB-2.

A Yes.

Q Okay. Given the answers that you just gave me about how you forecast, let me see if -- make sure I understand. You visit this, the forecast of sales to Seminole on an annual basis?

A Correct.

Q Okay.

A And all of our other wholesale customers, yes.

Q Okay. But the vast majority of your purchases in the wholesale arena or sales in the wholesale arena are to Seminole; is that right?

A They are a significant customer.

Q Do you know what percentage they make of your wholesale?

A I do not.

Q You don't even have kind of a within ten percentage points?

A No, I don't.

Q Okay. So let's look at from years 2015 to 2016 in the wholesale column. There's a drop of, it looks like 248 megawatts of sales forecasted there. Do

you see that?

A That looks like 148 megawatts to me, but, yes.

Q I'm sorry. 148. Is that because of something to do with Seminole?

A Well, I don't know specifically. However, I think, you know, to the point that you were making a moment ago about Seminole's Ten-Year Site Plan, they, like all our other wholesale customers, have contracts of varying lengths and quantities in which they have different capacity takes for each year.

So without knowing the specific details, what I will say is that, as I mentioned before, these annual quantities are provided to us by our wholesale group, you know, as a roll-up of the actual specific contracted amounts from one year to the next. So it would be my assumption that the variation from year to year that's reflected in the projections in the Ten-Year Site Plan reflect the ups and downs of different contracts that we have over time.

And certainly, as you were reading the various contracts reflected in Seminole's Ten-Year Site Plan, you could see that some of those contracts were tapering down, others were going up. So, you know, clearly the total amongst all of those was going to vary by some amount from year to year.

Q Okay. If I could get you to look at the 2013, same schedule.

A Uh-huh.

Q For 2017 I see 894 megawatts.

A Sorry. I pulled the wrong page.

Q And, again, 587 for 2014 for the same year. And that's a difference of, what, 307 megawatts?

A Yes.

Q Okay. Do you know why the forecast for 2017 sales to Seminole, to -- I guess this was largely, again, they have to be driven by Seminole; right?

A Well, I guess I will go as far as to say that there was certainly a change in our total projected wholesale sales.

Q And what was the basis for that?

A Specifically I don't know, but I can say in general that I presume that that reflects a change in the contracted amounts that our wholesale group was identifying.

Q Okay. Well, let's go to, and again --

MR. MOYLE: I'd move to strike the, that last answer. It was entirely speculative. He said he doesn't have information about it, doesn't know. It doesn't make sense for him to guess.

MR. WALLS: I mean, he's already answered the

question and there's no objection to the question, so --

MR. MOYLE: Motion to strike the answer.

CHAIRMAN GRAHAM: I'll allow the question and the answer.

BY MR. REHWINKEL:

Q On your 2014 Schedule 3.1, let's look at the year, the difference, the change from 2018 to 2019. It looks to me like a 250-megawatt increase in sales.

A Yes.

Q Do you, do you know the reason for that?

A Again, I would have to refer to --

MR. MOYLE: Objection. So I don't get hit with I didn't object on a timely basis, if he has an answer and he knows, fine. But if he's speculating, doesn't know, then I would object.

CHAIRMAN GRAHAM: Fair enough.

THE WITNESS: All right. How about if I answer it this way. It is my understanding -- I mean, those numbers are verified to me by our wholesale group as being the contracted amounts to our, the sum total of all our wholesale customers in those years. I don't know the contract specifics of what, you know, or I'm not able to tell you right now the contract specifics of what underlie any of those particular breakdowns of what customers or what contracts are involved.

BY MR. REHWINKEL:

Q Okay. But for 250 megawatts, that would have to be driven by Seminole; correct?

A Again, that would be a supposition.

Q Do you have any customer that takes 250 megawatts of wholesale power from you other than Seminole?

A Not that I'm aware of. But, you know, as I have not specifically looked at the schedule recently and committed it to memory, I would have to say that I can't answer that for sure.

Q Well, you can't answer anything about your forecast for sure; correct?

A Well, what I can say for sure is that the wholesale amounts reflected in our 2014 Ten-Year Site Plan reflect contracted amounts of capacity with existing executed contracts, and that's how they're calculated.

MR. REHWINKEL: Okay. Mr. Chairman, I'd like to then, I guess, pass out an exhibit.

CHAIRMAN GRAHAM: All right. We will give this one 137.

MR. REHWINKEL: Okay. And the short title is Seminole Electric Cooperative Contract Excerpts.

CHAIRMAN GRAHAM: Okay.

(Exhibit 137 marked for identification.)

MR. REHWINKEL: And if there are any problems with this, I do have 24 -- I had a problem with copying -- 24 copies of the entire set of contracts, if anybody wants to see them.

Mr. Chairman, I have Bates numbered these at the very bottom. These are my numbers, 1 through 20.

CHAIRMAN GRAHAM: Okay.

BY MR. REHWINKEL:

Q Mr. Borsch, do you have --

MR. REHWINKEL: What are we calling this, 138? 137.

CHAIRMAN GRAHAM: 137, correct.

BY MR. REHWINKEL:

Q Do you have Exhibit 137 in front of you?

A Yes, I do.

Q Okay. All I have done here for excerpt purposes is taken the cover page, the first page that has the date, and then the pages that address the capacity that is being contracted for. So, for example, on the, on page 1 there's a two thousand and -- January 21, 2009, contract. And then if you look on page 4, there's a section that says system-based capacity, and it has various megawatt amounts. Do you see that, like on section 4.1?

A I'm sorry. You're looking at 4.1?

Q Yes, sir.

A Yes.

Q Okay. Just to use this for an example, would these amounts be what you would forecast for, let's say, for 2018? There's -- it says, for the period June 1, 2016, through December 31, 2018, company will sell to customer 50 megawatts of system-based capacity and corresponding energy as provided herein. Would you, for purposes of forecasting, would you forecast that entire 50 megawatts for the year 2018?

A Yes, we would.

Q Okay. So this would not be one that you would have to understand how much they would buy. You would assume they were going to buy all of this; is that right?

A I would assume that we were obligated to provide that capacity and be called upon by our customer, expected to have that available for them.

Q Okay. So let's look at, let's go to page 9 of the exhibit. And this is a 2006 contract, as you can see on page 6, and looking in term section 4.1. It says, company will sell to customer 150 megawatts of system intermediate capacity and corresponding energy.

A Yes.

Q So for the year 2018, you would assume 150 megawatts in your forecasted sales to Seminole?

A Yes.

Q Okay. How about, let's go to page 10, and we're looking at the term 5.1. This is under the section seasonal peaking, system peaking capacity.

A Uh-huh. Uh-huh.

Q And it says in the middle there, from period December 1, 2014, through December 31, 2020, during the four calendar months of January, February, March, and December of each year, company will sell to customers 600 megawatts of seasonal system peaking capacity. Do you see that?

A Yes, I do.

Q How would that 600 megawatts be forecasted?

A Well, that 600 megawatts would be reflected on Schedule 3.2 as part of our winter capacity.

Q Okay. So these would not be in your 3.1 numbers?

A They would not.

Q Okay. All right. So if I could get you to turn to page 14. And this is titled -- the title of this document is First Amendment to Agreement for Sale and Purchase of System Combined Cycle Capacity and Energy Between Florida Power Corporation, doing business

as Progress Energy Florida, and Seminole Electric Cooperative, Inc. Do you see that?

A Yes.

Q And this appears to be an amendment that was dated December 18, 2009. Do you see that?

A No. It -- oh, yeah, I was looking -- that date is on here and also the date of the 29th of September, '11.

Q Oh, it's an amendment to the 2009 contract, so it's September 29, 2011.

A Yes.

Q Okay. I probably should have done this in color, because what you can't see is this document under 2.1 has, it's in legislative format.

A Uh-huh.

Q And if you'll turn to page 20, keep your finger on page 14, it appears to be executed and signed by both Seminole and Duke. Do you see that?

A Yes.

Q Okay. Are you familiar with this amended, amendment to the contract?

A Not specifically.

Q All right. If I'm looking here in 2.1, let's see if we can read this. For the term, company agrees to sell to customer and customer agrees to purchase from

company system combined cycle capacity in the amount of 200 megawatts for the period from June 1, 2016, through December 31, 2018, and 250 megawatts from the period from January 1, 2019, through May 31, 2019. Is that -- am I reading that right?

A I believe so.

Q Okay. And then it says, and in parentheses, collectively, the period from June 1, 2016, through May 31, 2019, shall be referred to as period one. And then it continues, in the amount of 500 megawatts during the period from June 1, 2019, through December 31, 2022. Do you see that?

A Yes.

Q Okay. So given that, let's go back to your 3.1 schedule in, on page 18 of your BMHB-2.

A Okay.

Q And if I look in 2019 through 2022, I don't see an increase in sales of 500 megawatts. What am I missing?

A Well, two things, I think. The first thing is that there's not an increase in sales even in this paragraph of 500 megawatts because it starts out at 250 the year before and then goes to 500.

But second of all, I think what is missing, and it was demonstrated by the reference that you made

to Seminole's Ten-Year Site Plan, is that there are a number of contracts in play with Seminole and with other wholesale contracts, which, you know, are changing from year to year. So to focus on a single contract misses the whole picture.

So while this contract may be increasing by 250 megawatts from one year to the next, other contracts may be rolling off so that the total differential intake is going to be something else.

Q The excerpts of the contracts that I have -- the contracts that are represented by the excerpts in Exhibit 137, are you saying those are not the complete set of contracts that you have with Seminole?

A I certainly don't know that one way or the other.

Q So it would be fair to say that the amounts that are shown here that are not seasonal peaking that are shown here in these excerpts that are firm capacity that are contracted, you have projected in out years from 2015 forward the contracted firm amounts; is that right?

A Yes. For all of the, for each of the contracts by season, summer or winter, or perhaps summer and winter, we have projected forward based on our executed contracts the amounts of capacity to which we

are committed for our wholesale customers.

Q And just to be clear, it's my understanding that these contracts treat wholesale customers the same as retail customers in the sense that they're considered native load; is that right?

A That is my understanding, yes.

MR. REHWINKEL: Okay. If I could have just a second, Mr. Chairman.

CHAIRMAN GRAHAM: Sure.

BY MR. REHWINKEL:

Q Mr. Borsch, is it your testimony that you are not aware of any change in the projected sales of power to Seminole Electric Cooperative for the years 2015 through 2020?

A It's my testimony that as of the time these values were given to me that they represent the contracted amounts that we have. I am not aware of updates to those contracts which would have occurred since the provision of this load forecast, and so I'm not aware of any other particular changes, no.

Q Are you aware of any non-contract bases that Seminole would have to seek to reduce what they purchased from Duke for the years 2015 through 2020?

A I'm not even sure I know what that means. No.

Q Okay. Before you filed your need

determination, did you, did Duke sit down with Seminole and have any discussions with them about their needs for the period 2018 and 2019?

A Not that I'm aware of. I certainly did not participate in any such conversations. My conversations regarding that, the wholesale load forecasts were entirely internal with our wholesale contracting group.

Q Okay. All right. Let's -- I want to move away from the Seminole issue, and I want to ask you to tell me what you understand to be the essential terms of the August 26th, 2014, Calpine deal with respect to the impact of that deal on the need for the Citrus County combined cycle unit.

A Okay.

Q I was going to ask you if you could tell me what you know about the contract -- I mean, the deal. And when I say the Calpine deal, I'm -- do you know what I'm referring to? What was announced yesterday at the hearing.

A Yes.

Q Okay. So --

A I was waiting for a specific question. Sorry.

Q Oh, well, let me repeat my question. I want you to tell me what you understand about the Calpine deal with respect to how it impacts the Citrus County

need determination.

A The structure of the Calpine deal in essence is a PPA beginning no later than January 1st, 2015, extending for the years 2015 and '16, followed by an acquisition of the Osprey facility in whole at the end of 2016. It does not, in my opinion, have a material or any -- I shouldn't say material -- it does not have any impact on the need for the Citrus facility because the available number of megawatts on peak from the Calpine facility is limited for a number of years based on the availability of firm transmission.

MR. MOYLE: You know, Mr. Chairman, he's testifying and it's all hearsay. I mean, if there's a document, if he wants to put in a document. But, I mean, it's all kind of --

CHAIRMAN GRAHAM: I don't know if it's hearsay. He asked him what he knows about the deal, and I'm going to give as much latitude as possible.

MR. MOYLE: Okay. So we would just maintain an objection that it's, that it's hearsay.

CHAIRMAN GRAHAM: Okay.

MR. MOYLE: Because it's either based on something he read or what somebody told him who's, you know, not here.

CHAIRMAN GRAHAM: Okay.

BY MR. REHWINKEL:

Q I think you were in the middle of explaining about the limitations on the available capacity from the plant.

A Yes. Under peak load conditions, Calpine is currently limited to deliver to DEF 249 megawatts. That is their firm point-to-point reservation across their transmission provider to DEF that is available to us on peak. So until we are able to construct additional transmission to have access to the full capacity of the plant, the peak value that would be reflected in our peak capacity for the purposes of determining reserve margin will be the 249 megawatts.

Q What is the earliest purchase date of the Osprey plant?

A I don't believe, as I understand the terms at the moment -- obviously, the final deal has not, is yet to be determined -- but the terms at the moment contemplate an end of 2016 closing. I don't believe there's an earlier or later.

Q Okay. And what is your understanding of the earliest under the Calpine deal, as you know it, that Duke would -- that transmission necessary to obtain the full capacity of the plant could begin?

A We would anticipate beginning that

transmission work in earnest following the closing of the full acquisition of the plant.

Q Is there a target for closing of the Calpine deal?

A Well, as I just mentioned, we expect the acquisition to occur at the end of 2016.

Q So you wouldn't start transmission work before the end of 2016; is that what you're saying?

A No. The transmission work, as I believe is identified in the testimony of Mr. Scott, is a significant investment. And, you know, while we will have a contract in place with Calpine, you know, there are, first of all, regulatory hurdles to be overcome and, second of all, various -- one will expect -- I mean, you know, obviously we haven't negotiated all the details of this, but we expect that there will be terms and conditions for both parties to potentially exit the deal if certain performance measures are not met. So we would not undertake a major investment of the type contemplated by that transmission until the deal had actually been consummated.

Q And I apologize for this, but I'm a little bit confused about when you say the deal. Because I'm looking at there's a deal that needs to be inked, if you will, with respect to what was discussed yesterday to

formalize that. And then there's another deal, which is the purchase of the plant. So I'm talking about the big deal that was talked about yesterday.

A Well, let me be more specific --

MR. MOYLE: Mr. Chairman, just so the record is clear, FIPUG would have a continuing objection to all this line of questioning about, you know, this quote/unquote deal that he's testifying about based on hearsay and is it written, is it not written. I mean, it's -- just so the record is clear, we have a continuing objection. Thank you.

CHAIRMAN GRAHAM: Okay.

THE WITNESS: Let me respond to your question by being more specific. We anticipate that the terms and conditions of the deal in the big sense, including both the PPA and acquisition as part of a whole, will be negotiated and hopefully successfully agreed to sometime in the remainder of this year.

The intent of the terms as provided to us by Calpine is that the actual acquisition of the plant would occur at the end of 2016. And I think the point of what I was saying a moment ago is that DEF would not undertake a major investment in support of that plant until we actually own it.

BY MR. REHWINKEL:

Q Okay. So, and the reason I'm asking is I'm trying to understand the transmission timeline. It would not only be your, you, Duke's efforts to construct a transmission line, but Tampa Electric Company would also have to construct; is that correct?

A I believe that, as reflected in Mr. Scott's testimony, DEF's intention is that we will wholly construct and own the transmission system that will connect the Osprey facility to our system.

Q Okay. So given the time frame that you have just testified to and the lead time that it would take to initiate and complete a transmission line, when is it your understanding that the full capacity of the Osprey plant would be deliverable to Duke?

A For planning purposes, we would -- we are using a date at the beginning of 2020 for the full capacity of the plant to be available to us.

Now I believe Mr. Scott testified yesterday that that was between, between a three- and four-year project. So, you know, we are, as I say, for planning purposes right now assuming that we could complete that project in three years. And, you know, so those would be '17, '18, and '19, with the full capacity being available to us at the beginning of 2020.

Q Okay. So that's your planning assumption. What is the earliest?

A I think that three years is very aggressive for a schedule, and that probably is the earliest.

Q So it's 2019 or 2020?

A 2020, beginning of 2020.

Q So has a decision been made that Duke will not begin any substantial investment in transmission before 1/1/2017?

A I would put it this way. I don't -- I mean, I'm not aware that a firm decision of any sort has been made. However, I do not believe that it would be prudent for us to make that investment until we have actually consummated the acquisition and are the owners of the facility.

Q Okay. Can I get you to turn to your rebuttal in the 110 docket, page 35.

A Yes.

Q Is this -- and I'm looking to the testimony there from lines 13 through the bottom. Is this the basis for your testimony that an acquisition of the Osprey plant would not have any effect on the Citrus County combined cycle plant?

A This is one of the elements of that testimony, yes.

Q What are the other elements?

A Well, I think you've asked me a number of detailed questions which are supported in some of the confidential exhibits to the rebuttal testimony, especially my exhibit --

MR. MOYLE: So, Mr. Chairman, this is probably where we get into an area where he's going to start saying, here, this exhibit, this exhibit, and y'all are looking at it. Then I don't think you can pull it back out of the record at a later point in time.

CHAIRMAN GRAHAM: Mary Anne?

MS. HELTON: I'm sorry. I didn't understand what Mr. Moyle's objection was.

CHAIRMAN GRAHAM: I think if he starts talking about one of the exhibits that we've agreed that we weren't going to include, once the cross-examine gets in there, how do you then not put it into the record?

MR. WALLS: Well, can I respond to that?

CHAIRMAN GRAHAM: Sure.

MR. WALLS: This is not one of those exhibits. We do not agree --

CHAIRMAN GRAHAM: But he was just saying that we're getting close to that area.

MR. WALLS: But this is not one of those exhibits.

CHAIRMAN GRAHAM: I understand that. But I was just asking her what should we do when we get to that, when he says, all right, this is one of those exhibits.

MR. MOYLE: And I guess I technically don't have an objection, but it was a very open-ended question saying, what are the exhibits that you think support, you know, this, and he's kind of going in and identifying the exhibits. If he starts saying, well, Commissioners, turn to this exhibit, this is --

CHAIRMAN GRAHAM: No, no. I understand the objection, and I agree with you. I don't know what we do when we get to that. Do we just stop the, do we stop the cross-examination because we're not taking that exhibit up, or do we re, do we re-question that exhibit?

MS. HELTON: I think until we get that point, it's kind of hard to say in the abstract what to do. I would suggest that if we do get to that point, then Mr. Moyle or whomever might have a problem can speak up and we will deal with it then.

CHAIRMAN GRAHAM: Okay. Fair enough.

MR. WALLS: And if I might respond, the witness does know which exhibits have been pulled, so he knows the ones that are not to be referenced.

CHAIRMAN GRAHAM: Okay. Sorry.

MR. REHWINKEL: And just, Mr. Chairman, I normally try to avoid doing discovery at the hearing, but we're in a little bit of a unique situation. So I am generally wanting to know from him what's in his testimony that impacts this question, so.

CHAIRMAN GRAHAM: I'm trying to give as much flexibility as possible.

MR. REHWINKEL: Thank you.

CHAIRMAN GRAHAM: Because it wasn't like we all planned this, you know, a month ago.

MR. REHWINKEL: Right.

BY MR. REHWINKEL:

Q So, Mr. Borsch, while you're looking, just -- my question to you is to be mindful of what Mr. Moyle and Ms. Rush -- Ms. Rule discussed about what exhibits are not in the -- have been withdrawn.

A Yes. That's fair. I'm looking for a specific page here. Broadly I will say that in my exhibit, my rebuttal, confidential rebuttal Exhibit Number 13, which I believe has not been withdrawn, there are a number of communications between DEF and Calpine which specifically refer to different variations on offers that were made to us by Calpine throughout the negotiating process and our responses to those offers.

And what I was going to do was attempt to

find, there is one of these -- I thought it was this one, but I don't seem to see what I'm looking for -- which refers specifically to the issue of the -- oh, here it is. Yes. On page 36 of 51 of my rebuttal Exhibit Number 13, in the middle of that page you'll see a heading that says Transmission. And in that paragraph, Calpine describes to us their current point-to-point reservations and their intention not to request additional transmission under the structure of that deal, which holds under the structure of the deal that is currently proposed.

Q When you say no additional transmission will be, that -- you mean pending construction of the facilities that are needed to deliver the entire plant?

A Yes. The intention, both in this offer that was made by Calpine and in our subsequent agreed to terms, is that Calpine will not be requesting additional transmission rights from their current transmission provider. You know, subject to the agreement of the deal, Duke and Calpine will work together to initiate an interconnection request process to allow the connection of the Osprey plant to the DEF system. And I think the details of that are outlined in Mr. Scott's testimony and specifically in his confidential Exhibit ES-3.

Q Okay. Is there anything else?

A I am sure there are other references, but those were the ones that came to mind at the moment.

Q Okay. Now there was -- I guess the question was raised by the Intervenors, as you address in your rebuttal testimony and you did in your summary, that the availability of a unit like Osprey could impact the in-service date of Citrus. Do you recall that?

A I recall those questions being raised.

Q Yeah. And you responded to that by saying that you ran an analysis that showed the revenue requirement impact on customers if you did that. Do you -- is that correct?

A I'm not sure that I understand specifically what you're referring to.

Q Okay. If you slipped Citrus for a year?

A Ah, yes.

Q Okay. That's what BMHB-16 on page 35 shows; is that right?

A I'm sorry. That --

Q 16, exhibit 16 on your testimony, page 35, not 13.

A Right. Rebuttal. I only see four pages to my Exhibit 16.

Q Well, I think you're in the 111 docket.

A Oh, I am in the 111 docket.

Q Yeah.

A So you're referring to the 110 docket.

Q Yeah.

A Oh, yeah. Okay. I think I'm aware of the page you're referring to, but let me just find it real quickly.

I don't remember having 16 exhibits to my 110 testimony but I do. Sorry. As I have it marked, my 16 has only six pages. But I did refer in my testimony to an increase in the cost to the customers related to the extension of Crystal River Units 1 and 2 of $90 million.

Q And that would be in conjunction with deferring the in-service date of Citrus by a year; correct?

A Correct.

Q Okay. So is that part of your testimony, that it, that it wouldn't make sense to defer Citrus even if Osprey or a Calpine acquisition -- or NRG acquisition gave you the flexibility; is that what you're saying here?

A Yes. I mean, we looked at this as if we would -- I mean, I think the question was asked to us by OPC's expert in particular to examine what would happen if we extended Crystal River Units 1 and 2 by one year,

moved the in-service date of Citrus back by one year, and supplemented however we needed to with purchased power in the interim, and that analysis yielded the result you're referring to.

Q Okay. Now Osprey, if Osprey was put into your generation mix, it would change the economics of the analysis that you ran in BMHB-16 on your 110 testimony; right?

A It would change it slightly but not significantly because, you know, as I mentioned a moment ago, what we're talking about here is having the 249 megawatts capacity of Osprey available on peak. This analysis was based on having 320 megawatts of the Suwannee peakers available at that same peak season. So when you slide Citrus back, the actual impact would likely be to slightly increase the amount of purchased power that would be required in the 2018 season. So I would say that it might actually make the results less cost-effective from the shift back.

Q Well, if there was a scenario that allowed you to get the entire -- what is the entire capacity of Osprey?

A The Osprey facility has a nominal capacity, including its duct firing, of 599 megawatts. The actual capacity varies slightly by season.

Q Okay. If you were able to get the entire 599 megawatts of Osprey delivered to you before the middle of 2018, under that scenario, would the economics of BMHB-16 be significantly different?

A I can't say that for certain. However, I would say that it is likely that they would not be significantly different. And the reason that I say that is because the bulk of the savings shown in this exhibit come from fuel efficiencies and production cost efficiencies associated with having Citrus in service.

Q Okay.

MR. REHWINKEL: Mr. Chairman, I'd like to ask for an exhibit to be passed out.

CHAIRMAN GRAHAM: Sure. I think we're up to 138. Do you have a title for this, Mr. Rehwinkel?

MR. REHWINKEL: It is Citrus -- Osprey/Citrus Delay Scenario.

(Exhibit 138 marked for identification.)

I think I actually put Citrus Delay with Osprey Scenario, but I think what we read is good.

CHAIRMAN GRAHAM: Okay.

BY MR. REHWINKEL:

Q And, Mr. Borsch, when you and your counsel have gotten this, the first page of this is, I would represent to you but I ask you if you could confirm

this, is essentially your load and resource balance as filed with one exception, and that is on line 14 it has Hines with all four units operating. I think you had assumed three, and you found that you could put all four in. So I've only changed that one assumption.

MR. MOYLE: Can I just make sure I'm clear, Mr. Chairman. I'm not sure what this document is, and, I mean, if the witness can identify it, that's great. But Mr. Rehwinkel now saying he's changed something on it, I'm just not clear what this is.

MR. REHWINKEL: Well, I'm waiting for an answer from the witness.

CHAIRMAN GRAHAM: I guess the question is is this something that you generated or --

MR. REHWINKEL: Yes.

MR. MOYLE: What is this document?

CHAIRMAN GRAHAM: This is something you generated?

MR. REHWINKEL: Yes, sir.

CHAIRMAN GRAHAM: Okay.

MR. REHWINKEL: But I think it's an accurate representation of the reserve margin calculation that they filed.

THE WITNESS: I guess I would say without time to cross-check this against our data, I can't say for

certain that all these numbers match. However, you know, at a high level, you know, nothing jumps out at me that I would say that's wrong or this needs to be added.

BY MR. REHWINKEL:

Q These reserve margins down here look pretty close to what you -- the only thing that's different is beginning in 2017 you have all four Hines chillers in service.

A If you'll give me a moment.

Q Thank you.

MR. REHWINKEL: I'm near the end, Mr. Chairman. This is just kind of a wrap-up.

CHAIRMAN GRAHAM: Sure.

MR. MOYLE: Just so I'm clear, Mr. Rehwinkel, the field that has been altered, is that on 14?

MR. REHWINKEL: Yes.

MR. MOYLE: On line 14?

MR. REHWINKEL: Yes.

MR. MOYLE: So it's your representation everything else is straight from Duke's stuff except line 14?

MR. REHWINKEL: Yes.

MR. MOYLE: Okay.

MR. WALLS: And just so I'm clear, right now we're just on the first page of this exhibit; right?

MR. REHWINKEL: That's correct.

CHAIRMAN GRAHAM: That's correct.

MR. REHWINKEL: This is more of a predicate page.

THE WITNESS: Again, subject to a more extensive check, I don't see any differences other than the one that you have pointed out already.

BY MR. REHWINKEL:

Q Okay. And the one that I have pointed out is now your planning assumption; right?

A Yes, it is.

Q Okay. So let's go to the second page, and what I've done here is I have Osprey at 515, which is without the duct firing capability; correct?

A Uh-huh.

Q And I have that in 2016.

MR. WALLS: And at this point I would like to object to the second page of this document as inconsistent with the witness's previous testimony moments ago.

MR. REHWINKEL: Yeah.

CHAIRMAN GRAHAM: Okay.

MR. REHWINKEL: If I could be heard on that, you know, I'd like to finish my questions, for one thing. And the second thing is the witness has

testified about transmission, and I'm -- this is a sensitivity analysis and it doesn't necessarily mean that this is what's going to happen. I want to ask questions to understand sensitivities.

So I think, given the on-the-fly nature of what we're doing here today, I think I should be given some latitude to explore this. The witness can certainly explain why it does and does not meet reality, and I certainly expect that he will.

CHAIRMAN GRAHAM: I don't know if I'd call it on the fly, but I appreciate having this illustration in front of us so we can follow your line of questioning.

MR. REHWINKEL: So may I continue?

CHAIRMAN GRAHAM: Sure. Yes.

BY MR. REHWINKEL:

Q Okay. And what's highlighted here on lines 15, line 17, and line 18, and line 20 are changes from the first page of this. So I would have Osprey in in 2016 at the full capability.

A Uh-huh.

Q And Crystal Rivers 1 and 2 would be slipped -- Unit 1 would be retired in 2020 and Unit 2 would be retired in 2019.

A Uh-huh.

Q And Osprey -- and Citrus would slip a year.

A Uh-huh.

Q Okay. Now without getting you to agree that this is something that should happen, I'm asking if you would agree that these, this is what's represented here relative to the, to the prior page.

A It looks to me as though the changes that you've just stated are reflected by the numbers that are on these pages.

Q Okay. Now let's put aside your testimony about the transmission. Let's assume transmission, for sake of a, for purposes of a hypothetical here, let's assume transmission was soluble before 2018. In other words, you could get all 515 megawatts of Osprey before 2018.

A I'll accept that as a hypothetical, with recognition that there's considerable testimony in this docket that that's not going to be the case.

Q Okay. If you put that aside, would you agree that the, that you can maintain a reserve margin above 20 percent under a scenario like this?

A Yes. I think that's really basically consistent with the analysis that we showed you in Exhibit 16 that we were looking at a moment ago. I mean, essentially this kind of put and take is similar to the exercise that we performed to do that analysis.

Q Okay. Now if Osprey was in at all 515 megawatts in combined cycle and was cycling --

A Uh-huh.

Q -- the heat rate of Osprey, do you know what that is?

A It's a little bit above 7,000.

Q Okay. What about the heat rate of the Suwannee peakers in general terms? I'm not asking you to disclose confidential information.

A I think that number is actually in the Ten-Year Site Plan. It's ten-five or something like that.

Q Okay. So the differential in the heat rate between the assumed 316 and the 7,200 for Osprey would give you some economic benefits, would you agree with that, under this hypothetical?

A Well, I guess what I would say to that is presumably that is true. However, you know, it's always, you always need to take caution in making assumptions about how units of very different characteristics will affect the overall production costs. I mean, Osprey is a combined cycle unit which we would presumably, especially in this scenario where we had access to the full capacity of the plant, operate at a significant capacity factor. The other units are

peakers. That's going to shift the whole stack.

Q Okay. So, in other words, to get the full economic impact of this scenario --

A Uh-huh.

Q -- you would have to run a production cost model for this scenario; right?

A We would, although I will say that, you know, I think that the cost models that we have run are, you know, given the relatively substantial numbers involved over small periods of time, are probably representative of the results that we would expect.

Q Okay. But you still haven't seen the results of this scenario, you haven't run that; right?

A Well, inasmuch as this is a hypothetical situation that postulates access to transmission which we do not believe is available, that would be correct.

Q Okay. Now would you also agree that under this scenario, the PPA that you've mentioned in the, that you had factored into the two -- the one-year delay that's the basis for BMHB-16, you would not need that; right?

A Again, you know, under this hypothetical scenario, that's right. You've demonstrated, I think, that the reserve margins are met.

Q Okay. And that would also be an economic

benefit to the customers under this hypothetical relative to the results of BMHB-16. Would you agree with that, that meaning the lack of a need to buy PPA?

A At this point you're really comparing apples to oranges, for the simple fact that the analysis prepared in BMHB-16 did not contemplate the economic terms provided to us by Calpine and the Osprey facility. So, I mean, if you want to say that, you know, that access to the full capacity of Osprey at an earlier date compared to the Suwannee peakers, absent other factors and specifically a transmission, you know, might provide some reduction in the cost differential for shifting.

I think that remains to be seen because, you know, in the period where we're talking about here, you know, there are a variety of things. I mean, either, in order to get this, in your hypothetical, either we would have had to invest $150 million in transmission to get there, or we would be paying a wheeling charge for the Osprey capacity. So whichever way you do that it's going to change the economics.

Q Fair enough. Thank you. My last line of questions is, if I could get you to go to your 14 -- your 111 testimony and BMHB-19. And this is the infamous Exhibit 134. Are you there?

A I'm sorry. 19, that would be the summary of

similar capital projects?

Q Yes.

A Okay.

Q And I understand that this specific schedule is largely moot at this time in this docket today because of the Calpine deal; right?

A Yeah. Yes.

Q I mean, this is talking about --

A Well, presuming that we, you know, come back as anticipated with a completed deal with Calpine, then we would not be building the Suwannee peakers, and the purpose of this particular exhibit was to address questions that had been raised about our ability to deliver similar projects on budget.

Q Correct. And now you did not, the reason I'm asking about this is that, although this is not here, you don't have a similar exhibit dealing with the construction of the Hines chillers; right?

A No, we do not.

Q Okay. Will that be the first of a kind project for Duke?

A No.

Q What about in Florida?

A In Florida.

Q Okay. Is -- why did you provide the similar

exhibit for the Hines chillers? Is that because no one was really challenging them?

A I think that's right.

Q Okay. Do you recall during your deposition we talked about the different standard between bringing Citrus County unit in and having to prove extraordinary circumstances if you exceed the estimate that you're giving the Commission in this docket, versus the construction projects in the 111 docket is you're not held to the strict standard in the rule with respect to justifying overruns. Do you recall that?

A We talked about that, yes.

Q Okay. What is the company's position at this time with respect to its commitment to meet the estimate that you've given for the Hines chillers with respect to overruns?

A I believe there's a statement in the interrogatories, and that statement says that, given the nature of these proceedings, we understand that the construction of projects, and of course at that time we were contemplating both the Suwannee and the Hines projects, construction of projects under the 111 docket would be treated similarly to the standard of proof with regard to cost overruns as in the 110 docket.

Q Okay. And that's your testimony here today?

A That is my testimony. I believe there's specific language in the interrogatories.

MR. REHWINKEL: Okay. Mr. Chairman, those are all the questions I have.

Thank you, Mr. Borsch.

THE WITNESS: Thank you.

CHAIRMAN GRAHAM: All right, Mr. Rehwinkel. We're going to go ahead and -- it's about close to our two-hour mark -- take a ten-minute break. By that clock in the back of the room, let's be back here at 11:30.

MR. REHWINKEL: I think I would have met my hour if Mr. Moyle hadn't kept objecting.

(Laughter.)

(Recess taken.)

CHAIRMAN GRAHAM: I have to apologize. The wheels started to fall off the wagon and PSC time got the better of me.

Let's continue with cross-examination, Mr. Wright.

MR. WRIGHT: We don't have any questions for Mr. Borsch, Mr. Chairman. Thank you.

CHAIRMAN GRAHAM: Ms. Shelley.

MS. SHELLEY: We have no questions. Thank you.

CHAIRMAN GRAHAM: Mr. Brew?

MR. BREW: Thank you, Mr. Chairman. I just made it.

EXAMINATION

BY MR. BREW:

Q Good morning, Mr. Borsch.

A Good morning.

Q I've got a lot of paper here, but so many of the numbers are the same I thought we'd try to start with some cleanup.

Talking of the 110 docket.

A Yes.

Q You've got your need study.

A Yes.

Q The 2014 Ten-Year Site Plan.

A Uh-huh.

Q And then on BMHB-3 you show the load forecast and reserve margins that you're expecting; right?

A Yes, I believe that's correct.

Q And then on BMHB-4 you show the load forecast; right?

A Let me turn to that so I can be looking at the same thing you're looking at.

Q Okay.

A Yes. And I believe in BMHB-4, during my deposition you identified to us a minor correction that

was contained in my errata.

Q Right. That's on just the winter 2014 number.

A Yes.

Q Okay. My question is, and on all of those exhibits, when we're talking about peak demand, winter and summer, we're talking about exactly the same numbers, which are the numbers that show up on Schedules 3.1 and 3.2 of the 2014 Ten-Year Site Plan; is that right?

A Yes.

Q Okay. So to the extent that we're talking about those documents and we're talking about peak demand, it's always the net firm demand from those schedules.

A Correct.

Q And the numbers are always the same.

A They're intended to be always the same.

Q Okay. And in the 111 docket you also have some of that information and you have an exhibit that shows near-term load forecasts, and that information is also exactly the same from the 20-year -- 2014 Ten-Year Site Plan.

A It should be, yes.

Q Okay. Let's start then with the Exhibit BMHB-3, although the initials are wrong.

A Yes.

Q Okay. So the summer firm peak demand we talked about comes from the Ten-Year Site Plan?

A That's correct.

Q And then the summer installed capacity in the summer reserve margin matches what I would otherwise -- with Citrus, matches what I would otherwise find on Schedule 7.1 of the Ten-Year Site Plan?

A Subject to check, it should, yes.

Q Okay. I'm just trying to make sure we're --

A Yeah, I understand.

Q -- we don't have different numbers on different documents.

A I don't believe we do.

Q And moving down to BMHB-4, again, the winter and summer peak forecasts are what we talked about. There's a column labeled Energy Requirements. Do you see that?

A Yes, I do.

Q And is energy requirements exactly the same as what you show on Schedule 3.3 of the Ten-Year Site Plan as net energy for load?

A I believe it is, yes.

Q Okay. Now if we can stick with BMHB-4 for a moment and look at the load forecast for winter and

summer, I'm correct, am I not, that Duke is basing its request for a need determination based on the summer peak columns rather than the winter peak, even though the winter is higher than the summer in seven out of the projected ten years; is that right?

A It is.

Q Okay. Also your testimony mentions that, I believe on pages 14 and 15, and this is your direct in the 110 document, docket, that Duke's need for capacity looks at its expected generation reserve margins and loss of load probabilities relative to peak demand; is that right?

A We do.

Q Okay. But that as a practical matter the reserve margin generally comes into play for a need determination before the loss of load probability constraints; is that right?

A That is correct.

Q And, in fact, that's what you claim in your testimony on page 15 here; is that right?

A Yes.

Q So what we're talking about is the estimated reserve margin requirements.

A Yes.

Q Okay. And the reserve margin requirements,

which are back on Exhibit 3, with Citrus for the years 2014 through 2020 reflects all of the additions that Duke has proposed, meaning the Suwannee CTs, the Hines chillers, and adding the Citrus capacity; is that right?

A Yes.

Q And there's nothing in your filed documents, any of the exhibits that we've talked about, that substitutes the Calpine deal for the Suwannee CTs; is that right?

A Not that provides this specific calculation, no.

Q Does it provide that calculation anywhere on these exhibits?

A No, I don't believe that it does, although --

Q That was my question.

And we talked about this during your deposition, but am I correct that as far as you know Duke's load forecasting methodologies used in preparing its Ten-Year Site Plan for 2014 are the same as they employed in 2013; is that right?

A As far as I know, yes.

Q Okay. And it's also correct that the forecasts that are employed in the Ten-Year Site Plan are completed in the prior fall of the -- or the fall of the prior year; is that right?

A That's correct.

Q So to the extent that you had information regarding wholesale contracts that would not -- in terms of additions or deletions, that would not be reflected in the 2014 Ten-Year Site Plan forecast yet; is that right?

A That's correct. The wholesale contracts that would be reflected in the 2014 Ten-Year Site Plan were current as of the fall of 2013.

Q And by extension, and I'll try not to repeat this from here on out, but the same would apply for your Need Study.

A That is correct.

Q Okay.

A It's probably fair to point out at this point that the Need Study --

Q Actually I'd prefer if you wait for a question.

A I'll wait then.

Q Now on your Exhibit 4, the column Energy Requirements, we've already been over this, but the, what you show is forecasted information from 2014, year 2014 and out; is that right?

A Yes, it is.

Q And the energy requirements are net energy for

load as I would otherwise look up on Schedule 3.3 of the Ten-Year Site Plan, column 8?

A Yes.

Q Which says Net Energy for Load. Now net energy for load refers to the energy Duke has to provide to serve its expected load, including transmission, transformation, distribution losses to get it to the customer meter; is that right?

A I believe that's correct. That's a number which is calculated by our load group and load forecasting group, and I'm not intimately familiar with all the subtleties around the small details like losses and things, but I believe that's correct.

Q Okay. And, but are you familiar that the number which is expressed in gigawatt hours reflects the total amount of energy that the company expects to provide for each of those years; it's an annual energy number?

A Yes.

Q Okay. And so to look at Exhibit 4, and let's just stick with the summer peak number for 2014, which shows 8,812 megawatts; do you see that?

A Yes, I do.

Q That would be the estimate of the highest single usage level for a single hour in the summer

period; right?

A Yes.

Q Okay. And the net energy for load requirement would represent the energy requirements for all hours in the year estimated.

A Yes.

Q Okay. And knowing not only the system peak but the energy requirements is important because it's reflective of system utilization, generated utilization, and overall system load factor; is that right?

A Yes.

Q Okay. So if I were to take the energy requirements for the year and divide it by all the hours in the year, that would give me effectively a system average annual demand; is that right?

A Well, I guess you could look at it that way. That isn't normally the way that we would utilize that calculation, but, yes.

Q Okay. Let's see. Oh, just some other quick document cleanup. Your Exhibits 125 and 135 --

A I'm sorry.

Q -- which are rebuttal forecasts. They're exactly the same document in the different dockets?

A You'd have to give me the exhibit numbers as they're shown in my testimony.

Q Let's try -- it's -- it's BMHB-15 in the 10 docket and BMHB-12 -- or, no, excuse me. It's 20 in the 110 docket -- or 111 docket. It's your chart of the summer peak forecast.

A Yes. I was just looking to see that it was the same in both dockets, but I believe that it is. Perhaps I'm looking at the wrong exhibit. 110 Exhibit 12, BMHB-12?

Q I think that's right. Or 110 Exhibit 15, which should be a chart.

A Interesting. I don't have a 15. But I will say that the, we did prepare this chart and it should be the same in both dockets.

Q Okay. That's close enough. I just don't want to get whipsawed between the two dockets.

A Right.

MR. BREW: Madam Chairman, I'd like to circulate a proposed exhibit, please.

COMMISSIONER EDGAR: Okay. Our staff will get that from you. By my chart that's 139.

MR. BREW: That's where I was. And for a short description it would be Forecasted Growth Rates Chart from Ten-Year Site Plans 2010, '11, '12, '13, and '14.

COMMISSIONER EDGAR: We will so label.

(Exhibit 139 marked for identification.)

BY MR. BREW:

Q Mr. Borsch, when you've had a chance to take a look at it, let me know.

A Okay.

Q Okay. Your Exhibit BMHB-15 had looked at prior years' Ten-Year Site Plans for forecasted summer peak load growth; right?

A Yes.

Q Okay. I represent to you that this chart does exactly the same thing, only it looks at the year over year percentage growth rate for the, for summer net firm demand for the 2010 and 2014 -- through 2014 Ten-Year Site Plans.

MR. WALLS: I'd like to object to this exhibit. It hasn't been established actually who prepared this exhibit.

COMMISSIONER EDGAR: Mr. Brew?

MR. BREW: I prepared the exhibit based on the company's filed Ten-Year Site Plans. I can go through the numbers if he wants, but --

COMMISSIONER EDGAR: Mr. Walls?

MR. BREW: The short answer is if you wanted to go to Schedule 3.2 or, excuse me, 3.1 in the 2014 Ten-Year Site Plan, you will see an actual number for

summer peak demand for 2013, and you'll see a forecasted number for 2014.

COMMISSIONER EDGAR: Mr. Walls, what is your objection?

MR. BREW: With the delta between them being expressed as a percentage.

MR. WALLS: That's my objection, is the delta is expressed as a percentage. And I don't see the backup calculations that he can provide Mr. Borsch to show how he calculated that percentage difference.

MR. BREW: I would be happy to do it. In this case, taking the quick example, you've got a 2014 expected net firm summer demand of 8,812, and a 2013 of 8,008, which gives you a difference of 804, which you would then divide by the actual one of 8,008, which would give you a percentage increase of 10.4 percent. And I represent to you that that's exactly the calculation that's used for each data point.

MR. WALLS: I think he needs to ask the witness that question, not me, but --

MR. BREW: Well, you're raising the objection. I'm just -- you asked how it was done and that's how it was done.

MR. WALLS: Well, my objection is that it -- if that's the way it was done by you, I think you would

need to establish with the witness that that's accurate.

MR. BREW: Okay. Fine.

COMMISSIONER EDGAR: Mr. -- thank you, Mr. Walls.

Mr. Brew, let's try that.

BY MR. BREW:

Q Mr. Borsch?

A Yes.

Q Referring to the 2014 Ten-Year Site Plan.

A Yes.

Q You show a net firm demand of -- for the year 2013, which is an actual number; right?

A That's correct.

Q Of 8,008 megawatts for summer net firm demand; is that right?

A That number is calculated in accordance with the requirements for Ten-Year Site Planning that is required by the Commission. So that forms the same basis equal to the way the rest of the numbers on that sheet are calculated.

Q Fine. Assuming that you've consistently calculated net firm demand throughout, you show an actual net firm demand in 2013 of 8,008 megawatts; is that correct?

A Yes, it is.

Q And you show a forecasted net firm demand in 2014 of 8,812; is that correct?

A Yes, we do.

Q And the difference between those would be 804 megawatts?

A Well, you are comparing a projected number to an actual number. But from a simple mathematical standpoint, yes.

Q Okay. And --

MR. WALLS: May I state an objection then to the exhibit --

COMMISSIONER EDGAR: Mr. Walls?

MR. WALLS: -- since we've now established something about the exhibit. I believe the title of this exhibit is now inaccurate. It's called Forecasted Annual Growth Rates, and Mr. Brew has just established with the witness that this is actually a comparison of actuals to forecasted.

MR. BREW: Actually, I will stand corrected. It is a -- actual and forecasted growth rates, because it covers the periods of the ten-year actual and ten-year forecasts shown in each of the plans. So I would be happy to correct the title so that it says Actual and Forecasted.

MR. WALLS: As long as the exhibit is clear

that that's the comparison that's being made, as Mr. Borsch has just said, then I'm fine with accurately describing what the exhibit is.

MR. BREW: Well, let's continue on then.

BY MR. BREW:

Q Mr. Borsch, continuing with --

COMMISSIONER EDGAR: Mr. Brew, hang on a second. So what we are going to do is we are going to amend slightly the title and the description, and therefore also the label on the exhibit list for this to Actual and Forecasted, et cetera.

MR. BREW: Annual Growth Rates.

COMMISSIONER EDGAR: Yes.

MR. BREW: And just to correct one point that Mr. Walls made, I just wanted to follow up a little bit.

COMMISSIONER EDGAR: You may.

MR. BREW: Thank you.

BY MR. BREW:

Q Mr. Borsch, for the same column, Net Summer Firm Demand, the year 2014 you show 8,812 megawatts; right?

A Yes.

Q And the following year, which is also a forecasted year, you show 9,042 megawatts; is that right?

A Yes, it is.

Q And so taking the difference between those, I could also drive a delta between the two forecasted amounts; is that right?

A Yes, you could make that calculation.

Q Okay. And am I correct that the company's methodology for calculating net firm demand for those forecasted years is performed in the same fashion throughout this column; is that right?

A Yes.

Q Okay. So would you agree with me in the context of defining a need for the Citrus units, a core issue is whether or not the estimated growth in peak, summer peak demand is reasonable?

A I would say that the load, the load projections are a key element in determining our forward-looking need.

Q Okay. And to determine that need, those, those assumptions need to be reasonable and based on supported evidence; is that right?

A Yes.

Q Okay. Thanks.

MR. BREW: Mr. Chairman, I'd like to circulate another document.

COMMISSIONER EDGAR: I'm actually going to go

ahead and maintain the helm for a few minutes.

MR. BREW: Oh, okay. My apologies.

COMMISSIONER EDGAR: But that's all right. Thank you. Our staff will get that from you and distribute.

MR. BREW: And this would be number 140?

COMMISSIONER EDGAR: Yes, sir. And this is labeled Historic Percentage of Summer Net Firm Demand to Average System Demand and Adjusted Summer Net Firm Demand Forecast?

MR. BREW: Correct.

COMMISSIONER EDGAR: Give a moment for everybody to take a look at it.

(Exhibit 140 marked for identification.)

MR. BREW: Again, Madam Chairman, just to explain, on this exhibit there are several sheets, and it's my intention to walk through each of them.

COMMISSIONER EDGAR: Okay.

BY MR. BREW:

Q When you're ready, Mr. Borsch, let's go to the first page, which has a label of Historic Summer Net Firm Demand as a Percentage of Net Energy for Load.

MR. WALLS: Again, let me state an objection to this. I would again ask is Mr. Brew representing that he prepared this document?

MR. BREW: Yes.

MR. WALLS: Okay.

MR. BREW: Based on the information presented in the company's Ten-Year Site Plan.

MR. WALLS: So I take it you will now confirm with the witness whether this is accurately prepared?

MR. BREW: I intend to walk through the calculations with him and have him confirm it, yes.

COMMISSIONER EDGAR: Mr. Walls?

MR. WALLS: And are the titles accurate for the pages?

MR. BREW: Actually the -- it should be Historic Net Firm Demand as a Percentage of Average System Demand, instead of Net Energy for Load.

COMMISSIONER EDGAR: One more time, Mr. Brew, please, a little slower.

MR. BREW: The first page should read Historic Summer Net Firm Demand as Percentage of Average System Demand.

COMMISSIONER EDGAR: Mr. Walls?

MR. WALLS: Could we just walk through the titles to the other pages to make sure they're accurate too now?

MR. BREW: Sure. The second page would be Forecasted Summer Net Firm Demand as Percentage of

Average System Load. It should be demand to be consistent.

The next page is a line graph that is correctly labeled as Summer Net Firm Demand as Percentage of Average System Demand because it shows both historic and forecast.

The next page would be listed Adjusted Forecast Summer Net Firm Demand. And the next page would be listed Adjusted Reserve Margin. So each of those titles is accurate.

COMMISSIONER EDGAR: Mr. Walls, anything further before we proceed?

MR. WALLS: As long as he intends to establish the last two pages what the adjustment was with the witness, I'm fine.

MR. BREW: Okay. Thanks.

BY MR. BREW:

Q First, let's take each column. We've got Year, which lists the ten-year historic period presented in your 2014 Ten-Year Site Plan; is that right?

A Those numbers appear to be correct.

Q Okay. Column A, Summer Net Firm Demand, is the historic period from your Schedule 3.1 labeled Net Firm Demand. Can you confirm that?

A So I'm looking at column A of the first page?

Q Column A of the first page of this exhibit, yes.

A And I am comparing that to column 10 on Schedule 3.1 of our 2014 Ten-Year Site Plan, which is also Exhibit BMHB-2 to my direct testimony.

Q That is correct.

A As far I can tell on quick check, those are the same numbers.

Q Okay. Column B of the exhibit is Net Energy for Load, which comes off of Schedule 3.3, column 8.

A Again, a quick glance through those numbers, they appear to be the same numbers.

Q Okay. Thank you. I will tell you that the column labeled C, Average System Demand, is the net energy for load divided by 8,760 hours in a year, as indicated in the footnote.

A Without the opportunity to check those numbers, I'll accept that that's the case.

Q Okay. And then column D is simply an expression of the net firm demand over the average system demand from column C as a percent. Again, I'll ask you to accept that that's the process that was done.

A I'll accept those calculations, subject to check, yes.

Q Okay. Thank you. Now in looking at that

quickly, you see that the ratio of summer net firm demand to average system demand peaked radically in 2009. Is that due in all likelihood to the change in usage patterns associated with the recession?

A Yes. I will say that there is a form of this same calculation in the Ten-Year Site Plan on, in column 9 of Schedule 3.3, which is required of us each year by the Commission, in which we have expressed the, essentially the inverse of the calculation you're attempting to do in this exhibit, you know, in the more traditional manner of expressing this as a load factor.

Q Right. And so it shows for 2009 on column 9 of that exhibit a drop in system load factor to about 45.3 percent.

A Yes, it does.

Q Okay.

A I think the number --

Q Oh, I'm sorry.

A The number I have in here is 44.5 for 2009.

Q Right. I'm sorry. I read the wrong number. That's correct.

And then after 2009 these ratios start to climb up just as your system load factor starts to improve; is that right?

A Yes. The system load factor begins to improve

as we go forward.

Q Okay. If you can move to the next page. Now we have the forecast years for the current Ten-Year Site Plan; correct?

A Yes, you have presented those years.

Q Okay. And the summer net firm demand comes from Schedule 3.1, net firm demand?

A Those appear to be the same numbers, yes.

Q Okay. And the net energy for load comes from Schedule 3.3, column 8?

A Again, those appear to be the same numbers.

Q Okay. And then I'll represent to you that columns C and D of the exhibit do the same math as the first page, which is to calculate an average system demand by dividing the net energy for load by 8760, and --

A Okay.

Q And then expressing the net firm demand as a percentage of the average system demand, same as on the prior page. Now that shows a rise in the net firm demand relative to average system demand that's even higher than what we saw during 2009; is that right?

A Well, I guess I'll say this. I mean, let me say that, first of all, it is certainly correct to assert that the numbers on the second page are higher

than the numbers on the first page. However, I'm a little bit mystified. There's a discrepancy in trend between the load factor numbers that are in column 9 of our Ten-Year Site Plan and the values that you have on these two pages in your percentage numbers, and without trying to do math on the stand here, I'm a little bit confused as to why those trends are inconsistent.

Q And I did not attempt to figure out your load factor calculation, but let's stick with this. If we can flip to the next page, which is a line graph, plots the percentage that we talked about for the historic period and then the forecast period.

A I will agree that the line graph represents the numbers that you have on the first two pages.

Q Okay. So if we can go back to the first page related to the actual numbers.

A Yes.

Q Do you see that?

A Yes.

Q The ratio of net firm peak demand to average system demand after 2009, after the depths of the recession starts to recover, and the question that I'm trying to get to is why it so dramatically shifts from 13 to 14.

A I guess the answer to that question is, given

that I have not had time to review your calculations and understand the movement of those numbers in detail, I can't -- I don't know.

Q But you've studied the net firm demand and the net energy for load throughout the forecast period; right?

A Yes.

Q Okay. So if we can move to the next page, and simply, again, this is, this is my calculation, but for the forecast years it applies the average ratio for the last five actual years to your forecasted system average demand for those forecast years to come up with the, an adjusted summer net firm demand on column C. Do you see that?

A I do.

Q Okay. So if we saw a continuation of the recent historic trend relative to what you've forecasted, on the following page we've come up with an adjusted reserve margin calculation, and I want to walk through that for a minute. Again, we're talking about the ten forecasted years for the current Ten-Year Site Plan? Column A is the total available capacity from the Ten-Year Site Plan; is that right? That would be from your Schedule 7.1, column 6.

A Yes.

Q Okay. So if we apply the adjusted net firm demand based on the recent experience, we would get an adjusted reserve margin by subtracting the total available capacity from the adjusted net firm demand, and that would give us the adjusted reserve margins that are shown on column D.

A Without -- I guess what I would say is I will suppose that you have done the arithmetic correctly. I won't necessarily agree that this is an appropriate calculation for calculating either reserve margin or firm demand going forward.

Q Okay. Well, let's stop right there. First, I hope Excel calculated the thing correctly. But would you accept that the math for calculating the reserve margin is exactly what you've done on your own Exhibit 7.1?

A I will agree that the methodology appears to be the same, inasmuch as you, you know, the numbers that you have are the numbers you would expect to be the inputs to that calculation.

Q And that's the same way that you did it on Exhibit 7.1 -- or Schedule 7.1 of the Ten-Year Site Plan?

A Well, I can't say they're the same way. I will say that in Exhibit 7.1 we calculated the reserve

margin consistently with the methods that we have shown the Commission over the past many years. I will take as a matter of your assertion that you have applied the same methodology in making the calculations on this sheet.

Q Well, then let's go to 7.1. Okay. 7.1 for the year 2014, you show total capacity available of 11,024 megawatts; is that right?

A Yes.

Q And this is all summer; right?

A Yes.

Q Okay. And you show total available capacity in column 6, or -- yeah, in column 6?

A I think that was the number you just cited. Yes, 11,024.

Q Okay. You show the system firm peak demand, which comes straight off of Schedule 3.1?

A Yes.

Q Okay. You show a delta, which is described as a reserve margin before maintenance?

A Yes.

Q Which is the available capacity minus the summer firm peak?

A Correct.

Q Okay. And then you express that as a percent,

that -- the, in this case for 2014, which is 2,211 megawatts of reserve; right?

A Yes.

Q And you get a 25 percent?

A Correct.

Q Okay. Would you accept that the math is done exactly the same way on the sheet I just showed you?

A Yes.

Q Okay. Thank you. And just for clarification purposes, on Schedule 7.1 you have a reserve margin before maintenance and a reserve margin after maintenance where you assume zero maintenance throughout the forecast period; right?

A Yes. We don't plan to do major maintenance on our units during the summertime.

Q Right. That's a standard planning convention.

A It is.

Q Okay. Now in developing your load forecasts for the Ten-Year Site Plan and all the documents that are in here, am I correct that you use normal weather?

A We do.

Q Okay. So when we look at the actuals, you'll see ups and downs that reflect the influence of weather as much as anything else.

A Among other factors, yes.

Q Okay. But in the forecast -- so for the forecasted numbers, weather is normalized?

A Correct.

Q Okay. Now for the, for the forecast period, taking residential customers, you are showing a decline in usage per customer for at least the next four or five years; right?

A I don't, can't put my finger on that number, but I think that's -- a slight decline is probably plausible, yes.

Q Okay. Certainly you're not forecasting a material increase in usage per customer.

A No, I don't believe so.

Q Okay. And that would be reflected on Schedules 2 of the Ten-Year Site Plan.

A Yes.

Q Okay. So I'm correct that, based on the company's Ten-Year Site Plan for both residential and commercial customers, you're showing either flat or declining usage per customer for the next five years.

A Well, I mean, if you look at these numbers, I believe what you'll see is that there is, if you, say, take the period 2014 through 2018, there is a very modest rise in the usage per customer for residential. You could characterize that as flat, but I would not

characterize it as declining. The commercial usage does have some ups and downs in it, but might -- you know, is flat to maybe very slightly declining.

Q Okay. So for 2014 for residentials, you show a decline of 1.8 percent in usage per customer from 2013 and 2014. So it's a drop; right?

A Oh, from 2013 to 2014.

Q And 2014 to 2015 is also a drop of less than 1 percent.

A Yes.

Q And 2015 to 2016 is a slight increase of three-tenths of a percent?

A Looking at the numbers, I would say that's probably correct.

Q Okay. And from 2016 to 2017 you're looking at an increase of basically one-tenth of 1 percent.

A Yes.

Q And for 2017 to 2018 you show a, basically a three-tenths of a percent increase in usage per customer.

A Uh-huh.

Q Okay. And not to spend too much time on this, but if we did the same thing for commercial, we would find similar numbers of a 2013 to 2014 drop of almost 3 percent in commercial usage per customer; right?

A Yes.

Q Okay. Another drop between 2014 and 2015?

A That is shown here, yes.

Q Okay. And then for the remaining period through 2018, changes of less than 1 percent.

A Yes.

Q Okay. And on the industrial side you're showing not so much changes in uses per customer but declining customers; right?

A Yes.

Q So in order to get the sudden increase in peak demand forecasted, you're not getting it from weather and you're not getting it from usage per customers; right?

A Are you talking about the increase -- tell me which two years or what period you're referring to.

Q For the forecast periods, say, for the next, say, 2014 to '16.

A The sudden increase in demand from 2014 to 2016?

Q Yes.

A I believe if you refer to Schedule 3.1, there is an increase in demand of a total of about 300 megawatts, or, you know, I think that's a cumulative period of only a few percentage points per year.

Q I'm sorry. Where are you?

A I was looking at Schedule 3.1, column 10, comparing the period from 2014 to 2016.

Q Right. From 2013 to 2014 you jump up 10 percent; right?

A Well, from 2013 to 2014 is not a fair comparison, because from 2013 you're talking about an actual number and 2014 a projected number. So the, there are a variety of differences in how those numbers come together, you know, not least of which is the difference in actual weather versus projected weather. As we discussed a few moments ago, we use a normal weather projection for our weather going forward. 2013, as it happens, was quite a mild summer.

Q And you weren't adding -- you added less than 1 percent additional residential customers?

A I guess I would have to check that number.

Q Okay.

A But --

Q If you go to --

A -- customer growth has been slower than we had hoped, although it's picked up this year.

Q It's picked up this year.

MR. BREW: May I -- Madam Chairman, may I circulate another document, please?

COMMISSIONER EDGAR: Yes, you may, and we'll ask our staff to help with that.

MR. BREW: Madam Chairman, this one I believe is Exhibit, for identification, 141?

COMMISSIONER EDGAR: Yes.

MR. BREW: And a short description would be Excerpt of Duke Energy Corp 8K Filing, Dated July 7, 2014.

COMMISSIONER EDGAR: Okay. We will so mark.

MR. BREW: It's August 7, 2014. Thank you.

COMMISSIONER EDGAR: Yes.

(Exhibit 141 marked for identification.)

BY MR. BREW:

Q Mr. Borsch, when you're ready. First question is are you at all familiar with Duke's filings with the Securities and Exchange Commission?

A Not particularly, no.

Q Do you ever provide any inputs into those reports to the SEC?

A No.

Q Can you look for me on the -- what I've shown you is a cover sheet for the Duke Energy 8K filed in August, and what I'll represent to you is labeled as page 20 of that filing.

A I'm not familiar with this document, but okay.

Q Okay. Then I will, I'll simply stick to -- do you see the column Average, labeled Average Number of Customers?

A Yes.

Q Okay. And let's focus on the area labeled Six Months Ended June 30.

A Okay.

Q And the percentage number, which I've circled, which is labeled Total Change of 1.3 Percent, Total Average Number of Customers, Duke Energy Florida. And my question to you is does that percentage rate match up with your information on customer growth so far this year?

A I don't have those numbers in my head, so I can't answer that question.

Q Okay. Do you track by month the number of customers?

A Duke Energy tracks that number. That's not specifically in my area of responsibility.

Q Okay. So you don't keep track of that?

A No. I look at those numbers for reference. But my area of responsibility is the long-term planning, so I don't keep track of those numbers on a month-by-month basis, but tend to look at them when whole year aggregates are available.

Q So after you've gotten your forecast done for the Ten-Year Site Plan, you don't follow through on the accuracy of those forecasts relative to the forecasts in the Ten-Year Site Plan until you repeat the process?

A Well, I'll say this. I don't. The -- I mean, I do inquire periodically of our load forecasting team, and I do certainly listen to presentations of some of these numbers in various meetings. But it's not in my area of responsibility to track these on a month-by-month basis.

Q Okay. A moment ago you said that growth in customers was slow but was picking up. Do you recall that?

A Yes. And that's, you know, my anecdotal understanding based on, as I said, my exposure at an informal level to those numbers.

Q Okay. And that's the extent of your knowledge?

A And that's the extent of my knowledge.

Q Okay. Mr. Borsch, your rebuttal exhibit, again, in the 110 dockets, the BMHB-16, which you discussed with Mr. Rehwinkel.

A I'm sorry. Refer me to which --

Q Rebuttal --

A -- what's shown in that exhibit.

Q That's the calculation of the effect of a one-year delay in Citrus.

A Oh, yes. I'm sorry. I'm on the wrong page. But, yes, I know the exhibit you're referring to.

Q Okay. Quick question is that analysis assumed no changes in the load forecast that you filed; right?

A That is correct.

Q Okay. And a while ago Mr. Rehwinkel had shown you a document that's been marked for identification as Exhibit 138. Do you have that handy?

A It's under this pile somewhere. Would that be the one suggesting the hypothetical delay?

Q Yes, exactly.

A Okay. Yes.

Q And the question is the same, which was line 5 of that exhibit shows net firm demand, and that's exactly what you filed in the need and Ten-Year Site Plan?

A Again, those appear to be the same numbers, yes.

MR. BREW: Okay. Thank you. That's all I have.

COMMISSIONER EDGAR: Thank you, Mr. Brew. Mr. Chairman.

CHAIRMAN GRAHAM: Thank you, Commissioner

Edgar, for handling that.

Let's move on to NRG.

MS. RULE: Thank you.

EXAMINATION

BY MS. RULE:

Q Good afternoon, Mr. Borsch.

A Good afternoon.

Q When Duke filed its petitions in these two dockets back in May, there was a combined cycle plant, a peaking plant, and a chiller uprate proposed; correct?

A That's correct.

Q And now you've, if I understand correctly, taken the Suwannee peaker out of the mix and replaced it with the Calpine combined cycle plant?

A Well, I think the right way to say that is we've taken the Suwannee peakers out of the mix while we plan for a deal which appears to us to be more cost-effective than those peakers with Calpine. And we'll bring back whichever of those deals turns out to be more cost-effective later on this year based on our final negotiations with Calpine.

Q So is it your testimony that you're considering the Calpine combined cycle plant to replace the Suwannee peaker plant that you previously proposed?

A It is my testimony that we are considering

the, and planning, subject to consummation of the deal, as I discussed with Mr. Rehwinkel earlier, we are planning to utilize the capacity of the Suwannee plant to fulfill our need rather than the construction of the Suwannee peakers.

Q When you say --

A I'm sorry. I meant to say the Osprey plant. I apologize. I misspoke.

Q Well, your original plan in these two dockets included peakers because they're generally a cheaper way to meet peak need than combined cycle; correct?

A That combined with the size of the load that we needed and an overall evaluation of the total revenue requirement results based on adding the peakers at that juncture versus, you know, the alternatives which we had available to us, including self-build, combined cycle, or the proposals that had been made to us by various parties.

Q Is it true that peakers are generally cheaper to meet peak need than combined cycle?

A It is true that, from a capital cost standpoint, peakers are generally less expensive to build.

Q Okay. On page ten of your direct testimony in Docket 140111 you talk about the company's plans for the

existing Suwannee plants.

A Uh-huh.

Q And at the time you filed your testimony, the company was planning to retire that 120 megawatts of summer capacity two years early; correct?

A Yes.

Q Is that still the company's plan?

A No. In point of fact, the -- well, let me say it a different way. It is our intention to retire those units which are at the end of their lives as soon as we can develop and construct -- well, we've already developed -- construct sufficient transmission projects in that year to support the change-out or to support the retirement of those units and the voltage needs in that area. So our current plan is to have those projects in service by, in time for the 2018 summer season.

In the event that we had built the peakers, the generation of the peaker, generation from those peakers would have supported that voltage need. So I would say that we do intend to operate the units until the transmission projects which are already underway are completed. We expect that that will be no later than the 2018 summer season.

Q So if I understand you correctly, then they are no longer slated for early retirement.

A That's a fair statement. We would, we would revert to retiring them in 2018 absent, you know, information on acceleration of the transmission projects.

Q Okay. And there are costs associated with not shutting them down; correct?

A Yes.

Q And generally what are those costs?

A Well, I would say the costs are twofold. There is the cost to operate the units themselves in the form of fixed operating and maintenance costs, staffing and so forth. And then, you know, more broadly there's the impact of which units are available in the stack at different times. But, you know, we do estimate that there is a cost of approximately, it's less than $5 million a year, maybe $3 million a year in fixed operating costs to operate those units for the next, you know, for the additional two years.

And those numbers -- you know, each time we do this evaluation with different alternate scenarios, you know, we have been putting and taking those costs, you know, depending on whether or not the peakers are included in the scenario.

MS. RULE: Give me just one minute.

CHAIRMAN GRAHAM: Sure. Sure.

MS. RULE: I apologize. I thought I had that docket -- or document closer.

BY MS. RULE:

Q You responded to some staff interrogatories about the retirement costs, or the costs of not retiring those plants -- that plant, didn't you?

A I guess I would have to ask you to find me a specific question. We responded to a lot of interrogatories.

Q That's certainly fair. I believe you stated that, in response to staff interrogatory number 70, which was -- I apologize. That's NRG's number 70.

A Okay.

Q And I can hand that to you, if you like.

A Let me see if I have it immediately available. Yes, I see the question you're referring to.

Q And you stated that the cost was estimated at 77.2 million; correct?

A Well, that's a different -- that's a response to a different question than the one you asked me a moment ago.

Q Okay.

A In the question as it's framed in interrogatory number 70, the question was, what would be the transmission cost if we were going to prepare to run

all five of those units at the same time? That is to say, the three steam units and the two proposed peakers.

In point of fact, avoiding those costs was one of the reasons that we concluded it was appropriate to retire the steam units in 2016 if the peakers were going to be constructed.

Q Okay. So now that Suwannee has been taken out of the mix --

A Uh-huh.

Q -- and Hines alone is in the mix --

A Uh-huh.

Q -- doesn't that affect the total cost of Hines?

A No.

Q If part of the price of keeping Hines in play is also keeping these units in play, why is that not a total cost that the Commission should take into account?

A The decision on the Hines chillers and the decision on the retirement date for the Suwannee steam units are entirely independent of each other. The -- I mean, first of all, they are geographically pretty far apart and from an electrical standpoint don't have any significant influence on each other from a transmission standpoint.

So there's not a related transmission cost

question there. And, you know, we, as I think is established in other interrogatories, we tested the value of the Hines chillers in -- you know, that is to say we tested whether or not the Hines chillers proved cost-effective by taking them in and out of scenarios either with the peakers or with some of the proposed acquisitions. So they're totally independent questions.

Q Have you modeled the cost of keeping Hines and not retiring these plants?

A In the context of having modeled alternatives to the Suwannee peaker project, yes. The cost of not retiring or the savings accrued from retiring those plants early is relatively small in the context, say, of, you know, the cost shifts for and against when we start comparing, you know, the other piece of the generation, which in this case would be, say, the peakers versus one of the acquisitions.

Q I believe your testimony at page 11 of your direct in Docket 140111 is that the company needs approximately 280 megawatts of summer generation commencing in 2016, increasing to 470 megawatts in the summer of '17; correct?

A Yes.

Q How much of the 280 megawatts 2016 need will you be getting from Calpine?

A Well, as I stated earlier, we'll be getting essentially 249 megawatts from Calpine. However, we will have a portion of the Hines chiller project available in that year. I think we went through the schedule for the development of the Hines chiller projects in my deposition. So they, there will be sufficient megawatts to cover that summer.

Q But Calpine will be covering the majority of that need, won't it?

A Yes.

Q Okay. Does the Calpine deal specifically limit the amount of power to be delivered from Calpine?

A The deal itself does not, but the attendant facts, in this case the availability of point-to-point service from the Osprey facility to DEF does.

Q And I've confirmed with counsel about some things I may ask you about the GE contract, and I do not intend to go beyond that, but I would like to ask you about some dates. Duke already entered into an agreement with GE for the purchase of two combustion turbines; correct?

MS. TRIPLETT: Mr. Chairman, I'm sorry. If I could lodge an objection. I don't think this is the appropriate witness to be asking these questions about this contract. That would have been Mr. Landseidel.

MS. RULE: I believe his testimony talks about the agreement and the plans that Duke had, at least at the time he filed the testimony, to build the plant, and he talks about the contracts.

MS. TRIPLETT: I mean, I'm okay if she wants to see if Mr. Borsch knows details beyond what he filed in his direct. But, you know, but perhaps we could just see how that goes, because while he generally has knowledge about the GE contract, the specifics, particularly about what has happened since the testimony has been filed, are more from Mr. Landseidel.

CHAIRMAN GRAHAM: Well, then, we'll just follow to see where it goes, and you can stop if we hit a sticking point.

MS. TRIPLETT: Thank you.

BY MS. RULE:

Q Are you aware when the contract was executed?

A I don't have a specific date in my head, but I am aware that it was in May of this year.

Q It was executed in May?

A Well, I believe that was -- I guess I should say in May was when we gave notice to proceed.

Q Okay. Would you accept, subject to check, that it was executed in March?

A Yes.

Q Okay. There are specific penalties associated with not fulfilling the contract; is that correct?

A In general, it's my understanding that there are clauses, but I am not familiar with any of the details.

Q Okay. Do you know whether Duke still plans to build the Suwannee peakers at a later date?

A We -- assuming, let me start with this, assuming successful consummation of our deal with Calpine, we would not have a specific plan to construct the Suwannee peakers at this time.

Q Do you expect Duke's ratepayers to pay the termination charges associated with the GE contract?

MS. RULE: There's been no objection. I asked the witness to answer.

CHAIRMAN GRAHAM: I didn't say anything.

THE WITNESS: I was only pausing to see. There was a lot of movement down at the other end of the table.

(Laughter.)

MR. WALLS: Well, let me object to the extent it gets into any confidential information that Mr. Borsch cannot disclose.

CHAIRMAN GRAHAM: Okay.

MS. RULE: Confidential as to whether he, the

company expects its ratepayers to pay for this?

THE WITNESS: Let me try answering it this way and see if this -- is that, as I think has been stated earlier and in the preliminary matters, once we reach a firm deal with Calpine, we will be bringing that deal back to this Commission for a review by the Commission and presumably discovery by all the parties. Details like the one that you're asking about will be covered in that proceeding.

BY MS. RULE:

Q So you will not commit right now that Duke will not ask its customers to pay termination charges associated with the Suwannee peakers; is that correct?

A One of the principles of our negotiation with Calpine throughout has been that we would negotiate a deal which was more favorable from a cost-effectiveness standpoint to our customers than the base plan of building the Suwannee peakers, and that we would have sufficient terms in that contract that our customers would be held harmless from various eventualities.

Q Regarding your prior testimony, what is the cost of the transmission investments that you say will provide the voltage support that the Suwannee peakers would have provided?

A That's actually not in my testimony because

those projects are already part of our base transmission plan. I don't have that number at hand.

Q You stated that the transmission project was underway?

A I believe that it is. I mean, it's not a single project. It's a whole series of different projects throughout the northern area. Some are underway and others are yet to be completed.

Q Was any of this investment reflected in your modeling?

A The bulk of the northern area generation projects, in fact, I believe all of the northern area generation projects -- or I shouldn't say generation -- northern area transmission projects are part of our base plan and were expected to be accomplished in all scenarios.

Q When did Duke authorize the transmission projects?

A I'm not specifically -- I don't know.

Q Have you modeled a load growth that is less than you've projected?

A In the evaluations in this docket, no.

Q Okay. In the event that the load growth you've forecasted fails to materialize, will Duke need the Hines chillers?

A Yes. Well, let me say this a different way. I believe that the Hines chillers are cost-effective in just about all scenarios, regardless of where we end up with, you know, specifics of load growth in the next few years.

And in part, I think that is supported by the fact that in various of our modeling, in different cases, depending particularly on acquisitions that were offered to us, you know, the sum of the Hines chillers and the particular acquisition might have been noticeably more than the specific need in those years, and yet in each of those cases we found that adding the Hines chillers was more cost-effective than leaving them out of the evaluation.

MS. RULE: I have no more questions, Commissioners, but I would like to put together an exhibit of certain interrogatory responses and of course provide to counsel. They're already on file. I don't believe they're in staff's exhibits, but I would like to enter that as an exhibit. And I would offer it at a later date, if that's okay.

CHAIRMAN GRAHAM: We'll wait to see what it is you put forth and we'll deal with it at that time.

MS. RULE: Thank you. No questions. Thank you.

CHAIRMAN GRAHAM: Mr. Moyle, I assume that you have more than four or five minutes' worth of questions.

(Laughter.)

MR. MOYLE: There's been a lot of discussion about assumptions today and their reliability, but that's a very reliable assumption.

CHAIRMAN GRAHAM: All right. Well, then I think this is a good time to take a lunch break. I have about four minutes to 1:00. Let's start back at two o'clock, Art Graham time. Let's take a recess.

(Lunch recess taken.)

(Transcript continues in sequence in Volume 6.)

STATE OF FLORIDA)
: CERTIFICATE OF REPORTER
COUNTY OF LEON)

I, LINDA BOLES, CRR, RPR, Official Commission Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said 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.

LINDA BOLES, CRR, RPR
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