FILED JUN 04, 2015 DOCUMENT NO. 03340-15 FPSC - COMMISSION CLERK

1		BEFORE THE PUBLIC SERVICE COMMISSION
2		PUBLIC SERVICE COMMISSION
3	In the Matter of:	
4		DOCKET NO. 150043-EI
5	PETITION FOR DETERM THAT THE OSPREY PLA	NT
6	ACQUISITION OR, ALT THE SUWANNEE SIMPLE PROJECT IS THE MOST	CYCLE
7	EFFECTIVE GENERATIO	N
8	ALTERNATIVE TO MEET NEED PRIOR TO 2018,	BY DUKE
9	ENERGY FLORIDA, INC	·/
10		
11	PROCEEDINGS:	HEARING
12	COMMISSIONERS PARTICIPATING:	COMMISSIONER JULIE I. BROWN
13	DATE:	Wednesday, June 3, 2015
14 15	TIME:	Commenced at 9:30 a.m. Concluded at 9:55 a.m.
16	PLACE:	Betty Easley Conference Center Room 148
17		4075 Esplanade Way Tallahassee, Florida
18		
19	REPORTED BY:	MICHELLE SUBIA, RPR Notary Public in and for
20		the State of Florida
21		at Large
22		PREMIER REPORTING
23		14 WEST 5TH AVENUE LLAHASSEE, FLORIDA
24		(850) 894-0828
25		

1	APPEARANCES:
2	ROBERT SCHEFFEL WRIGHT and JOHN T. LAVIA,
3	III, ESQUIRES, Gardner Law Firm, 1300 Thomaswood Drive,
4	Tallahassee, Florida 32308, appearing on behalf of the
5	Osprey Energy Center, LLC.
6	DIANNE M. TRIPLETT, ESQUIRE, 299 First
7	Avenue North, St. Petersburg, Florida 33701, appearing
8	on behalf of Duke Energy Florida, Inc.
9	CHARLES REHWINKEL, DEPUTY PUBLIC COUNSEL and
10	J.R. KELLY, PUBLIC COUNSEL, Office of Public Counsel,
11	c/o the Florida Legislature, 111 W. Madison Street,
12	Room 812, Tallahassee, Florida 32399-1400, appearing on
13	behalf of the Citizens of the State of Florida.
14	JON C. MOYLE, JR. and KAREN PUTNAL, ESQUIRES,
15	118 N. Gadsden Street, Tallahassee, Florida 32301.
16	CHARLES MURPHY, ESQUIRE, on behalf of
17	Commission Staff, Florida Public Service Commission,
18	2540 Shumard Oak Boulevard, Tallahassee, Florida
19	32399-0850.
20	CHARLIE BECK, GENERAL COUNSEL; MARY ANNE
21	HELTON, Advisor to the Commission, Florida Public
22	Service Commission, 2540 Shumard Oak Boulevard,
23	Tallahassee, Florida 32399-0850.
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1	I N D E X		
2			
3	PREFILED WITNESSES		
4	NAME :	PAGE	NO.
5	Mark E. Landseidel	25	
6	Edward L. Scott	34	
7	Kevin E. Delehanty	44	
8	Kris G. Edmondson	59	
9	Matthew E. Palasek	79	
10	Benjamin M. H. Borsch	96	
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1		EXHIBITS		
2	NUMBER:		ID	ADMTD.
3	1	Comprehensive Exhibit List	23	23
4	2	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
5 6	3	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
7	4	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
8	5	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
10	6	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
11 12	7	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
13	8	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
14 15	9	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
16	10	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
17 18	11	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
19	12	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
20 21	13	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
22	14	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
23 24	15	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
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1		CONTINUED EXHIBITS		
2	NUMBER:		ID	ADMTD.
3	16	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
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5	17	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
6	18	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
7 8	19	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
9	20	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
10	21	(As described in the Comprehensive		23
11	2 <u>1</u>	Exhibit List - Exhibit 1)		23
12	22	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
13 14	23	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
15	24	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
16	25	(As described in the Comprehensive		23
17		Exhibit List - Exhibit 1)		
18	26	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
19	27	(As described in the Comprehensive		23
20	27	Exhibit List - Exhibit 1)		
21	28	(As described in the Comprehensive Exhibit List - Exhibit 1)		23
22	20			23
23	29	Proposed Stipulation		43
24				
25				

1	PROCEEDINGS
2	HEARING OFFICER BROWN: Good morning,
3	everyone. I hope you all are doing well today.
4	Today is June 3rd, 2015, the time is nine-thirty.
5	This is the hearing for Docket 150043-EI.
6	Staff, can you please read the notice.
7	MR. MURPHY: Yes. By notice published
8	May 5th, 2015, this time and place is set for
9	hearing in Docket Number 150043-EI. The purpose
10	of the hearing is set forth in the notice.
11	HEARING OFFICER BROWN: Thank you,
12	Mr. Murphy.
13	And I would like to take appearances starting
14	with my left, Mr. Wright.
15	MR. WRIGHT: Good morning. Thank you,
16	Commissioner Brown. Robert Scheffel Wright and
17	John T. LaVia, III, on behalf of Osprey Energy,
18	LLC.
19	MS. TRIPLETT: Good morning. Dianne Triplett
20	on behalf of Duke Energy Florida.
21	MR. MOYLE: Jon Moyle on behalf of the
22	Florida Industrial Power Users Group, FIPUG. And
23	I would also like to enter an appearance for Karen
24	Putnal, who is with our firm.
25	MR. REHWINKEL: Charles Rehwinkel and J.R.

1	Kelly with Office of Public Council on behalf of
2	Dukes' customers.
3	HEARING OFFICER BROWN: Thank you. And I
4	will note that PCS Phosphate has been excused,
5	Mr. Brew.
6	Staff.
7	MR. MURPHY: Charles Murphy on behalf of
8	Commission Staff.
9	MS. HELTON: And Mary Anne Helton, Advisor to
10	the Commission. And also appearing today is
11	Charlie Beck, your General Counsel.
12	HEARING OFFICER BROWN: Thank you so much.
13	Before we proceed, I would like to note that
14	the parties have waived cross examination of the
15	witnesses. And Duke witnesses and PSC Phosphate,
16	as I stated earlier, have been excused. And we do
17	have a proposed stipulation that we have to
18	address.
19	That being said, Mr. Murphy, can you go
20	through the preliminary matters?
21	MR. MURPHY: Yes. The parties have agreed to
22	stipulate to issues, testimony and exhibits in
23	this case and to waive cross examination of
24	witnesses and post-hearing filings. All parties
25	except Mr. Moyle have waived opening statements.

1	After his opening statement, Staff recommends that
2	we address the proposed stipulation, exhibits and
3	prefiled testimony, in that order.
4	HEARING OFFICER BROWN: Okay.
5	Yes, Mr. Rehwinkel.
6	MR. REHWINKEL: Yes, Commissioner. For the
7	record, I spoke with Mr. Brew this morning and
8	received his authorization to state on the record
9	that he first of all, he thanks you for
10	excusing him from attendance here, but he takes no
11	PCS Phosphate takes no position on Issues 1 and
12	2 and they agree to the language that will be
13	presented to you in Issues 3, 4 and 5. They waive
14	opening statements and post-hearing filings, just
15	for the record. Thank you.
16	HEARING OFFICER BROWN: Thank you very much.
17	Mr. Moyle, you have up to five minutes.
18	MR. MOYLE: Well, thank you. And I don't
19	think I will take five minutes. But FIPUG did
20	want to just make a couple of comments, general
21	comments.
22	What's before you today is a proposal for
23	Duke to purchase an asset, a Calpine asset. And
24	you will remember that this came up front and
25	center during the Citrus County Need Determination

time goes on, no one can see beyond the horizon, you know, if things happen and FERC says, well, you have to do this or you have to do that, we don't want the parties coming back and saying, well, here, ratepayers, you know, the deal has changed and we want you to play an active role in

12 And I wanted just to note a little bit of a 13 concern as we were working through proposed 14 stipulations, that FIPUG feels strongly that, you 15 know, this is the deal and this should be the deal 16 and stay the deal, and we are cautiously 17 optimistic that that will be the case.

What we are a little concerned about is as

I mean, I think that's -- my recommendation

sleeves and working through it. And they have shared information, confidential information with FIPUG and PCS and the Office of Public Counsel to allow us to look at the details of the deal. And we have concluded that it's a good deal for ratepayers, assuming the deal that's on the table is the deal that is consummated and is put into place.

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hearing, and it kind of came up in a bit of an

Duke and the other parties for rolling up their

unorthodox way. But I really wanted to compliment

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is, is when this issue was kind of brought up at
one point, we kind of said, we're okay with it so
long as Calpine and Duke sort out the issues
between them and any extras or things that are not
foreseen are settled out between them. So I
wanted to make that point.

Sometimes when you enter into stipulations,
everything happens, you know, you lose some of the
flavor of things. So at the end of the day, FIPUG
supports the transaction, we've agreed with the
stipulations, we've agreed to waive cross. I
think it's a good deal. We just would encourage
that everyone keep this deal in place.

14 So that's really what FIPUG wanted to say in 15 their opening statements, and to also compliment 16 Staff. As we worked through this, Staff, per 17 usual, was very good to work with and 18 accommodating and so I think it's a good day and 19 we hope that you'll accept the stipulation as 20 presented.

HEARING OFFICER BROWN: Thank you, Mr. Moyle.
I appreciate those comments and you putting those
on the record.

With that being said, do any of the otherparties have any other comments?

1	MS. TRIPLETT: Thank you, Commissioner Brown.
2	I don't have any comments, but I did want to
3	just as we move forward, if there are any
4	questions, just to caution the parties as they
5	answer the question that there's a lot of
б	confidential information. So if you see folks
7	hesitating, I don't think it's because we don't
8	know the answer, I think it's because we are
9	trying to figure out a way to articulate it in a
10	nonconfidential fashion. Thank you.
11	HEARING OFFICER BROWN: Thank you. And I am
12	aware of that, too.
13	Any of the other parties have any comments
14	before we proceed?
15	(No response.)
16	HEARING OFFICER BROWN: All right. Staff,
17	let's address the proposed stipulation.
18	MR. MURPHY: Okay. Staff has added the
19	proposed stipulation as Exhibit 29. The
20	stipulation of Issues 1 and 2 is joined by Duke,
21	Osprey and Staff and is unopposed by Public
22	Counsel, FIPUG and PCS Phosphate.
23	For the benefit of those who do not have a
24	copy of the exhibit, the proposed stipulation of
25	Issues 1 and 2 provides the following:

1	Issue 1: Does DEF have a need for additional
2	generation capacity prior to 2018?
3	Stipulation: Yes, DEF has a need for
4	additional generation capacity prior to 2018, as
5	demonstrated in its testimony and exhibits in this
6	docket.
7	Issue 2: Is the acquisition of Calpine's
8	Osprey Plant the most cost-effective way to meet
9	DEF's generation need prior to 2018?
10	Stipulation: Yes, the acquisition of the
11	Osprey Plant is the most cost-effective way to
12	meet DEF's generation need to prior to 2018, if
13	the Osprey Plant acquisition is approved by the
14	requisite regulatory authorities in accordance
15	with the APA.
16	Issues 3 and 4 are joined by all parties
17	except Osprey, which takes no position on these
18	issues. The proposed stipulation of these issues
19	provides the following.
20	Issue 3: Does the Asset Purchase and Sale
21	Agreement for the Osprey Plant contain adequate
22	provisions to protect DEF's customers?
23	Stipulation: DEF entered into an Asset
24	Purchase and Sale Agreement with Osprey Energy
25	Center, LLC as the assignee of Calpine

1Construction Finance Company, LP, to purchase2Calpine's Osprey Plant.

The APA contains provisions that are intended to protect DEF's customers if certain contingencies occur related to the proposed acquisition of the Osprey Plant.

7 Unless mutually agreed by the stipulating 8 parties, the parties agree that DEF must strictly 9 enforce all of the provisions of the APA, and DEF 10 agrees that it will strictly enforce these 11 provisions.

DEF agrees that it will not and cannot use cost savings that may be realized in integrating the Osprey Plant into DEF's system, including transmission costs, to diminish or do away with any of the provisions, protections or limitations contained in the APA.

18 DEF agrees that only reasonable and prudent 19 costs will be recovered through the GBRA mechanism 20 and that DEF bears the burden of proof regarding 21 prudence. As part of this stipulation, DEF agrees 22 that the "extraordinary circumstances standard" 23 found in Rule 25-22.082(15) applies to this 24 transaction, as if DEF had selected the self-build 25 option.

1Issue 4: If the Osprey Plant cannot be2acquired under the terms and conditions of the3Asset Purchase and Sale Agreement, is construction4of the DEF Suwannee Generation Project the next5most cost-effective way to meet DEF's generation6need prior to 2018?

7 Stipulation: The parties agree that if DEF 8 cannot acquire the Osprey Plant, construction of 9 the Suwannee Simple Cycle Project is the next most 10 cost-effective alternative, and that DEF bears the 11 burden of demonstrating that only reasonable and 12 prudent costs for that project are recovered in 13 rates.

14Issue 5: Given the resolution of the15foregoing issues, how and when may DEF request16recovery of the final costs for the Osprey Plant17Acquisition or the Suwannee Simple Cycle Project?

18 Pursuant to Paragraph 16 of the Stipulation: 19 Revised and Restated Stipulation and Settlement 20 Agreement, DEF may request cost recovery closer in 21 time to the in-service date of the proposed 22 generation resource. At that time, DEF can 23 request recovery of the actual, or nearly final 24 estimated or projected, costs incurred to place 25 the resources in service on a reasonable time

1	frame in advance of the actual in-service date,
2	subject to the applicable burdens of proof
3	referenced in the stipulations to Issues 3 and 4
4	above. Cost recovery may not occur until the
5	resources are actually in service.
6	HEARING OFFICER BROWN: Thank you,
7	Mr. Murphy, for reading the proposed stipulations
8	into the record. I appreciate it.
9	I know everybody here has a copy of it, and I
10	just want to confirm with the parties that this
11	accurately reflects your understanding of the
12	agreement among the parties. If you could say yes
13	on the record, that would be great.
14	MR. WRIGHT: Yes, for Osprey, LLC it does as
15	to Issues 1 and 2 and the others for no position.
16	Thanks.
17	MS. TRIPLETT: Yes, to all issues for Duke
18	Energy Florida.
19	MR. MOYLE: What Staff read accurately
20	reflects the status. I think the only thing that
21	I just want to make clear is that we use the
22	parlance of a type two stipulation without
23	defining what it is, but essentially it's a party
24	is not agreeing to that factual assertion, it's
25	just saying we don't take a position and we're not

1	standing in the way of resolution of the position.
2	So with that clarification, FIPUG agrees.
3	HEARING OFFICER BROWN: Yes. Thank you.
4	MR. REHWINKEL: Yes, the Public Counsel
5	concurs. Like Mr. Moyle on Issues 1 and 2, we
6	take no position. And like I stated before on the
7	record, I am authorized to state that PCS
8	Phosphate also concurs in the stipulation as
9	presented by Mr. Murphy.
10	HEARING OFFICER BROWN: Thank you so much.
11	I would like to turn to Duke. I just have a
12	few questions that I would like addressed.
13	Regarding Issue 5 for cost recovery and the
14	burden of proof that is set fourth in Issues 3 and
15	4 of the stipulations, I would like to
16	specifically ask if you can elaborate on when that
17	is that Duke will request and what that burden of
18	proof will be?
19	MS. TRIPLETT: Sure. I think I probably need
20	to take them one at a time. So if Osprey is
21	we're able to acquire Osprey, then the closing
22	date in the APA is January 3rd, 2017 and so we
23	would anticipate that probably six months in
24	advance of actually consummating the closing we
25	would petition the Commission and we would include

in that petition the costs that we anticipate
incurring for that first year. And those costs
would be subject, not only to the more typical
reasonable and prudent standard, but it would be
subject to the higher extraordinary circumstances
standard.

7 Now, that standard, as we note in the 8 stipulation, is found in the -- what's known as 9 the bid rule. It typically -- it only applies to 10 those power -- those acquisitions or self-build 11 options that are subject to the Power Plant Siting 12 This transaction is not subject to the Power Act. 13 Plant Siting Act. But we have come in for 14 advanced approval, if you will, in a need-like 15 proceeding.

16 So the way that the standard would work -- us 17 agreeing to the standard applies to me means that 18 if we go -- you know, for example, the APA has 19 lots of provisions that are confidential, but if 20 we incur costs that are in addition to the 21 provisions of the APA, then we would have to show 22 not only that it was reasonable and prudent, but 23 also that those additional costs were due to 24 extraordinary circumstances.

To my knowledge, that is an untested standard

1 in the rule, which makes sense why you would ask 2 what does that mean. To me it means, you know, 3 it's higher than prudence, it has to be something 4 that is unforeseen at the time and something that 5 is pretty unusual and extraordinary. And 6 obviously saying the word "extraordinary" doesn't 7 really help, but it's got to be something that is 8 above and beyond.

9 And, you know, applying it to the Osprey 10 Plant acquisition, I think that if we are going to 11 incur costs that are not anticipated in the APA, 12 for example, as you'll see in a previous -- I 13 think it's Bullet 3 -- we have to strictly enforce 14 the provisions unless the other parties that are 15 stipulating here mutually agree that it makes 16 sense at that time to incur additional costs.

17 So that gives us, I think, the flexibility to 18 address something that happens that I can't even 19 anticipate sitting here today, but it may still 20 make sense given the overall picture to incur that 21 additional cost and move forward. So it's got to 22 be pretty high. So I don't know if that --23 HEARING OFFICER BROWN: That was a great 24 answer, Ms. Triplett. That was exactly what I was 25 looking for, and I appreciate you walking us

1	through that.
2	MS. TRIPLETT: Sure. And then, of course,
3	with the Suwannee Plant, if Osprey is not
4	approved, then Suwannee that's the reasonable
5	and prudent standard.
б	HEARING OFFICER BROWN: Right.
7	MS. TRIPLETT: So that is I think you know
8	what that means.
9	HEARING OFFICER BROWN: No. Thank you, I
10	appreciate you walking us through again.
11	Do any of the parties have anything to add to
12	Ms. Triplett's comments?
13	MR. MOYLE: Yes. FIPUG appreciates the
14	comments, I just would note that she did remark
15	that it's untested. So by our silence, I don't
16	know that we're necessarily agreeing to that. But
17	the points she made about unforeseen and a high
18	burden I think make sense.
19	And, you know, the unforeseen will be
20	interesting. I think we all kind of know that
21	there's another regulatory body, the FERC, that
22	has to look at this deal and there's some
23	questions about that so, you know, that's clearly
24	foreseen. But to the extent there are things that
25	are not foreseen, then, you know, I think we would

1	cross that bridge when we get to it.
2	HEARING OFFICER BROWN: Mr. Rehwinkel.
3	MR. REHWINKEL: Yes. Commissioner, I think
4	that I agree with the comments of both counsel,
5	but I think it is important to note, as
6	Ms. Triplett did in Bullet 3, the "unless mutually
7	agreed to by the stipulating parties" is a pretty
8	good protection, that means that it would be very
9	unlikely that you would even get to the
10	extraordinary circumstances issue because you have
11	to get past that unanimous agreement by the
12	stipulating parties, which is everyone here and
13	PCS.
14	HEARING OFFICER BROWN: I appreciate that. I

HEARING OFFICER BROWN: I appreciate that. I was actually going to ask you a question as representing Office of Public Counsel and all of the customers why you think this stipulation is in the best interest of the customer, and I think you provided that. But if you want further --

20 MR. REHWINKEL: Well, let me just say that I 21 can state that on behalf of the Public Counsel's 22 Office, Duke -- and I guess since Osprey was a 23 counter-party -- the two of them did a good job of 24 developing the APA. But I think what Duke did was 25 to take very good steps to protect customers, if

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1	they enforce the agreement as written.
2	There are provisions in here that we find a
3	lot of comfort in because there is a substantial
4	margin of benefit to customers by purchasing this
5	plant versus building Suwannee, if the requisite
6	approvals occur from FERC and the provisions are
7	enforced. And we think it's important that that
8	margin be maintained, and these provisions in the
9	stipulation give us a lot of comfort that that
10	margin can be maintained.
11	HEARING OFFICER BROWN: I appreciate that.
12	Any other comments before I turn to Staff?
13	(No response.)
14	HEARING OFFICER BROWN: Okay. Now, Staff,
15	your recommendation is to approve the stipulation;
16	is that correct, Traci?
17	MS. MATTHEWS: Yes, that's correct,
18	Commissioner.
19	HEARING OFFICER BROWN: And in your opinion,
20	do you feel that there are adequate provisions to
21	protect the customers with this deal?
22	MS. MATTHEWS: Yes, I do. And as
23	Ms. Triplett pointed out and as, you know, we all
24	are aware, and we discussed with you previously,
25	that a lot of these terms, the particulars of
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1	those protections are confidential.
2	But I can tell you that there are adequate
3	ratepayer protections to address the sunk costs of
4	the Suwannee Project if the Osprey purchase
5	doesn't go I mean, if it goes according to
6	plan, sorry.
7	And, also, there are adequate ratepayer
8	protections to address any delays in the Suwannee
9	Project if the acquisition doesn't receive all of
10	the necessary approvals. So we feel comfortable
11	that there's plenty of protection for the
12	ratepayers.
13	HEARING OFFICER BROWN: Thank you.
14	Excellent. I appreciate that.
15	And, Mr. Murphy, is there anything else you
16	would like to add?
17	MR. MURPHY: With that, Staff would just ask
18	that the proposed stipulation as reflected in
19	Exhibit 29 be approved by the Hearing Officer.
20	HEARING OFFICER BROWN: Okay. Thank you.
21	With all of that and having spent lots of
22	time, and my staff spending lots of time reviewing
23	the testimony, the prefiled testimony and exhibits
24	and hearing from the parties, along with
25	understanding that the parties have stipulated

Florida P	ublic Servic	e Commission
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1	exhibits, testimony and waived cross examination
2	of the witnesses, and the filing of the
3	post-hearing briefs as well, I will approve the
4	proposed stipulation.

5 And with that, I believe we need to deal with 6 the exhibits.

Staff has compiled a 7 MR. MURPHY: Yes. 8 stipulated comprehensive exhibit list which 9 includes the prefiled exhibits attached to the 10 witnesses' testimony in this case and Staff's 11 The list has been provided to the exhibits. 12 parties, the Hearing Officer and the court 13 reporter.

14 Staff asks that the exhibit list be marked as 15 Hearing Exhibit No. 1 and that the other exhibits 16 be marked as set forth in the list. Staff asks 17 that the exhibit list be included in the record 18 and moves Exhibits 1 through 29 into the record as 19 set forth in the list.

HEARING OFFICER BROWN: Okay. I will go
ahead and move Staff's exhibit list and Exhibits 1
through 29 into the record.

(Exhibits No. 1 through 29 were received in
evidence.)

MR. MURPHY: With that, Staff asks that all

1	prefiled testimony be included in the record.
2	HEARING OFFICER BROWN: Okay. Any
3	discussion?
4	(No response.)
5	HEARING OFFICER BROWN: All prefiled
6	testimony is now moved into the record.
7	(Whereupon, prefiled testimony inserted.)
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Premier Reporting

IN RE: PETITION FOR DETERMINATION THAT THE OSPREY PLANT ACQUISITION AND, ALTERNATIVELY, THE SUWANNEE SIMPLE CYCLE PROJECT IS THE MOST COST EFFECTIVE GENERATION ALTERNATIVE TO MEET THE REMAINING NEED PRIOR TO 2018 FOR DUKE ENERGY FLORIDA, INC.

BY DUKE ENERGY FLORIDA, INC.

FPSC DOCKET NO.

DIRECT TESTIMONY OF MARK E. LANDSEIDEL

1 I. INTRODUCTION AND QUALIFICATIONS.

2 Q. Please state your name, employer, and business address.

 A. My name is Mark E. Landseidel and I am employed by Duke Energy Corporation ("Duke Energy"). My business address is 400 South Tryon Street, Charlotte, North Carolina.

Q. Please tell us your position with Duke Energy and describe your duties and
responsibilities in that position.

A. I am the Director of Project Development and Initiation in the Duke Energy
Corporation Project Management and Construction ("PMC") Department. In this role,
I am responsible for the initiation and development of major non-nuclear generation
projects for Duke Energy Florida, Inc. ("DEF" or the "Company"). As Director of
Project Development, I have responsibility and management oversight for the
Suwannee Simple Cycle combustion turbine project for the Company.

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Q. Please summarize your educational background and employment experience. 1 2 Α. I graduated from Colorado State University in May 1982 with a Bachelor of Science 3 in Engineering. I completed the General Manager Program at Harvard Business School in November 2001. I am a certified Project Management Professional. I 4 joined Duke Energy Corporation in July 1982 and I have worked in a number of 5 departments including plant operations, plant maintenance, business development, and 6 project management and construction in my 32 year career with Duke Energy. I have 7 been responsible for project development, project management and construction of a 8 number of major projects since August 1996, including responsibility for the initiation, 9 development, and construction for combustion turbine and combined cycle generation 10 plants, including the W.S. Lee 2 unit Combustion Turbine project completed in 2006, 11 Buck 2X1 Combined Cycle project completed in 2011, the Dan River 2X1 Combined 12 Cycle project completed in 2012, the W.S. Lee 2X1 Combined Cycle project that 13 begins construction in 2015, and the Citrus County 4X2 Combined Cycle project that 14 begins construction in 2016. I assumed my current position with Duke Energy 15 Corporation in July 2012. 16 17

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II. PURPOSE AND SUMMARY OF TESTIMONY.

Q. What is the purpose of your testimony in this proceeding?

A. I am testifying on behalf of the Company in support of its Petition for Determination of Cost Effective Alternative to Meet Need prior to 2018 for Duke Energy Florida,
 Inc. I will describe and explain the site and unit characteristics for the Suwannee
 Simple Cycle combustion turbine project, including its size, equipment, equipment

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1		configuration, fuel type, supply modes, and other aspects of the project. I will also
2		explain the estimated costs and projected in-service dates for the Suwannee Simple
3		Cycle Project. As explained by other DEF witnesses, the Suwannee Simple Cycle
4		Project is an alternative to the Calpine Osprey plant acquisition, such that if that
5		acquisition does not receive applicable regulatory approvals, the Company will be able
6		to restart its work on the Suwannee project and still meet the necessary in-service date
7		to reliably meet DEF's need.
8		
9	Q.	Are you sponsoring any exhibits to your testimony?
10	А.	Yes. I am sponsoring the following exhibits to my testimony:
11		• Exhibit No (MEL-1), a map showing the location of the Suwannee power
12		plant site in Suwannee County, Florida;
13		• Exhibit No (MEL-2), the preliminary layout of the Suwannee Simple
14		Cycle project at the Suwannee power plant site;
15		• Exhibit No (MEL-3), an itemization of the major cost items for the
16		Suwannee Simple Cycle project; and
17		• Exhibit No (MEL-4), the confidential projected schedule for completion
18		of the Suwannee Simple Cycle project.
19		Each of these exhibits was prepared under my direction and control, and each is true
20		and accurate.
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Q.

Please summarize your testimony.

A. The Suwannee Simple Cycle project is a cost effective option to fulfill DEF's remaining capacity and energy needs prior to 2018, if the Company cannot purchase Calpine's Osprey Plant. The Suwannee Simple Cycle project leverages use of existing land, gas, and transmission infrastructure at the Suwannee power plant site and will have low air emissions using proven technology. In addition, the F class combustion turbine technology is well suited to peaking capacity needs with both fast start capability and high reliability. If DEF cannot purchase the Osprey plant, the Company is positioned to build this project on schedule and on budget to place the Suwannee Simple Cycle Project in commercial operation in June 2017.

III. THE SUWANNEE SIMPLE CYCLE PROJECT.

Q. What is the Suwannee Simple Cycle Project?

A. The Suwannee Simple Cycle project is a state-of-the-art combustion turbine
generation project. Two dual fuel F class combustion turbine generators will be
purchased and installed together with two generator step-up transformers to generate
an estimated 320 MegaWatts ("MW") of electrical power for DEF's customers. The
Suwannee Simple Cycle project will also include fuel oil and demineralized water
storage tanks, and related balance of plant facilities.

Q.

Where will the Suwannee Simple Cycle project be located?

A. If DEF cannot purchase the Osprey plant, the Suwannee Simple Cycle project will be located at the Company's existing Suwannee power plant site. The Suwannee site has

existing combustion turbines fired by gas and oil and existing steam units with supporting pipeline and transmission infrastructure. The Suwannee power plant site is located near Live Oak in Suwannee County, Florida. The location of the Suwannee power plant site is shown in Exhibit No. (MEL-1) to my direct testimony.

Q. Are there advantages to building this combustion turbine project at the Suwannee site?

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Α. Yes. The Suwannee Simple Cycle project will leverage use of existing land, gas, and 8 9 transmission infrastructure at the site, minimizing the need to purchase or build this 10 infrastructure for the project. Thus, the only land that has been purchased is an additional 24 acres located adjacent to the site for an additional buffer area. 11 Additionally, the project will use existing transmission infrastructure at the site as 12 much as possible. One of the F class combustion turbines will be connected to the 13 existing 115kV transmission switchyard and the other F class combustion turbine will 14 be connected to the existing 230kV transmission switchyard. The only anticipated 15 transmission costs are for these connections, bus lines, and associated interconnection 16 support equipment and installation. Natural gas will be supplied to the two F class 17 combustion turbines by the Florida Gas Transmission ("FGT") pipeline and a local gas 18 lateral to the existing site metering and regulating station on site. The existing steam 19 plant will be retired, thus modernizing the fleet and reducing the site environmental 20 impacts. The preliminary layout for the Suwannee Simple Cycle project at the 21 Suwannee power plant site is shown in Exhibit No. (MEL-2) to my direct 22 testimony. 23

1	Q.	How does the Company plan to construct the Suwannee Simple Cycle project?
2	A.	DEF awarded the major equipment contracts, including the F class combustion
3		turbines and generator step-up transformers, directly from the equipment
4		manufacturers pursuant to requests for proposals ("RFPs") to experienced
5		manufacturers. DEF also awarded an engineering, procurement, and construction
6		("EPC") contract to an experienced EPC contractor pursuant to an RFP. Duke Energy
7		has experience with this contracting approach, having successfully executed several
8		simple and combined cycle gas turbine projects with it including the W.S. Lee
9		Combustion Turbines (2006), Hines Combined Cycle Power Blocks 3&4 (2005,
10		2007), Bartow Combined Cycle (2009), H.F. Lee Combustion Turbine 5 (2009), Buck
11		Combined Cycle (2011), H.F. Lee Combined Cycle (2012), Dan River Combined
12		Cycle (2012), and the Sutton Combined Cycle (2013). DEF plans to employ lessons
13		learned and best practices from these prior Duke Energy successful gas turbine
14		projects on the Suwannee Simple Cycle project.
15		
16	Q.	If the Osprey purchase does not receive regulatory approvals, what will it cost to
17		build the Suwannee Simple Cycle project?
18	A.	DEF estimates that it will cost approximately \$195.1 million, including the Allowance
19		for Funds Used During Construction ("AFUDC"), to build the Suwannee Simple
20		Cycle project. This estimate includes the cost to purchase the combustion turbine
21		generators and step-up transformers, along with other equipment for the project; the
22		engineering, procurement, and construction contract costs to build the project; owner
23		costs; and the transmission switchyard and bus line work to connect the project to the

1		grid. A breakdown of the major cost items for the Suwannee Simple Cycle project is
2		included in Exhibit No (MEL-3) to my direct testimony.
3		
4	Q.	What will it cost to operate the Suwannee Simple Cycle project?
5	А.	The estimated incremental annual fixed operation and maintenance ("O&M") cost for
6		the Suwannee Simple Cycle project is \$1.4 million. The predominate costs in the
7		fixed O&M for the project are labor and labor-related operating costs for the
8		employees required for plant operation. Other costs included in the fixed O&M
9		estimate are O&M support and indirect costs.
10		There are also variable O&M costs to operate the Suwannee Simple Cycle
11		plant. The estimated variable O&M cost for the Suwannee Simple Cycle project is
12		\$700,000. These variable O&M costs include maintenance costs, such as planned
13		equipment inspections and overhauls, water, chemicals, lubricants, and consumables.
14		
15	Q.	If the Suwannee Simple Cycle project is built, what will be its operational
16		characteristics?
17	А.	If DEF cannot purchase the Osprey plant, the Suwannee Simple Cycle project will
18		provide DEF with approximately 320MW peaking generation capacity from utility
19		industry proven F class combustion turbines. It will have an average summer full load
20		heat rate of approximately 10,395 British Thermal Units ("BTUs") per kilowatt-hour
21		("kWh") Higher Heating Value ("HHV"). The Suwannee Simple Cycle is expected to
22		operate at a capacity factor range consistent with its peaking generation capacity role
23		on DEF's system. The plant will have low air emissions using proven dry, low NOx

1 combustors with water injection when operating on oil. In addition, the F class 2 combustion turbine technology is well suited to peaking capacity needs with both fast 3 start capability and high reliability. Peaking capacity units are cost effective and necessary for customer reliability in times of peak demand or system upsets. 4 5 Q. What is the schedule for construction of the Suwannee Simple Cycle project? 6 7 A. The Suwannee Simple Cycle project is scheduled for commercial operation in June 2017. To meet this schedule, DEF must commence work on the Suwannee Simple 8 9 Cycle project no later than DEF plans to commence this work on if DEF has not obtained the necessary regulatory approvals for the 10 Calpine Osprey plant acquisition by A copy of the current major 11 milestone schedule for permitting and construction of the Suwannee Simple Cycle 12 project is included in Exhibit No. (MEL-4) to my direct testimony. 13 14 Will the Company place the Suwannee Simple Cycle project in service by that 15 Q. date? 16 Yes, if DEF cannot purchase the Osprey plant. In my opinion, the schedule for Α. 17 completion of the Suwannee Simple Cycle project is reasonable and it can be met by 18 the Company. If the Company commences work on the Suwannee Simple Cycle 19 DEF will place the Suwannee Simple Cycle combustion project on 20 turbines in commercial operation by June 2017. 21 22

1	Q.	If DEF can proceed with acquiring the Calpine Osprey Plant, what impact will
2		that have on the Suwannee Simple Cycle Project?
3	А.	The Company will not continue with the Suwannee Simple Cycle project if it can
4		acquire the Calpine Osprey Plant. The details of that alternative, including provisions
5		that obligate Calpine to reimburse DEF for its costs already expended on the
6		Suwannee Simple Cycle project, are explained by DEF witness Mr. Matthew Palasek.
7		
8	IV.	CONCLUSION.
9	Q.	Will the Company build the Suwannee Simple Cycle project on time and on
10		budget?
11	А.	Yes, in my opinion, if the Company cannot purchase the Osprey plant, DEF will build
12		the Suwannee Simple Cycle project on time and on budget and the Suwannee Simple
13		Cycle combustion turbines will provide reliable, cost-effective generation capacity
14		prior to 2018 consistent with DEF's capacity and energy needs.
15		
16	Q.	Does this conclude your testimony?
17	A.	Yes it does.

IN RE: PETITION FOR DETERMINATION THAT THE OSPREY PLANT ACQUISITION AND, ALTERNATIVELY, THE SUWANNEE SIMPLE CYCLE PROJECT IS THE MOST COST EFFECTIVE GENERATION ALTERNATIVE TO MEET THE REMAINING NEED PRIOR TO 2018 FOR DUKE ENERGY FLORIDA, INC.

BY DUKE ENERGY FLORIDA, INC.

FPSC DOCKET NO. _____

DIRECT TESTIMONY OF EDWARD L. SCOTT

1	I.	INTRODUCTION AND QUALIFICATIONS.
2	Q.	Please state your name, employer, and business address.
3	А.	My name is Edward L. Scott and I am employed by Duke Energy Florida, Inc. ("DEF" or
4		the "Company"). My business address is 6565 38 th Avenue, North, St. Petersburg,
5		Florida 33710.
6		
7	Q.	Please tell us your position with DEF and describe your duties and
7 8	Q.	Please tell us your position with DEF and describe your duties and responsibilities in that position.
	Q. A.	
8		responsibilities in that position.
8 9		responsibilities in that position. I am the Director Transmission Planning Florida. In this role, I am responsible for all
8 9 10		responsibilities in that position. I am the Director Transmission Planning Florida. In this role, I am responsible for all transmission planning for DEF. I am responsible for ensuring that long-range

Reliability Corporation ("NERC"), Florida Reliability Coordinating Council ("FRCC"), and DEF planning standards and requirements. Areas of additional focus include development of Generation and Transmission Integrated Siting Strategies and evaluation of Transmission Service and Generator Interconnection Requests. I also represent DEF on the FRCC Planning Committee and the NERC Planning Committee.

Q. Please summarize your educational background and employment experience.

A. I have been with the Company (and its predecessor companies Progress Energy Florida and Florida Power Corp.) since 2001 in positions of increasing responsibility. In my previous role as Manager of System Operations at the Florida Energy Control Center, I oversaw the real time, electric system operations of the Florida utility, including generation dispatch, transmission reliability, and transmission service transactions. I have held prior leadership roles as Manager of Bulk Transmission Planning, and Supervisor System Operations for the Company. I also held several Company engineering positions with increasing responsibility in Operations Network Reliability, Operations Planning, and Operations Training. Prior to joining the Company, I was a staff engineer with the FRCC.

I earned bachelor and master of science degrees in electrical engineering from the Florida Institute of Technology in 1998 and 1999. I also earned a master of science degree in business administration from the University of Florida in 2007. I am a licensed Professional Engineer in Florida and North Carolina.

II.

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PURPOSE AND SUMMARY OF TESTIMONY.

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What is the purpose of your testimony in this proceeding?

A. 3 I am testifying on behalf of the Company in support of its Petition. As explained by other DEF witnesses, the Company is presenting the Osprey Energy Facility Combined Cycle 4 ("Osprey") plant acquisition and, alternatively, the Suwannee Simple Cycle 5 6 ("Suwannee") project as the most cost effective alternative to meet its remaining need for 7 generation prior to 2018. My testimony and exhibits provide an overview of the transmission system impacts and costs for these generation alternatives that the Company 8 is presenting to meet its remaining need prior to 2018 in the most cost-effective manner 9 for its customers. I also address in my exhibits the transmission analysis process and the 10 transmission system impacts associated with additional supply-side generation 11 alternatives that the Company evaluated prior to choosing the Osprey plant acquisition 12 and, alternatively, the Suwannee project as the most cost effective alternatives to meet its 13 remaining need prior to 2018. 14

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Q. Have you previously filed testimony with the Florida Public Service Commission?
A. Yes. On May 27, 2014 I filed direct testimony in Docket No. 140110-EI (Citrus County Combined Cycle Power Plant Need Petition) and Docket No. 140111-EI (Suwannee Project and Hines Chillers Power Uprate Need Petition) describing the transmission system impacts and costs used in the evaluation of those need decisions. A copy of my May 27, 2014 direct testimony in Docket No. 140111-EI is attached as an exhibit to my current direct testimony in this docket and referenced throughout my current testimony.

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Q. Are you sponsoring any exhibits to your testimony?

A. Yes. I am sponsoring the following exhibit to my testimony:

 Exhibit No. ____(ELS-1), a copy of my May 27, 2014 Direct Testimony and Exhibits filed in Docket No. 140111-EI, In re: Petition for Determination of Cost Effective Generation Alterative to Meet Need Prior to 2018 for Duke Energy Florida, Inc.

This exhibit was prepared under my direction and control, and it is true and accurate.

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Q. Please summarize your testimony.

As discussed by other DEF witnesses, my understanding is that the Company is filing this 10 А. Petition to fulfill its remaining need prior to 2018 with either the Osprey plant acquisition 11 from Calpine Construction Finance Company LLP ("Calpine"), if the acquisition is 12 approved by the necessary regulatory authorities, or if not, the Suwannee Simple Cycle 13 Project as the most cost effective generation alternative for that need. I understand that 14 this determination was made using the transmission system impacts and costs that I 15 presented in my May 27, 2014 testimony in Docket No. 140111-EI. My current direct 16 testimony provides a status update on transmission system planning for the Suwannee 17 Simple Cycle Project and Osprey plant acquisition since my May 27, 2014 testimony was 18 filed in Docket No. 140111-EI. My current direct testimony also confirms that there have 19 been no material changes to the projected transmission system impacts or costs for the 20 Suwannee project or Osprey plant acquisition that would affect the current economic 21 analysis presented in the testimony of Mr. Benjamin Borsch. 22

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III.

TRANSMISSION ANALYSES OF PROPOSED GENERATION.

Q. What generation resource option has the Company selected as the most cost effective option to meet its remaining need for additional generation capacity prior to 2018?

5 А. My understanding is that the Company has petitioned to fill its remaining need prior to 2018 with the Osprey plant acquisition or, if the Osprey plant acquisition is not approved 6 7 by the necessary regulatory authorities, the Suwannee Simple Cycle Project. The Osprey plant is an existing 599 MW combined cycle power plant located in Polk County, Florida. 8 The Osprey plant is described in more detail in the direct testimony of Mr. Kris 9 Edmondson. The Suwannee Simple Cycle Project involves the construction of two F 10 class combustion turbines and related equipment and facilities at the Company's existing 11 Suwannee power plant site in Suwannee County, Florida. This project is described in 12 more detail in the direct testimony of Mr. Mark Landseidel in this proceeding. I 13 performed the transmission system impact analyses that were part of the Company's 14 evaluation of both of these projects to meet the Company's need prior to 2018 in Docket 15 No. 140111-EI. 16

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Q. What transmission analyses were performed for the Suwannee project?

A. As I explained in my May 27, 2014 direct testimony in Docket No. 140111-EI attached as Exhibit No. ____ (ELS-1), DEF performed transmission planning analyses in accordance with all applicable FERC, NERC, FRCC, and DEF planning standards and requirements. These transmission planning analyses and the results of these transmission planning analyses are explained in Exhibit No. ____ (ELS-1). As a result of these

transmission planning analyses, DEF identified the work scope for the necessary transmission system upgrades to connect the Suwannee Simple Cycle Project to DEF's system and determined that the estimated cost for these transmission system upgrades was \$15.7 million. See Exhibit No. (ELS-1). The additional transmission system benefits of locating the Suwannee Simple Cycle Project at the existing Suwannee facility site are also described in Exhibit No. (ELS-1).

Q. Have there been any changes to the transmission system analyses for the Suwannee 8 Simple Cycle Project since your direct testimony in Docket No. 140111-EI? 9

А. Yes. Since my direct testimony in Docket No. 140111-EI, included as Exhibit No. 10 (ELS-1), DEF has completed the transmission feasibility study, system impact study, and 11 facility impact study for the Suwannee Simple Cycle Project. These studies are 12 performed to finalize the work scope and cost estimates for the transmission network system upgrades for the project. As a result of the completion of these studies, the transmission system work scope for the Suwannee Simple Cycle Project has not changed, but DEF has updated the estimated cost for this work scope for the project. The current estimate for the transmission system network upgrades to connect the Suwannee Simple Cycle Project to DEF's system is less than the estimated cost of \$15.7 million resulting from the planning analyses described in Exhibit No. ____ (ELS-1). The current estimated cost is approximately \$10 million for this work.

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1	Q.	In your opinion, are the results of your analysis of the transmission costs for the
2		Company's Suwannee Simple Cycle Project reasonable?
3	А.	Yes. The updated cost estimate is based on the completion of transmission system
4		studies that were incomplete at the time my direct testimony was filed in Docket No.
5		140111-EI. See Exhibit No. (ELS-1). There are no further studies necessary to
6		determine the transmission system network upgrades and costs for the Suwannee Simple
7		Cycle Project. In my professional opinion, and based on my experience and evaluation of
8		the impact of adding the Suwannee Simple Cycle Project to the Company's system, these
9		results are accurate and reasonable.
10	1	
11	Q.	Do the results of the completed transmission studies for the Suwannee Simple Cycle
12		Project affect the Company's economic evaluation of that Project?
13	А.	No. My understanding is that the lower transmission costs for the Suwannee Simple
14		Cycle Project are immaterial over the study period in the economic evaluation to
15		determine the most cost effective generation alternative to meet the Company's
16		remaining need prior to 2018 that was performed by the Company and explained in Mr.
17		Borsch's direct testimony in this proceeding.
18		
19	Q.	Did the Company also evaluate the transmission system impact and cost of
20		acquiring the Osprey plant and adding it to DEF's system?
21	А.	Yes. This analysis is also presented in my May 27, 2014 direct testimony and exhibits in
22		Docket No. 140111-EI attached as Exhibit No. (ELS-1). The Osprey plant acquisition
23		was one of the generation resource alternatives that the Company evaluated in Docket

1 No. 140111-EI. The transmission screening studies for the Osprey plant acquisition and 2 the results of those studies are explained in Exhibit No. (ELS-1). As explained there, 3 DEF employed the same industry-standard transmission screening studies and facility cost estimation standards for the Osprey plant acquisition that DEF uses for all of its 4 5 planned or projected transmission facility additions or upgrades on its own transmission system. These screening study analyses showed that transmission system network 6 upgrades were required to fully incorporate the Osprey plant into the DEF system. These 7 transmission system network upgrades directly connect the Osprey plant to DEF's system 8 to provide DEF access to the full generation capacity of the Osprey plant. These 9 transmission system network upgrades are described in Exhibit No. (ELS-1). The 10 cost of these transmission system network upgrades were estimated at \$150 million. 11 12 Have you performed any updates to the transmission screening study analyses for **Q**. 13 the Osprey plant acquisition? 14 No we have not. The information provided in my direct testimony in Exhibit No. A. 15 (ELS-1) for the Osprey plant acquisition remains the best available information 16 regarding the necessary transmission system network upgrades and costs for DEF to 17 acquire the Osprey plant and directly connect it to DEF's system to obtain the full 18 generation capacity of the Osprey plant. 19 20 Has your estimate for the transmission system network upgrades for the Osprey Q. 21 plant acquisition changed? 22 No it has not. Our estimate for the necessary transmission system network upgrades for 23 Α.

1		DEF to acquire the full generation capacity of the Osprey plant by directly connecting the
2		Osprey plant to DEF's transmission system remains \$150 million. See Exhibit No.
3		(ELS-1). DEF considers the \$150 million estimate to be a conservative transmission
4		estimate. However, if other, less expensive, transmission options are made available to
5		DEF, the transmission group would of course consider them and, if appropriate for the
6		project, utilize them for the project. DEF plans to use the most cost effective
7		transmission option for the Osprey plant acquisition.
8		
9	Q.	When will the Company complete the transmission studies necessary to finalize the
10		work scope and estimate for the transmission system network upgrades for the
11		Osprey plant acquisition?
12	А.	Calpine has recently submitted an Interconnection Request to connect the Osprey plant to
13	-	the DEF Balancing Area Authority ("BAA"). This Interconnection Request is the
14		prerequisite for the DEF transmission group to perform an Interconnection Study
15		including a feasibility study, system impact study, and facility cost impact study. DEF
16		estimates that this entire process will take approximately 12 to 18 months.
17		
18	Q.	In your opinion, are the results of your current analysis of the transmission costs for
19		the Osprey plant acquisition reasonable?
20	A.	Yes. In my professional opinion, and based on my experience and evaluation of the
21		impact of adding the Osprey plant to the Company's system, these results are accurate
22		and reasonable. The current work scope and estimated cost for the transmission system
23		network upgrades to directly connect the Osprey plant to DEF's system to provide DEF

1		the plant's full generation capacity is conservative. As a result, the completion of the
2		transmission feasibility study, system impact study, and facility cost impact study are not
3	:	expected to materially change the current estimated work scope and costs to directly
4		connect the Osprey plant to DEF's system.
5		
6	Q.	Were the results of these transmission analyses incorporated into the Company's
7		economic evaluation?
8	A.	Yes. The results of these economic evaluations are explained in detail in Mr. Borsch's
9		direct testimony in this proceeding.
10		
11	Q.	Does this conclude your testimony?
12	А.	Yes, it does.

IN RE: PETITION FOR DETERMINATION THAT THE OSPREY PLANT ACQUISITION AND, ALTERNATIVELY, THE SUWANNEE SIMPLE CYCLE PROJECT IS THE MOST COST EFFECTIVE GENERATION ALTERNATIVE TO MEET THE REMAINING NEED PRIOR TO 2018

FOR DUKE ENERGY FLORIDA, INC.

BY DUKE ENERGY FLORIDA, INC.

FPSC DOCKET NO.

DIRECT TESTIMONY OF KEVIN E. DELEHANTY

1 I. INTRODUCTION AND QUALIFICATIONS.

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Q. Please state your name, employer, and business address.
A. My name is Kevin E. Delehanty and I am employed by Duke Energy Business
Services, LLC, the service company affiliate of Duke Energy Florida, Inc.
("DEF" or the "Company"). My business address is 550 South Tryon Street,
Charlotte, North Carolina 28202.

Q. Please tell us your position with Duke Energy and describe your duties and responsibilities in that position.

A. I am the Director of Market Fundamentals. In this role, I am responsible for
 preparation of the Fundamental Forecast, which is the Duke Energy Corporation
 ("Duke Energy") long-term fossil fuels commodity price forecast for all the
 subsidiary electric utilities, including DEF. As a result, I am responsible for

	providing the long term commodity price component of the fuels forecast to DEF
	for its Integrated Resource Planning ("IRP") process.
Q.	Please summarize your educational background and employment experience.
A.	I received an Associate's degree in Industrial Electronics from Spartanburg
	Technical College in May, 1982. In May 1990, I received a Bachelor of Science
	degree in Electrical Engineering from the University of South Carolina –
	Columbia. I have also been a licensed Professional Engineer in the State of South
	Carolina since 1994.
	I joined Duke Power Company in June, 1982 as an Engineering Associate
	in the Distribution Engineering Group. From 1982 – 1987, I was a Power Quality
	Engineer in the Electrical System Design Group. I joined the System Planning
	Group in 1990 where I was responsible for production cost modeling, project
	evaluation, and financial analysis. Over the next ten years I served in a variety of
	roles leading cross functional teams in planning and asset strategy. In 2000, I
	joined the Bulk Power Marketing Group as a Senior Structured Planning Engineer
	responsible for valuation and risk analysis of large structured power deals. In
	2005, I joined the Corporate Strategy Group as Manager of Commodity Price
	Fundamentals responsible for supervision of the commodity price forecasting
	process using external consultants for modeling and data. Following the merger
	with Cinergy in 2006, I was named Director of Market Fundamentals and
	Competitive Analytics responsible for the development of the long-term fuel price
	outlooks used in all long-term planning studies.

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II.

PURPOSE AND SUMMARY OF TESTIMONY.

Q. What is the purpose of your testimony in this proceeding?

3 А. I am testifying on behalf of DEF in support of its Petition. My testimony and 4 exhibits describe the process for developing the Fundamental Forecast and 5 explain why the Fundamental Forecast is a reasonable long-term fuels price 6 forecast for the Company to use in making its resource planning decisions. As explained by other DEF witnesses, the Company is presenting the Osprey Energy 7 Facility Combined Cycle ("Osprey") Plant Acquisition and, alternatively, the 8 9 Suwannee Simple Cycle Project ("Suwannee") as the most cost effective alternative to meet its need for generation prior to 2018. My testimony applies 10 equally to both the Osprey and the Suwannee alternatives since both plants would 11 have natural gas as their primary fuel. 12

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Q. Have you previously filed testimony with the Florida Public Service Commission?

A. Yes. On May 27, 2014 I filed direct testimony in Docket No. 140110-EI (Citrus County Combined Cycle Need Petition) and Docket No. 140111-EI (Suwannee and Hines Chillers Approval of Need Petition) describing the Company's Fundamental Forecast and Fuel Forecast used in the evaluation of those need decisions. A copy of my May 27, 2014 direct testimony in Docket No. 140111-EI is attached as Exhibit No. ___(KED-1) to my current direct testimony in this docket and referenced throughout my testimony.

1	Q.	Are you sponsoring any exhibits to your testimony?
2	A.	Yes. I am sponsoring the following exhibits to my testimony:
3		• Exhibit No(KED-1), a copy of my May 27, 2014 Direct Testimony
4		filed in Docket No. 140111-EI, In re: Petition for Determination of Cost
5		Effective Generation Alterative to Meet Need Prior to 2018 for Duke
6		Energy Florida, Inc., along with Exhibit Nos(KD-1) through (KD-4);
7		• Exhibit No (KED-2), a confidential chart showing the Company's
8		Fall 2013 base, high, and low natural gas price sensitivity forecasts as
9	1	well as every subsequent forecast produced since the Fall 2013 outlook;
10		and
11		• Exhibit No (KED-3), a confidential chart of the Company's Fall
12		2013 base natural gas price forecast compared to a shaded range
13		depicting other contemporary industry natural gas price forecasts
14		published Fall 2013, and a second range depicting the forecasts released
15		in 2014.
16		The Company generated exhibits identified above were prepared under my
17		direction and control, and each is true and accurate. The other exhibits contain
18		information that was prepared by government agencies charged with collecting,
19		collating, and publishing information of the type included in the identified
20		exhibits, they are reliable industry resources for this information, and this
21		information is typically used by the Company as resource material in the
22		preparation of the Fundamental Forecast.
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Q.

Please summarize your testimony.

A. I filed testimony in Docket No. 140111-EI describing Duke Energy's
 Fundamental Forecast process and the reasonableness of DEF's Fall 2013 Fuel
 Forecast developed from the Fundamental Forecast. The Commission determined
 that Fuel Forecast to be reasonable in Order No. PSC-14-0590-FOF-EI.

As discussed by other DEF witnesses, my understanding is that the Company is filing this Petition to fulfill its remaining need prior to 2018 with either the Osprey plant acquisition from Calpine Construction Finance Company LLP ("Calpine"), if the acquisition receives the necessary governmental and regulatory approvals, or if not, the Suwannee new build simple cycle project as the most cost effective generation alternative for that need. I understand that this determination was made using the 2013 Fall Fuel Forecast that I presented in my May 27, 2014 testimony in Docket No. 140111-EI. Consequently, my current direct testimony confirms that there have been no corrections or changes to that 2013 Fall Fuel Forecast and that the 2013 Fall Fuel Forecast remains a reasonable fuel forecast for that time as the Commission determined in Order No. PSC-14-0590-FOF-EI.

My current testimony also provides an update on the status of the Fundamental Forecast process in 2014 and describes the Fall 2014 Fuel Forecast. I explain that Duke Energy's Fundamental Forecast and Fall 2014 Fuel Forecast reasonably represent future fuel commodity prices. I further explain that the near term fuel forecast in the Fall 2014 Forecast is materially the same as the near term

Fall 2013 Forecast that the Commission determined was reasonable in Order No. PSC-14-0590-EI.

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III.

Q.

Does DEF have a fuel forecast?

DEF'S FUEL PRICE FORECAST.

6 A. Yes. DEF has both a short-term fuel forecast and a long-term forecast as I 7 discussed in my May 27, 2014 testimony attached as Exhibit No. (KED-1). The short-term fuel forecast is based on observed market prices and is used 8 9 mainly for operational purposes. The long-term forecast is a fundamentals-based forecast and it reflects Duke Energy's long-term outlook for resource planning 10 purposes and other long-term investment decisions for Duke Energy and all of its 11 electric utilities, including DEF. The Company uses the Duke Energy 12 Fundamental Forecast, or long-term fuel forecast, for long-term investment 13 14 decisions, such as building and operating new power plants, in its IRP process. I further explain the reason Duke Energy has a Fundamental Forecast in my May 15 27, 2014 testimony on pages 6-7. See Exhibit No. (KED-1). 16

The Fundamental Forecast is based on an extensive review and a rigorous analysis of available and relevant information that affects fuel commodity prices. It reflects industry expertise and Duke Energy's expertise and professional judgment of future fuel costs. It is further in line with other contemporary, industry fuel forecasts. As I explained in my direct testimony in Docket No. 140111-EI, the Fundamental Forecast reasonably represents future fuel

1		commodity prices. The Commission agreed, concluding in Order No. PSC-14-
2		0590-EI that DEF's fuel forecast was reasonable.
3		
4	Q.	Have you made any corrections to the Fundamental Forecast presented to
5		the Commission in Docket No. 140111-EI?
6	А.	No. The Fundamental Forecast and fuel commodity prices represented in that
7		fuels forecast in Docket No. 140111-EI remains a reasonable representation of the
8		future fuel commodity prices at the time it was prepared. Nothing has occurred
9		that indicates any corrections to the information that was relied upon to prepare
10		that Forecast.
П		
12	Q.	Does Duke Energy update its Fundamental Forecast?
1000	ו	Does Dure Energy update its Fundamental Foreast.
13	A.	Yes. The Duke Energy Fundamental Forecast is updated in the Fall and Spring of
13		Yes. The Duke Energy Fundamental Forecast is updated in the Fall and Spring of
13 14		Yes. The Duke Energy Fundamental Forecast is updated in the Fall and Spring of each year based on new information and changing circumstances, as applicable.
13 14 15		Yes. The Duke Energy Fundamental Forecast is updated in the Fall and Spring of each year based on new information and changing circumstances, as applicable. In 2014 Duke Energy extended its consultant agreement with Energy Ventures
13 14 15 16		Yes. The Duke Energy Fundamental Forecast is updated in the Fall and Spring of each year based on new information and changing circumstances, as applicable. In 2014 Duke Energy extended its consultant agreement with Energy Ventures Analysis, Inc. ("EVA"). EVA is an expert energy consultancy in the field of fuels
13 14 15 16 17		Yes. The Duke Energy Fundamental Forecast is updated in the Fall and Spring of each year based on new information and changing circumstances, as applicable. In 2014 Duke Energy extended its consultant agreement with Energy Ventures Analysis, Inc. ("EVA"). EVA is an expert energy consultancy in the field of fuels forecasting in the industry that Duke Energy uses to assist Duke Energy to
13 14 15 16 17 18		Yes. The Duke Energy Fundamental Forecast is updated in the Fall and Spring of each year based on new information and changing circumstances, as applicable. In 2014 Duke Energy extended its consultant agreement with Energy Ventures Analysis, Inc. ("EVA"). EVA is an expert energy consultancy in the field of fuels forecasting in the industry that Duke Energy uses to assist Duke Energy to prepare the Fundamental Forecast. Duke Energy utilized EVA's assistance in
13 14 15 16 17 18 19		Yes. The Duke Energy Fundamental Forecast is updated in the Fall and Spring of each year based on new information and changing circumstances, as applicable. In 2014 Duke Energy extended its consultant agreement with Energy Ventures Analysis, Inc. ("EVA"). EVA is an expert energy consultancy in the field of fuels forecasting in the industry that Duke Energy uses to assist Duke Energy to prepare the Fundamental Forecast. Duke Energy utilized EVA's assistance in preparing the Spring 2014 and Fall 2014 updates to the Fundamental Forecast
13 14 15 16 17 18 19 20		Yes. The Duke Energy Fundamental Forecast is updated in the Fall and Spring of each year based on new information and changing circumstances, as applicable. In 2014 Duke Energy extended its consultant agreement with Energy Ventures Analysis, Inc. ("EVA"). EVA is an expert energy consultancy in the field of fuels forecasting in the industry that Duke Energy uses to assist Duke Energy to prepare the Fundamental Forecast. Duke Energy utilized EVA's assistance in preparing the Spring 2014 and Fall 2014 updates to the Fundamental Forecast using the same process described in my direct testimony in Docket No. 140111-
13 14 15 16 17 18 19 20 21		Yes. The Duke Energy Fundamental Forecast is updated in the Fall and Spring of each year based on new information and changing circumstances, as applicable. In 2014 Duke Energy extended its consultant agreement with Energy Ventures Analysis, Inc. ("EVA"). EVA is an expert energy consultancy in the field of fuels forecasting in the industry that Duke Energy uses to assist Duke Energy to prepare the Fundamental Forecast. Duke Energy utilized EVA's assistance in preparing the Spring 2014 and Fall 2014 updates to the Fundamental Forecast using the same process described in my direct testimony in Docket No. 140111- EI. <u>See</u> Exhibit No. (KED-1).

assumptions underlying the Fundamental Forecast based on changes in the market and evolving conditions in the national and regional economies where the electric utilities are located, political and regulatory conditions, environmental conditions and other factors that have or may have an impact on the Fundamental Forecast.

Q. What differences are there between Duke Energy's 2013 Fundamental Forecast and the Spring 2014 and Fall 2014 Forecasts?

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8 A. From the Fall 2013 forecast through the Spring and Fall 2014 forecast cycles, 9 Duke Energy updated a number of assumptions that affected either the supply or demand for natural gas, but collectively their price impacts were often offsetting. 10 11 The 2014 forecasts assumed lower growth estimates in gas demand from the power sector, but also included stronger growth in the industrial sector, and 12 exports of liquefied natural gas ("LNG") and pipeline gas. Duke Energy also 13 14 assumed more coal retirements which normally increases gas demand, but lower domestic coal demand has reduced coal prices and softened the effect. Duke 15 Energy also lowered its long-term outlook for global oil prices in 2014, but this 16 17 too will also have offsetting price impacts for natural gas. Lower oil prices will negatively impact supply of gas from the production of natural gas liquids, and 18 19 "associated gas" from oil production. But lower oil prices will reduce the demand for natural gas feed stocks in the petrochemical sector, soften U.S. LNG export 20 demand from oil linked markets, and will reduce demand from the production of 21 22 Canadian Tar Sands. Overall net demand was slightly higher in the 2014 23 outlooks, but so were natural gas supplies. Accordingly, the price of gas barely

changed under Duke Energy's reference carbon tax case from the Fall 2013 case all the way through the Fall 2014 update.

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Q. Did DEF make any adjustments to its estimated carbon costs assumptions in 2014?

A. Duke Energy has not changed its reference case assumption of modeling a 6 national tax on carbon as a proxy for putting a price on carbon. As I described in 7 my direct testimony in Docket No. 140111-EI, Duke Energy has included a price 8 9 on carbon within its base fundamentals outlook since late 2006 as a way of capturing the potential impact of uncertain future policy for regulating CO₂ 10 emissions. In the absence of legislation, the United States Environmental 11 Protection Agency ("EPA") is moving ahead with regulating CO₂ emissions from 12 existing fossil fuel-fired power plants, and the EPA issued extensive proposed 13 14 rules in June 2014 and followed up with supplemental rules directed at U.S. territories and Indian lands on October 28, 2014. The EPA used its authority 15 under section 111(d) of the Clean Air Act to move forward with a set of 16 17 performance standards for existing generation. The preliminary schedule is for final rule issuance by June 2015; however, implementation would not occur until 18 2020 even if this initial aggressive schedule remained. Duke Energy recognized 19 20 that the very preliminary nature of the proposed rule and the myriad of possible compliance plans which the states might deploy would make any modeling 21 attempt a rough approximation. Duke Energy did however attempt to model a 22 23 scenario case using a very narrow interpretation of the EPA's proposed rule using

state level rate limits on the existing portfolio covered by the rule. This analysis was not meant to reflect the Company's view of what the final rule will ultimately look like, but rather to study the impact of the proposed limits on generation dispatch, system operation, and cumulative demand for coal and natural gas. The analysis showed that applying the rule strictly as a rate standard rather than applying the alternative fixed mass cap resulted in a much higher demand for natural gas and a larger reduction in the use of coal than the EPA anticipated in their own analysis. The resulting gas price forecast for this interpretation of the section 111(d) rule, (also referred to as the Clean Power Plan or CPP scenario), is shown on Exhibit No. ___(KED-2). It should also be noted that while the projected price curve for natural gas is higher than the Duke Fall 2013 base case forecast, this scenario still falls within the bounds of the Fall 2013 gas price sensitivity range.

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The carbon price Duke Energy currently uses in its fundamental forecast is a direct input to the process and has been set at a level the Company believes to be a reasonable trajectory to represent the risk of federal climate change legislation or regulation given the current uncertainty surrounding such policy. Duke Energy believes that the carbon price trajectory it uses is also reflective of the pricing that policy makers may consider acceptable if or when they act.

Because of the high degree of uncertainty surrounding the outcome of climate change policy, however, DEF, in its IRP process, runs scenarios off of the Duke Energy fundamental forecast carbon price trajectory that also include a no carbon cost forecast to produce a more robust analysis.

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Q.

How is the Fundamental Forecast used in the IRP process?

2 A. After the Fundamental Forecast is reviewed and validated as a credible long-term 3 commodity price forecast, it is provided to Duke Energy's fuels procurement group where it is combined with other market data to develop the final delivered 4 fuel price inputs to the resource planning models. As I described in my direct 5 6 testimony in Docket No. 140111-EI, for the natural gas commodity component, the fuels procurement group utilizes futures market quotes from the NYMEX to 7 price the first three years, followed by a two year transition period of blended 8 9 prices to the long-term fundamentals for the balance of the forecast. After establishing the commodity price curve, the procurement group develops plant 10 specific fuel price inputs by factoring in existing contracts, as well as fixed and 11 variable transportation costs. Exhibit No. (KED-2) to my direct testimony is 12 a chart of the fundamental natural gas forecast and includes the 2014 Spring and 13 2014 Fall updates for comparison. Forecast sensitivities based on the 14 Fundamental Forecast are also developed by the market fundamentals group. 15 These sensitivities include low and high natural gas forecast scenarios around the 16 base natural gas price forecast in the Fundamental Forecast. See Exhibit No. 17 (KED-2). 18

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Q. How were the low and high natural gas forecast scenarios developed in the Fall 2013 Fundamental Forecast?

A. The low and high natural gas forecasts in the Fundamental Forecast were
 developed by comparing the Duke Energy base natural gas price forecast in the

1		Fundamental Forecast to contemporary, well-recognized industry natural gas
2		price forecasts and applying statistically relevant standard deviations to the data.
3		This methodology produces the shaded areas around the Duke Energy
4		Fundamental Natural Gas Forecast shown in Exhibit No (KED-1) and (KED-
5		2) and results in the calculation of the low and high natural gas price forecasts
6		around the Fundamental Natural Gas Forecast. Duke Energy's methodology
7		reasonably anchors its low and high natural gas price scenarios to contemporary
8		industry natural gas price forecasts and ensures that the range of potential natural
9		gas prices in the Duke Energy Fundamental Natural Gas Forecast is not out of line
10		with industry forecasts.
11		
12	Q.	Do these updated 2014 Forecasts fall within the two standard of deviation
13		range provided in the 2013 Fundamental Forecast attached to your May 27,
13 14		range provided in the 2013 Fundamental Forecast attached to your May 27, 2014 testimony?
	А.	
14	А.	2014 testimony?
14 15	А.	2014 testimony? Yes. As shown on Exhibit No(KED-2), when plotted against the 2013
14 15 16	А.	2014 testimony? Yes. As shown on Exhibit No(KED-2), when plotted against the 2013 Forecast the Spring 2014 and Fall 2014 Forecast updates both fall squarely within
14 15 16 17	А. Q .	2014 testimony? Yes. As shown on Exhibit No(KED-2), when plotted against the 2013 Forecast the Spring 2014 and Fall 2014 Forecast updates both fall squarely within
14 15 16 17 18		2014 testimony? Yes. As shown on Exhibit No(KED-2), when plotted against the 2013 Forecast the Spring 2014 and Fall 2014 Forecast updates both fall squarely within the range contemplated by the 2013 Forecast.
14 15 16 17 18 19		2014 testimony? Yes. As shown on Exhibit No(KED-2), when plotted against the 2013 Forecast the Spring 2014 and Fall 2014 Forecast updates both fall squarely within the range contemplated by the 2013 Forecast. Are there any fundamental changes to the 2013 Fundamental Forecast based
14 15 16 17 18 19 20	Q.	2014 testimony? Yes. As shown on Exhibit No(KED-2), when plotted against the 2013 Forecast the Spring 2014 and Fall 2014 Forecast updates both fall squarely within the range contemplated by the 2013 Forecast. Are there any fundamental changes to the 2013 Fundamental Forecast based on the 2014 Forecast updates?
14 15 16 17 18 19 20 21	Q.	 2014 testimony? Yes. As shown on Exhibit No(KED-2), when plotted against the 2013 Forecast the Spring 2014 and Fall 2014 Forecast updates both fall squarely within the range contemplated by the 2013 Forecast. Are there any fundamental changes to the 2013 Fundamental Forecast based on the 2014 Forecast updates? No. Although Duke Energy has modified many of its input assumptions as noted

1	Q.	In your opinion are any of these updates between the Duke Energy 2013
2		Fundamental Forecast and the Spring 2014 and Fall 2014 updated Forecasts
3		material to the overall Forecast?
4	А.	No. The general uncertainty around key assumptions likely outweighs the various
5		incremental adjustments that have been implemented since the Fall 2013 outlook.
6		The EPA's proposed section 111(d) rule in particular has introduced a new source
7		of uncertainty that will not be quickly resolved until the rule is finalized and the
8		states begin submitting compliance strategies. However, the Company's
9		preliminary analysis, using a very strict interpretation of the proposed rule, did not
10		result in gas prices outside of the Fall 2013 gas price sensitivity range.
11		
12	Q.	In your opinion, is the Fundamental Forecast a reasonable view of future fuel
13		commodity prices?
14	A.	
	~ ~ ~	Yes. The Fundamental Forecast is based on an extensive review and a rigorous
15		Yes. The Fundamental Forecast is based on an extensive review and a rigorous analysis of available and relevant information that affects fuel commodity prices.
15 16		
		analysis of available and relevant information that affects fuel commodity prices.
16		analysis of available and relevant information that affects fuel commodity prices. Duke Energy relies on industry expertise and its own expertise to develop this
16 17		analysis of available and relevant information that affects fuel commodity prices. Duke Energy relies on industry expertise and its own expertise to develop this information in the Fundamental Forecast and it incorporates the best available
16 17 18		analysis of available and relevant information that affects fuel commodity prices. Duke Energy relies on industry expertise and its own expertise to develop this information in the Fundamental Forecast and it incorporates the best available data regarding these assumptions into the Forecast and it is updated regularly.
16 17 18 19		analysis of available and relevant information that affects fuel commodity prices. Duke Energy relies on industry expertise and its own expertise to develop this information in the Fundamental Forecast and it incorporates the best available data regarding these assumptions into the Forecast and it is updated regularly. The Fundamental Forecast reflects industry expertise and Duke Energy's best
16 17 18 19 20		analysis of available and relevant information that affects fuel commodity prices. Duke Energy relies on industry expertise and its own expertise to develop this information in the Fundamental Forecast and it incorporates the best available data regarding these assumptions into the Forecast and it is updated regularly. The Fundamental Forecast reflects industry expertise and Duke Energy's best professional judgment of future costs at the time the Fundamental Forecast is

1	1	marginal costs, plant operational characteristics, and observable data regarding
2		commodity prices. As shown in Exhibit No (KED-3), and as I explained
3		above with respect to the development of the low and high natural gas price
4		scenarios, the Company's natural gas forecast is in line with other contemporary
5		natural gas forecasts (both public and proprietary) prepared by leading industry
6		consultants. As a result, the Fundamental Forecast reasonably represents future
7	-	fuel commodity prices.
8		
9	Q.	Do you have an opinion regarding the use of natural gas as a fuel source for
10		the Osprey or Suwannee power plants?
11	А.	Yes. My opinion has not changed since my direct testimony in Docket No.
12		140111-EI that natural gas is and will be a competitively-priced fuel source for
13		either the Osprey or Suwannee plants. Natural gas is an attractive economic fuel
14		source for the generation of electricity for Duke Energy's customers compared to
15		the total cost of generation for other types of generation technologies. Natural gas
16		is also an attractive fuel source because, compared to oil and coal, it is a cleaner
17		burning fuel and does not have the same level of environmental costs and related
18		impacts associated with generation plants using those alternative fuels. This
19		results in a favorable impact on the relative capital cost of constructing generating
20	:	facilities capable of complying with current and ever-increasing environmental
21	,	regulations.
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1 **Q**. Does the Company continue to believe that natural gas will be an economic long-term fuel source for electrical energy production? 2 Yes it does. As I discussed in my direct testimony in Docket No. 140111-EI, in 3 Α. the last decade, advances in natural gas production technology have provided 4 natural gas producers access to unconventional gas supplies that previously were 5 not economic production resources. As I further explained in my direct testimony 6 in Docket No. 140111-EI, these unconventional gas supplies provide a long-term 7 source of supply of natural gas for natural gas users in the United States. See 8 Exhibit No. ____ (KED-1). 9 10 11 Q. Does this conclude your testimony? Yes it does. Α. 12

IN RE: PETITION FOR DETERMINATION THAT THE OSPREY PLANT ACQUISITION AND, ALTERNATIVELY, THE SUWANNEE SIMPLE CYCLE PROJECT IS THE MOST COST EFFECTIVE GENERATION ALTERNATIVE TO MEET THE REMAINING NEED PRIOR TO 2018 FOR DUKE ENERGY FLORIDA, INC.

BY DUKE ENERGY FLORIDA, INC.

FPSC DOCKET NO.

DIRECT TESTIMONY OF KRIS G. EDMONDSON

1	I.	INTRODUCTION AND QUALIFICATIONS.
2	Q.	Please state your name, employer, and business address.
3	А.	My name is Kris G. Edmondson and I am employed by Duke Energy Florida, Inc.
4		("DEF" or the "Company"). My business address is 299 1 st Avenue North, St.
5		Petersburg, Florida 33701.
6		
7	Q.	Please tell us your position with DEF and describe your duties and
8		responsibilities in that position.
9	А.	My current position is General Manager - Florida Fossil Operations. I am responsible for
10		ensuring safe, reliable, and cost effective operations for a significant portion of the
11		combined cycle and combustion turbine fleet in Florida. Provided the acquisition of the
12		Osprey Plant is approved, I would assume responsibility for this Plant in addition to the
13		other DEF plants that currently report to me.
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1 **Q**. Please summarize your educational background and employment experience. A. I hold a Bachelor of Science in Civil Engineering and a Masters in Business 2 3 Administration. I have worked in the regulated utility industry for 17 years. The 4 majority of my experience has been in fossil operations leading organizations within 5 power plants and support teams focused primarily on operations, maintenance, 6 engineering, and project management. I have experience managing power plants, integrating new unit construction into existing plants, directing technical support 7 organizations, and leading outage and project management teams supporting plants. 8 9 II. PURPOSE AND SUMMARY OF TESTIMONY. 10 **O**. What is the purpose of your testimony in this proceeding? 11 Α. I am testifying on behalf of the Company in support of its Petition. As explained by other 12 DEF witnesses, DEF is presenting the Osprey Energy Facility Combined Cycle Plant 13 ("Osprey Plant") acquisition and, alternatively, the Suwannee Simple Cycle Project 14 ("Suwannee Project") as the most cost effective alternative to meet its need for 15 generation prior to 2018. My testimony and exhibits describe the Osprey Plant 16 technology and location and how acquisition of the Osprey Plant by DEF would 17 complement DEF's system. I also describe the due diligence process the Company 18 performed on the Osprey Plant prior to agreeing to acquire the Plant subject to regulatory 19 approvals. Lastly, I will present the Company's forecasts for the operating and 20 maintenance costs for the Osprey Plant and explain why the major maintenance work and 21 associated costs are necessary for the Osprey Plant. 22

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1	Q.	Are you sponsoring any exhibits to your testimony?
2	А.	Yes. I am sponsoring the following exhibits to my testimony:
3		• Exhibit No(KGE-1), a map showing the location of the Osprey Energy
4		Center in Auburndale, Polk County, Florida;
5		• Exhibit No(KGE-2), the confidential Technical Due Diligence Evaluation
6		report for the Osprey Energy Center prepared by Burns & McDonnell
7		Engineering Company, Inc. ("Burns & McDonnell"); and
8		• Exhibit No (KGE-3), the confidential Pro Forma Major Maintenance Cost
9		Summary Projections for the Osprey Plant.
10		Each of these exhibits was prepared under my direction and control, and each is true and
11		accurate.
12		
13	Q.	Please summarize your testimony.
14	1	
14	A.	The Osprey Plant is a reasonable acquisition for the Company that will provide DEF's
15	А.	The Osprey Plant is a reasonable acquisition for the Company that will provide DEF's customers with an efficient, reliable source of combined cycle energy generation. Prior
	А.	
15	А.	customers with an efficient, reliable source of combined cycle energy generation. Prior
15 16	A.	customers with an efficient, reliable source of combined cycle energy generation. Prior to executing the asset purchase agreement ("APA") for the Osprey Plant, DEF conducted
15 16 17	A.	customers with an efficient, reliable source of combined cycle energy generation. Prior to executing the asset purchase agreement ("APA") for the Osprey Plant, DEF conducted a detailed due diligence evaluation of the Plant acquisition. Based on that due diligence
15 16 17 18	A.	customers with an efficient, reliable source of combined cycle energy generation. Prior to executing the asset purchase agreement ("APA") for the Osprey Plant, DEF conducted a detailed due diligence evaluation of the Plant acquisition. Based on that due diligence review, DEF concluded that the current condition and operating performance of the
15 16 17 18 19	A.	customers with an efficient, reliable source of combined cycle energy generation. Prior to executing the asset purchase agreement ("APA") for the Osprey Plant, DEF conducted a detailed due diligence evaluation of the Plant acquisition. Based on that due diligence review, DEF concluded that the current condition and operating performance of the Osprey Plant was reasonable and that there were no fatal flaws to DEF's acquisition of
15 16 17 18 19 20	A.	customers with an efficient, reliable source of combined cycle energy generation. Prior to executing the asset purchase agreement ("APA") for the Osprey Plant, DEF conducted a detailed due diligence evaluation of the Plant acquisition. Based on that due diligence review, DEF concluded that the current condition and operating performance of the Osprey Plant was reasonable and that there were no fatal flaws to DEF's acquisition of the Plant. DEF will complete a final due diligence evaluation prior to closing on the
15 16 17 18 19 20 21	A.	customers with an efficient, reliable source of combined cycle energy generation. Prior to executing the asset purchase agreement ("APA") for the Osprey Plant, DEF conducted a detailed due diligence evaluation of the Plant acquisition. Based on that due diligence review, DEF concluded that the current condition and operating performance of the Osprey Plant was reasonable and that there were no fatal flaws to DEF's acquisition of the Plant. DEF will complete a final due diligence evaluation prior to closing on the Plant acquisition to ensure there are no material changes in the condition and operating

requirements for the equipment at the Osprey Plant. DEF prepared cost estimates for the Plant maintenance needs based on equipment manufacturer recommendations and DEF's extensive experience and expertise with the maintenance requirements and costs for similar equipment. These maintenance costs were taken into account in the Company's evaluation of the cost effectiveness of acquiring the Plant. Subject to the results of DEF's initial and final due diligence reviews, DEF's acquisition of the Osprey Plant is reasonable to provide DEF's customers the benefits of the Plant's projected long-term efficient and reliable service.

III. THE OSPREY COMBINED CYCLE POWER PLANT ACQUISITION.

11 Q. Can you describe the Osprey Plant?

A. Yes. The Osprey Plant is an existing 599 MW natural gas-fired 2x1 combined cycle generation facility in Auburndale, Florida that was originally put in service in 2004. The plant includes two Siemens Westinghouse 501FD2 model Combustion Turbine Generators, two Nooter Erikson Heat Recovery Steam Generators and one Siemens KN Steam Turbine Generator. The Plant produces 534 MW on a base load basis and up to 599 MW with additional peaking capacity. The Osprey Plant is a merchant plant currently owned by Osprey Energy Center LLC as the assignee of Calpine Construction Finance Company, L.P. ("Calpine") and provides capacity and energy to DEF under a power purchase agreement ("PPA").

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Q.

Where is the Osprey Plant located?

A. The Osprey Plant is located at the Osprey Energy Center in Auburndale, Polk County, Florida, in the Tampa Electric Company ("TECO") balancing area authority ("BAA"). The location of the Osprey Plant is shown on Exhibit No. ___(KGE-1) to my direct testimony.

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Q. Are there other key operational characteristics of the Osprey Plant?

8 A. In addition to high fuel efficiency, combined cycle technology delivers strong reliability. This technology offers the flexibility to adjust power output up or down to meet load 9 requirements on DEF's system. Given the 2x1 configuration, the plant offers flexibility 10 11 to run the steam turbine with just one combustion turbine for high efficiency at reduced loads when needed. These features position the operator of the combined cycle plant to 12 generate power to match the DEF system load demand. The Osprey Plant has several 13 14 operating configurations to provide supplemental peaking capability, including power augmentation, inlet fogging, and heat recovery steam generator ("HRSG") duct firing. 15 These capabilities can increase load on the Plant power block from a base load of 534 16 MW to a peak load of 599 MW when needed. In addition, the HRSG stacks have 17 dampers that help preserve heat when the units are cycled off to allow for quicker start up 18 times to meet customer demands. The combined cycle technology is proven and DEF 19 has significant experience operating equipment of similar design and vintage. 20

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A.

Q. What is the fuel source for the Osprey Plant?

difference of firm capacity. The contract maximum flow rate is
i. Under the Osprey Plant acquisition agreement, the rights to the
Gulfstream contracted capacity will be assigned to DEF by Calpine once the Plant
acquisition is completed. The current term of the Gulfstream contract is not scheduled to
expire
Q. Does the Osprey Plant have dual fuel capability?
A. No. The Osprey Plant does not burn fuel oil and so it does not have dual fuel capability.
However, a majority of DEF's combined cycle and peaking power plants in Florida have
dual fuel capability, therefore, the resource reliability from dual fuel already exists on
DEF's system.

The Osprey Plant runs on natural gas. Calpine currently has a firm transportation service

agreement with Gulfstream Natural Gas System, LLC ("Gulfstream"), which provides for

Q. Can you briefly describe the proposed Osprey Plant acquisition terms?

A. The specific terms of the Osprey Plant acquisition are described in detail in the testimony
of Mr. Matthew Palasek and in the APA attached to his testimony. For my purpose in
managing the due-diligence review of the Plant acquisition, my understanding is that
DEF is proposing to purchase the Osprey Plant following a two-year PPA. The purchase
of the Plant would occur on or before January 3, 2017.

Q. Will Calpine continue to own and operate the Osprey Plant prior to the closing?
A. Yes. As discussed in the direct testimony of Mr. Palasek, DEF and Calpine agreed to a PPA for DEF's purchase of firm capacity and energy from the Osprey Plant to DEF's system between October 2014 and January 2, 2017. During this PPA period, DEF will seek to obtain the required regulatory approvals for DEF's acquisition of the Osprey Plant.

Q. Are there advantages to DEF's customers to acquire the existing Osprey Plant?

Yes. First, the Osprey Plant is an existing facility that delivers an efficient source of 9 Α. generation for customers. The technology and vintage of equipment is similar to other 10 units in the DEF fleet which will allow DEF to leverage current operations and 11 maintenance programs and expertise for this Plant. Geographically, the Osprey Plant is 12 positioned within 30 miles of the Hines Energy Center and 40 miles of Intercession City, 13 which aligns well with existing DEF generation resources. In addition, buying and 14 continuing to operate an existing plant leverages existing infrastructure and can provide a 15 cost effective resource option under the right conditions. 16

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IV. OSPREY PLANT ACQUISITION DUE DILIGENCE PROCESS.

Q. Following the initial agreement in principle in the term sheet between Calpine and
 DEF for purchase of the Osprey Plant can you describe what the next steps were?
 A. Yes. Calpine provided a due diligence period for DEF to assess and evaluate the

condition of the Plant, the operation and maintenance conditions and requirements,
environmental, water, and other site related permits and permit requirements for

continued operation of the Plant, and complete regulatory and financial assessments associated with the Plant acquisition by DEF.

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Q. What was the purpose of the due diligence evaluation of the Osprey Plant?

A. Due diligence is a necessary step in the acquisition process to assist the development of the terms and conditions of a final purchase agreement. The due diligence process was used to determine the maintenance status of the Osprey Plant and to investigate and ensure that the Plant had been constructed and operated in an appropriate manner so the Plant will continue to provide dependable long-term service for DEF and its customers.

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II Q. How was the due diligence process structured?

DEF and Calpine cooperated in the due diligence process for the Osprey Plant acquisition 12 A. between September and December 2014. DEF established a due diligence working group 13 in early September, 2014, with teams organized to assess the overall condition of the 14 Osprey Plant and long-term operational requirements as well as the financial and 15 regulatory aspects of the proposed transaction. DEF brought together internal 16 representatives from the following subject matter areas: technical and engineering, 17 environmental, transmission, legal, rates, regulatory, regulatory finance, integrated 18 resource planning analytics, human resources, financial planning & analysis, tax, and 19 corporate development for its working group. 20

Starting in September 2014, DEF put together extensive Requests for Information ("RFIs") directed to Calpine covering multiple aspects of the Plant, its components and parts, maintenance, financials, contracts, transmission, environmental, historical

performance and multiple other categories of information. In addition to providing responses to these RFIs, Calpine set up a data room where hundreds of documents were made available to DEF's working group. DEF's initial assessment included an equipment condition assessment, operation and maintenance ("O&M") cost studies, and a unit performance assessment. The basic goal of this assessment was to determine if there were any fatal flaws with the Osprey Plant for which DEF would not proceed with the Osprey Plant acquisition.

The next phase of due diligence involved development of a more detailed evaluation of DEF's projected operating and capital costs to operate and maintain the Osprey Plant in 2017 and beyond. These cost projections were prepared based on condition information provided by Calpine in response to the RFI's and incorporated DEF's planned O&M strategy, consistent with current operations of similar units in the Company's fleet.

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Q. Did DEF hire a consultant to independently evaluate the Osprey Plant?

A. Yes. DEF hired Burns & McDonnell to conduct an independent due diligence evaluation
and engineering assessment for the Osprey Plant as part of phase one of DEF's due
diligence evaluation of the Osprey Plant acquisition. The purpose of the Burns &
McDonnell evaluation was to assess whether the Plant had been constructed and operated
in a manner that provided DEF assurance that the Plant had the capability to provide long
term, dependable service as a combined cycle power plant. Burns & McDonnell also sent
Calpine an extensive RFI regarding the Plant, accessed the Calpine data room, and

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conducted a site visit of the Osprey Plant during its three-month evaluation of the Osprey Plant.

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Q. Who is Burns & McDonnell?

А. Burns & McDonnell is an engineering firm that provides engineering, architectural, 5 6 construction, environmental, and consulting services to a broad range of clients across a multitude of industries. They are a large national engineering consultation company 7 (5,000 employees), have extensive experience in engineering assessment, and are well 8 9 known in the power generation industry. They provide engineering services and consulting services to the Company on a wide variety of projects, and are currently 10 engaged as DEF's owner's engineer on the Citrus County Combined Cycle facility and a 11 number of other projects related to the generation units in the existing fleet. The Burns & 12 McDonnell team that performed the review of the Osprey Plant is routinely engaged in 13 due diligence reviews for existing power generation facilities. 14

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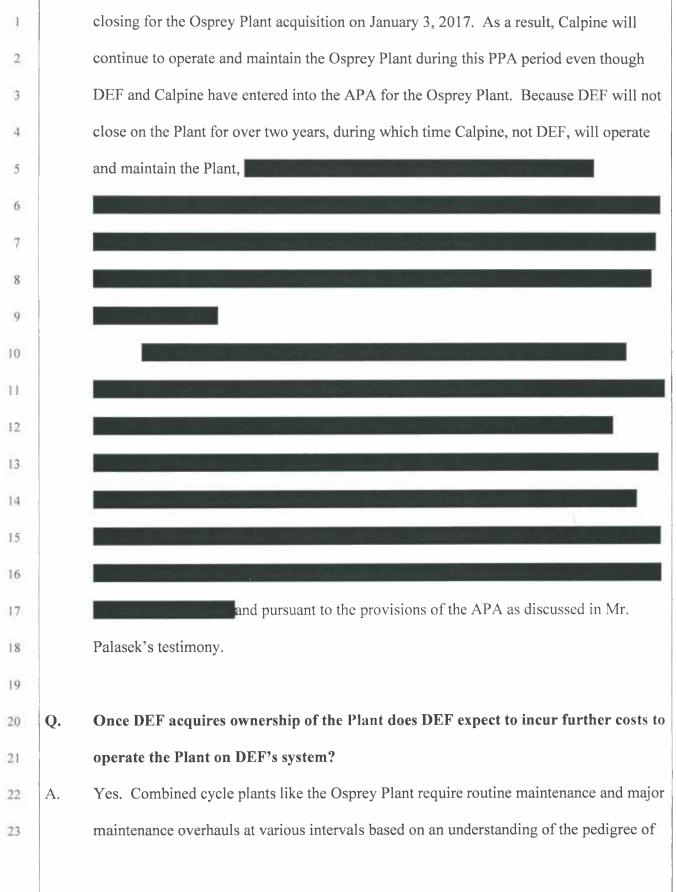
Q. Did Burns & McDonnell find any fatal flaws with the Osprey Plant acquisition?

A. No. Burns & McDonnell concluded that the Osprey Plant is capable of providing longterm reliable service as a combined cycle facility if the Osprey Plant continues to be
properly operated and maintained in accordance with good utility practice. Burns &
McDonnell provided DEF with a Technical Due Diligence Evaluation report to support
its conclusion. Burns & McDonnell included in its report recommendations on plant
operations and maintenance and performance, key contracts and agreements, and
environmental considerations. A copy of the Burns & McDonnell technical due diligence

1 evaluation report for the Osprey Plant is attached as Exhibit No. (KGE-2) to my direct testimony. 2 3 **Q**. 4 Is the initial due diligence process complete? Α. Yes. The initial due diligence evaluation, phases one and two, were completed in 5 6 November 2014 with the Burns & McDonnell report finalized in December 2014. 7 Q. What were DEF's final conclusions from its initial due diligence review of the 8 9 **Osprey Plant acquisition?** DEF concluded that the Osprey Plant was in reasonable physical condition and has 10 A. reasonable operating performance with no foreseeable major flaws that prevent DEF 11 from proceeding with the Osprey Plant acquisition. As to environmental permitting 12 (based on information provided) the Plant is currently in compliance and there were no 13 significant findings. Based on the due diligence review DEF was able to establish 14 estimates for projected Plant O&M costs, including costs for upcoming, necessary major 15 maintenance, and provide appropriate cost and performance inputs for the integrated 16 17 resource planning analyses. 18 You testified that DEF completed its initial due diligence review, does DEF plan 19 **Q**. another due diligence review before it completes the acquisition of the Osprey 20 Plant? 21 Yes. Because DEF must obtain regulatory approvals to complete the acquisition of the 22 Α. Osprey Plant, DEF and Calpine agreed to the PPA through January 2, 2017, with a 23

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the key components and parts and recommendations from the equipment manufacturers or Original Equipment Manufacturers ("OEMs"). In the case of the Osprey Plant, since it was put in service in 2004, the combustion turbines and steam turbines, principally, will be coming up on their major maintenance intervals in the 2017 and 2018 time frame. Accordingly, DEF estimates that it will incur (\$2014) in 2017 and

(\$2014) in 2018 to perform these major maintenance requirements.

In addition to the costs for the major maintenance requirements for the Plant, DEF will also incur costs to re-stock and maintain equipment and material inventory for the continued operation of the Osprey Plant on DEF's system consistent with DEF's standard policies and practices. Similarly, DEF expects to incur additional costs to integrate the Osprey Plant into the DEF fleet. All these costs are reflected in the Major Maintenance Cost Summary Projection Pro Forma Forecast (\$2014) attached to my direct testimony as Exhibit No. (KGE-3). The exhibit includes the Forecast of estimated O&M major maintenance and capital major maintenance for the Osprey Plant through 2030, and provides an itemized list of the maintenance or replacement costs needed for each category of equipment and the year in which it must be incurred.

Q. What makes up the major maintenance costs in 2017 and 2018?

A. A significant portion of these major maintenance needs are tied to major inspections that are coming due on both Plant gas turbines, the steam turbine, and all three generators, during which a substantial number of the parts and components are typically inspected and likely replaced. DEF has a robust plant maintenance program for combined cycle plants that demands a high-level of quality for parts used in the plants and regular interval

based maintenance. The strategy behind the cost estimates for these major maintenance 2 needs in the Forecast is to remove and replace a number of gas turbine parts that are either due to be replaced or would not be qualified by DEF's Combustion Turbine ("CT") 3 4 engineering team for continued operation. This strategy ensures the components and 5 parts are well known and documented and the units are well positioned to reliably and cost effectively operate through the remaining life cycle of the Plant. In addition, these 7 initial major maintenance investments will properly align the Plant assets with DEF's maintenance philosophy and current combined cycle programs. The estimated cost 8 projections for the major maintenance needs are based on DEF's due diligence reviews 9 and they do not reflect information typically available from site-specific commercial 10 discussions or detailed outage planning that will only begin to take place as part of the integration effort once regulatory approvals for the Plant acquisition are obtained. This 12 maintenance is necessary to ensure the continued and long-term operation of the Plant in 13 an efficient and reliable manner for the benefit of DEF's customers.

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Q. What is the difference between O&M major maintenance and capital major maintenance in Exhibit No. ____ (KGE-3)?

А. The distinction is based on the nature of the maintenance required. O&M major 18 maintenance generally involves the preservation of the parts and equipment, and capital 19 major maintenance generally involves the replacement of parts and equipment. So, for 20 example, the steam turbines are listed under O&M because the steam turbines require 21 cleaning, polishing, repairs and other preservation-type activities while the majority of 22 the combustion turbines major maintenance is listed under capital because the 23

combustion turbines require replacement of a significant number of parts and components.

Q. What are examples of the capital major maintenance for the Osprey Plant in 2017 and 2018?

 A. The majority of the capital portion of the forecasted costs is made up of part replacements on the combustion turbines. The remaining projected capital investments are in the heat recovery steam generator (LP Evaporator tube bundle replacements and HRSG Stop Valve replacements), SCR catalyst replacements, heat exchanger tube replacements, and investments in the plant control system.

Q. What are examples of the O&M major maintenance for the Osprey Plant in 2017 and 2018?

A. The majority of the O&M major maintenance expenses projected are tied to the steam turbine major inspection and the rotor out generator inspections on both combustion turbines and the steam turbine. Other O&M major maintenance forecasts are tied to inspections on the HRSG, high energy piping systems, and balance of plant systems. These inspections include condition assessments and repair cost to remedy any findings to ensure reliable operation of the equipment.

How did DEF determine when the maintenance items shown on the Pro Forma Forecast were necessary? The Osprey Plant working group created the recommended maintenance program for the

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Osprey Plant depicted in the Pro Forma Forecast attached as Exhibit No. __(KGE-3). Power plant components have OEM recommended, routine schedules for major maintenance to preserve optimal performance of the equipment. Maintenance is typically "triggered" based on cumulative hours of operation and OEM recommendations. DEF has an established maintenance program and practice which incorporates these OEM recommended service intervals, service bulletins and the Company's own experience with similar equipment.

Since the Osprey Plant was put in service in 2004, it is coming up on major scheduled maintenance overhauls, in particular for its largest components, the steam turbines and combustion turbines, in 2017 and 2018. The major maintenance items shown on the Pro Forma Forecast are based on a combination of Calpine's projected maintenance schedule for 2017, condition items identified by DEF during due diligence, and conformity with DEF's standards for major maintenance. DEF determined these major maintenance needs based on a thorough review of due diligence information provided by Calpine coupled with DEF subject matter experts forecasting needs based on DEF standards. See Exhibit No. (KGE-3).

In addition, some portions of the maintenance work that the working group included in the Pro Forma Forecast cost projections for the Osprey Plant are needed to bring the Osprey Plant into compliance with DEF fleet standards. For example, DEF has specific standards and specifications for qualifying OEM and third-party combustion

turbine parts prior to use. Many of the parts in the Osprey Plant combustion turbines are non-OEM parts and have unknown qualifications. DEF plans to integrate the Osprey Plant into its fleet and conform the O&M practices at the Osprey Plant to DEF's standards. This means that DEF will either re-qualify or replace parts to ensure that the operation and maintenance of the Osprey Plant conforms to DEF's O&M program standards used at its other combined cycle generation plants.

The only way that DEF can ensure that the Osprey Plant meets its maintenance program standards will be inspection and likely replacement of non-qualifying parts during the major maintenance. For this reason, the investment in major maintenance projected in 2017 and 2018 in each of the combustion turbines includes assumptions that a majority of the turbine and compressor parts will be replaced. This assumption is based on the pedigree of parts provided by Calpine coupled with a maintenance strategy to ensure that DEF understands component condition well enough to operate the Plant reliably until the next maintenance outage under DEF's maintenance standards.

Moreover, notwithstanding the extensive due diligence conducted by DEF and the comprehensive review of records kept on the various parts of the Plant, DEF will not be able to know the condition of the Osprey Plant parts until the Plant components are opened up and inspected during the maintenance outages. During these unit outages, some parts assumed to be replaced in the Pro Forma Forecast cost projection may be requalified for use based on DEF combustion turbine engineering evaluation, which could lower the total costs shown in the Pro Forma Forecast; however, other parts that are not planned on being replaced or work that is not planned on being performed during the outage may be necessary once DEF commences the outage work, requiring higher costs

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than are currently projected. Actual major maintenance costs will not be fully known until the outage work is completed, but based on DEF's detailed due diligence assessment, the Pro Forma Forecast cost projections in Exhibit No. (KGE-3) represent the Company's best available information regarding the major maintenance costs for the Osprey Plant.

How were the major maintenance costs estimated?

А. The major maintenance cost projections were based on the Company's operating experience and program cost baselines for Siemens-based combustion turbines and steam turbines in combined cycle operation – which DEF has significant experience with including the units at the Bartow plant and the Hines Energy Center. The operating cost forecasts include both detailed major maintenance and program upgrade requirements in the early years and typical program maintenance projections thereafter. These cost projections are budgetary estimates based on the Company's extensive experience operating and maintaining similar combined cycle power plants.

Q.

Why isn't Calpine paying for this major maintenance?

Α. Per Calpine's maintenance schedule and in accordance with Calpine's maintenance standards, these maintenance outages are not coming due during Calpine's ownership period. Calpine, however, likewise projected that the same major maintenance intervals would be required in a maintenance outage in the 2017 timeframe, which was taken into consideration by DEF and Calpine when the terms and conditions for the acquisition of the Calpine Plant in the APA were negotiated. The costs for the maintenance work in

this time frame were also taken into account in the cumulative present value revenue requirements ("CPVRR") analysis of the cost effectiveness of acquiring the Osprey Plant that was prepared by the Company. The Pro Forma Forecast in Exhibit No. ____ (KGE-3) was used to develop the Osprey Plant acquisition revenue requirements that were used in the CPVRR evaluation of the cost effectiveness of the acquisition that is included in an exhibit to and discussed in the direct testimony of Mr. Benjamin Borsch in this proceeding.

Q. Are the major maintenance costs that are projected reasonable and necessary?
A. Yes. The major maintenance costs are based on industry standard, required major maintenance that is needed in 2017 and 2018 for the Osprey Plant steam turbine, combustion turbines, and balance of plant, including, for example, the heat recovery steam generators. Other major maintenance costs are for work and material that are necessary to incorporate the Osprey Plant into the DEF system and ensure that the Osprey plant provides reliable service as a part of DEF's fleet. All of these cost estimates take into consideration OEM recommendations, standard interval maintenance schedules, and DEF's extensive expertise with operating and maintaining similar equipment through its plant maintenance program. The costs presented in the Pro Forma Forecast in Exhibit No. ___ (KGE-3) are reasonable costs for work and material that are necessary for the reliable, long-term operation of the Osprey Plant for the benefit of DEF's customers.

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CONCLUSION.

- Is DEF's acquisition of the Osprey Plant reasonable? Q. 2 Yes. Based on the due diligence review by the DEF working group and our outside A. 3 consultant Burns & McDonnell, and subject to the final due diligence review and 4 conditions prior to closing on the Plant acquisition in January 2017, the Osprey Plant 5 should continue to provide long-term reliable service for DEF and its customers. DEF's 6 acquisition of the Osprey Plant with the requisite capital and maintenance costs is 7 reasonable to incorporate the Osprey Plant into DEF's system for the benefit of DEF's 8 9 customers. 10
- **Q.** Does this conclude your testimony?
 - A. Yes, it does.

IN RE: PETITION FOR DETERMINATION THAT THE OSPREY PLANT ACQUISITION AND, ALTERNATIVELY, THE SUWANNEE SIMPLE CYCLE PROJECT IS THE MOST COST EFFECTIVE GENERATION ALTERNATIVE TO MEET THE REMAINING NEED PRIOR TO 2018 FOR DUKE ENERGY FLORIDA, INC.

BY DUKE ENERGY FLORIDA, INC.

FPSC DOCKET NO.

DIRECT TESTIMONY OF MATTHEW E. PALASEK

I. INTRODUCTION AND QUALIFICATIONS.

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Q. Please state your name, employer, and business address.

A. My name is Matthew E. Palasek and I am employed by Duke Energy Corporation ("Duke Energy"). My business address is 550 South Tryon Street, DEC-39B, Charlotte, North Carolina 28202.

Q. Please tell us your position with Duke Energy and describe your duties and responsibilities in that position.

A. I am a Director in Corporate Development with Duke Energy. In this role, I am responsible for supporting Duke Energy and its subsidiaries in a variety of transaction activity: acquisitions, divestitures, joint ventures, and corporate-level combinations. I was involved in discussions with Calpine Construction Finance Company, L.P.

("Calpine") regarding the potential acquisition of the Osprey Plant by Duke Energy
Florida, Inc. ("DEF" or the "Company") up to the agreement to terms between DEF and
Calpine for the Osprey Plant acquisition. Subsequent to that agreement in principle
between DEF and Calpine, I was part of the Company's due diligence for the Osprey
Plant acquisition on behalf of Corporate Development. In this role I was responsible for
coordinating the exchange of information between DEF and Calpine about the acquisition
and coordinating and participating in contract negotiations for and the transaction review
of the Osprey Plant acquisition. I was also responsible for coordinating and obtaining
internal approvals consistent with Duke Energy policy and project controls for plant and
major equipment or material acquisitions.

Q. Please summarize your educational background and employment experience.

A. I graduated from George Washington University in 1996 with a B.S. in Economics. Upon graduation I worked for Charles River Associates ("CRA"), an economics consulting firm, in Washington DC. I predominantly supported CRA's energy practice in analysis for antitrust filings related to utility mergers and Federal Energy Regulatory Commission ("FERC") filings for market based rate authority. Subsequently, I attended Duke University's Fuqua School of Business, from which I received my Master's in Business Administration in 2002. Shortly after graduation I worked in the strategy group of Mirant, an Independent Power Producer based in Atlanta, Georgia. In the summer of 2003 I left to work at Capital One in Richmond, Virginia to work in an operations consulting group. In 2005 I joined Duke Energy. Since that time I have worked predominantly in the Corporate Development (or Mergers & Acquisitions) group. In my

role I have supported Duke Energy in its transactions, both regulated and unregulated, 1 both in support and leadership of transactions. 2 3 II. PURPOSE AND SUMMARY OF TESTIMONY. 4 Q. What is the purpose of your testimony in this proceeding? 5 I am testifying on behalf of the Company in support of its Petition. I will provide and A. 6 describe the term sheet and the Asset Purchase and Sale Agreement ("APA") between 7 DEF and Osprey Energy Center, LLC as the assignee of Calpine for DEF's acquisition of 8 the Calpine Osprey Plant. I will also generally explain the terms of the APA and the 9 beneficial terms and conditions that the Company obtained for the benefit of DEF's 10 customers. Finally, I will explain that the APA is a reasonable agreement between DEF 11 and Calpine for DEF to obtain the benefits of the Osprey Plant for DEF's customers. 12 13 Are you sponsoring any exhibits to your testimony? **Q**. 14 Α. Yes. I am sponsoring the following exhibits to my testimony: 15 16 • Exhibit No. (MEP-1), the confidential August 25, 2014 term sheet between DEF and Calpine for DEF's acquisition of the Osprey Plant; and 17 Exhibit No. (MEP-2), the confidential APA between DEF and Calpine for DEF's 18 acquisition of the Osprey Plant. 19 Each of these exhibits was prepared under my direction and control, and each is true and 20 accurate. 21 22 23

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Please summarize your testimony.

A. DEF and Calpine executed a term sheet and, subsequent to DEF's due diligence, an APA for DEF's acquisition of the Osprey Plant. DEF will acquire the Osprey Plant in just over two years, subject both to receipt of the requisite governmental and regulatory approvals of the acquisition and Calpine's continued operation of the Plant consistent with good utility practice and all applicable laws, regulations, orders, and permits in that time period, pursuant to the terms and conditions of the APA. As a result, the APA terms and conditions reasonably preserve the benefits of the Osprey Plant acquisition for DEF's customers if the requisite governmental and regulatory approvals are obtained and DEF acquires the Osprey Plant.

III. BACKGROUND NEGOTIATIONS FOR THE OSPREY PLANT ACQUISITION.
 Q. Please briefly describe how DEF and Calpine began negotiations for the acquisition of the Calpine Osprey Plant.

A. As explained in Mr. Benjamin Borsch's testimony filed in Docket No. 140111-EI, DEF first considered a bid from Calpine, to purchase the Osprey Plant, in fall 2013. The parties continued discussing the proposal for some time, even after DEF made its filing in May 2014 with the Florida Public Service Commission ("FPSC" or the "Commission") in Docket No. 140111-EI for approval of its Suwannee Simple Cycle self-build project ("Suwannee Project"). DEF and Calpine were able to resolve many issues, but some remained open.

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Q. What were the main issues that remained unresolved as the August hearing in Docket No. 140111-EI approached?

Α. First was the need to obtain Federal Energy Regulatory Commission ("FERC") approval 3 and the . Related to this concern was the 4 need to hold DEF's customers whole for certain obligations DEF had made to support the 5 Suwannee Project. The Company had to move forward with the Suwannee Project to 6 maintain the expected 2016 in-service date, and there were sunk costs associated with 7 that Project by the time of the hearing in Docket No. 140111-EI. The Company was also 8 concerned with ensuring that customers were protected if FERC did not approve the 9 Osprey Plant acquisition, including ensuring that the Suwannee Project remained a viable 10 11 option for as long as possible until more certainty regarding required regulatory approvals for the Osprey Plant acquisition could be obtained. The other major negotiation issue 12 was the purchase price for the Plant, as well as the pricing for the Power Purchase 13 Agreement ("PPA") that is part of the overall Osprey transaction. DEF had to ensure that 14 the Osprey Plant acquisition (when considering the entire deal) was more favorable to its 15 customers than its Suwannee Project. 16

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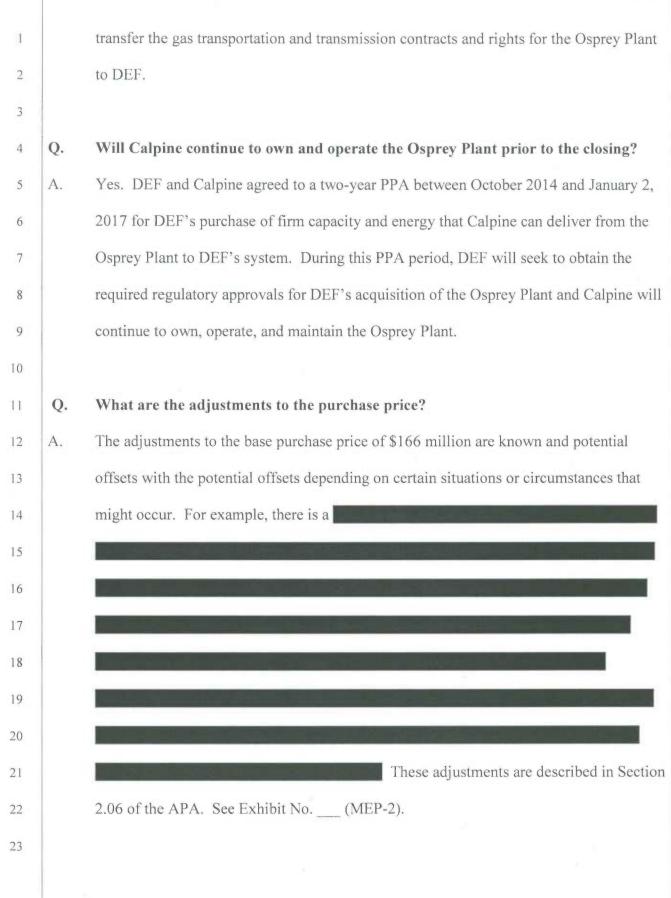
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Q. Did the parties resolve those last remaining open issues?

A. Yes. As explained during the opening stages of the hearing in Docket No. 140111-EI,
 DEF and Calpine agreed in principle to a deal, as evidenced in a term sheet, for DEF's acquisition of the Osprey Plant. A copy of the confidential term sheet between DEF and Calpine is included as Exhibit No. (MEP-1) to my direct testimony. The parties requested that the Suwannee Project portion of DEF's petition in Docket No. 140111-EI

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1		be withdrawn from consideration during the hearing, to allow the parties additional time
2		to conduct due diligence and negotiate a more detailed APA.
3		
4	IV.	THE OSPREY PLANT ASSET PURCHASE AGREEMENT.
5	Q.	Did DEF execute an APA with Calpine for the acquisition of the Calpine Osprey
6		Plant?
7	А.	Yes. Calpine and DEF negotiated the terms and conditions of the final APA for the
8		Osprey Plant acquisition, using the term sheet terms as a guide. DEF and Calpine
9		executed the APA for the Osprey Plant on December 17, 2014. A copy of the
10		confidential APA between DEF and Calpine for the Osprey Plant is attached as Exhibit
11		No. (MEP-2) to my direct testimony.
12		
13	Q.	What are the major terms of the APA?
14	А.	I break the APA into five main areas, which I will explain in greater detail below. Those
15		areas are: (1) acquisition overview; (2) required regulatory approvals; (3) due diligence
16		rights; (4) protection and security for DEF's customers; and (5) continuity of operations.
17		
18	А.	ACQUISITION OVERVIEW.
19	Q.	Please describe the basic structure of the APA.
20	A.	DEF and Calpine agreed that DEF will purchase the Osprey Plant for \$166 million,
20 21	A.	DEF and Calpine agreed that DEF will purchase the Osprey Plant for \$166 million, subject to certain adjustments, and that the closing is expected to occur on January 3,
	A.	

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1	Q.	What are the conditions precedent to the closing for the Osprey Plant acquisition?
2	А.	The conditions precedent to the closing of the Osprey Plant acquisition include obtaining
3		the requisite governmental or regulatory approvals for the acquisition. Other conditions
4		precedent include the parties' performance of the covenants in the APA and compliance
5		with the terms of the APA. Calpine's covenants include the continued operation and
6		maintenance of the Osprey Plant in accordance with good utility practice and compliance
7		with all laws, regulations, and permits in operating the Plant during the PPA period prior
8		to closing. Another condition precedent to the closing is the lack of any Material
9		Adverse Effect, which under the APA generally means
10		
11		The conditions precedent to the
12		closing for the Osprey Plant acquisition are set forth in detail in Articles VI and VII of
13		the APA. See Exhibit No. (MEP-2).
14		
15	В.	REQUIRED REGULATORY APPROVALS.
16	Q.	What regulatory approvals are required to complete DEF's acquisition of the
17		Osprey Plant?
18	А.	This acquisition requires approval from at least three agencies. First, FERC approval of
19		DEF's acquisition of the Osprey Plant is required for DEF to complete its acquisition of
20		the Osprey Plant. DEF and Calpine agreed that DEF would petition FERC to approve
21		DEF's acquisition of the Osprey Plant in 2015. DEF and Calpine further agreed to
22		for the Osprey Plant if FERC approval,
23		, is not obtained prior

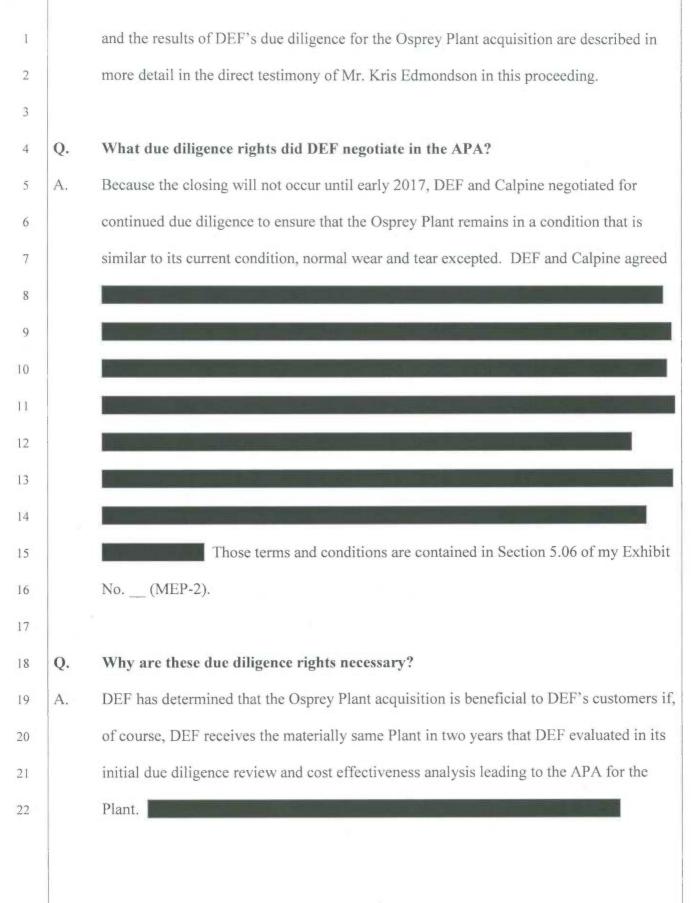
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1		to If FERC approval is not obtained,
2		. See Exhibit No (MEP-2).
3		
4	Q.	What is the significance of the second second seco
5		Osprey Plant acquisition?
6	А.	This deadline for FERC approval was established because DEF must recommence the
7		Suwannee Project by to place that Project in commercial service to meet
8		DEF's remaining summer peak load requirements in 2017. This requirement to
9		recommence the Suwannee Project is further explained in the direct testimony of Mr.
10		Mark Landseidel and Mr. Benjamin Borsch. As a result,
11		date by which DEF can meet its remaining need for additional generation capacity prior
12		to 2018 by generation resources other than the acquisition of the Osprey Plant, if the
13		regulatory approvals for DEF's acquisition of that Plant are not obtained. DEF,
14		accordingly, preserved for its customers the benefits of this alternative generation
15		resource to meet its remaining need for additional generation capacity prior to 2018 in the
16		event that DEF did not obtain the required regulatory approvals for the Osprey Plant
17		acquisition.
18		
19	Q.	What is the next regulatory approval that must be obtained before DEF can acquire
20		the Osprey Plant?
21	А.	DEF's acquisition of the Osprey Plant is also conditioned upon approval
22		by the Department of Justice ("DOJ") under the Hart
23		Scott Rodino ("HSR") Act. The APA obligates the parties to make two filings with the

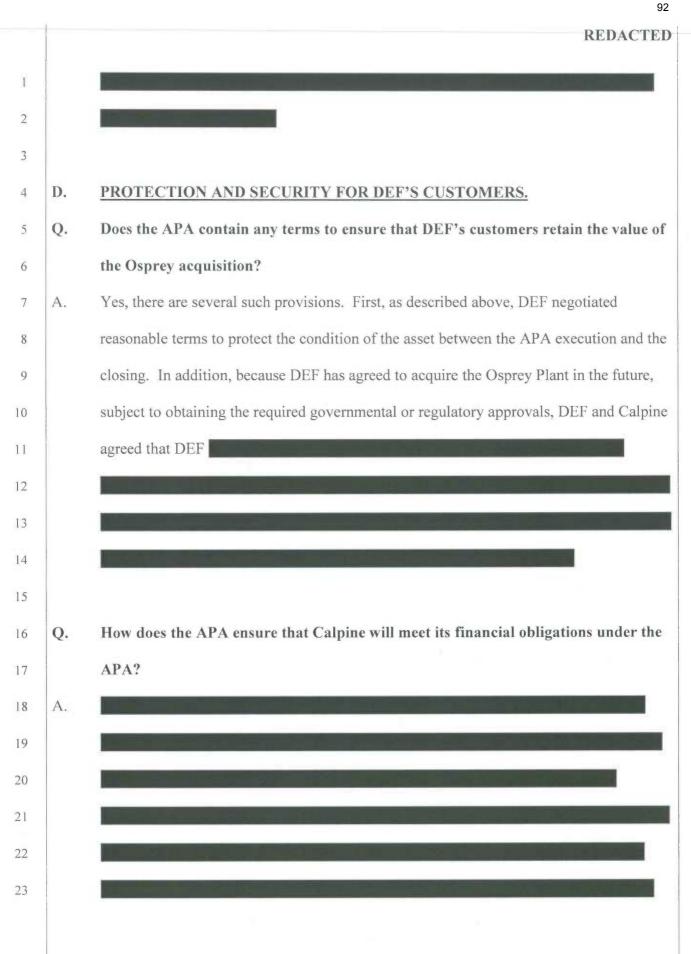
1		DOJ to obtain HSR approval. The initial filing must be made in 2015 and the subsequent
2		filing must be made no later than March 31, 2016.
3		
4	Q.	Why must the parties make two HSR filings?
5	А.	If the DOJ approves the acquisition, that approval is only valid if the acquisition is closed
6		within one year of obtaining the approval. However, making the initial filing even
7		though the closing is not planned until January 2017 provides the parties both additional
8		certainty as to whether the acquisition will ultimately be approved, and the ability to
9		continue with the Suwannee Project by
10		acquisition is doubtful. The second filing, if warranted by the response to the initial
11		filing, will be made closer in time to the January 3, 2017 closing.
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12		
12	Q.	Regarding the second second second
	Q.	Regarding the Example 1 for both the FERC and HSR filings, how did the parties address what is Example 1 in the APA?
13	Q. A.	
13 14		the parties address what is in the APA?
13 14 15		the parties address what is in the APA? The term is a defined term in Section 1.01 of
13 14 15 16		the parties address what is in the APA? The term is a defined term in Section 1.01 of
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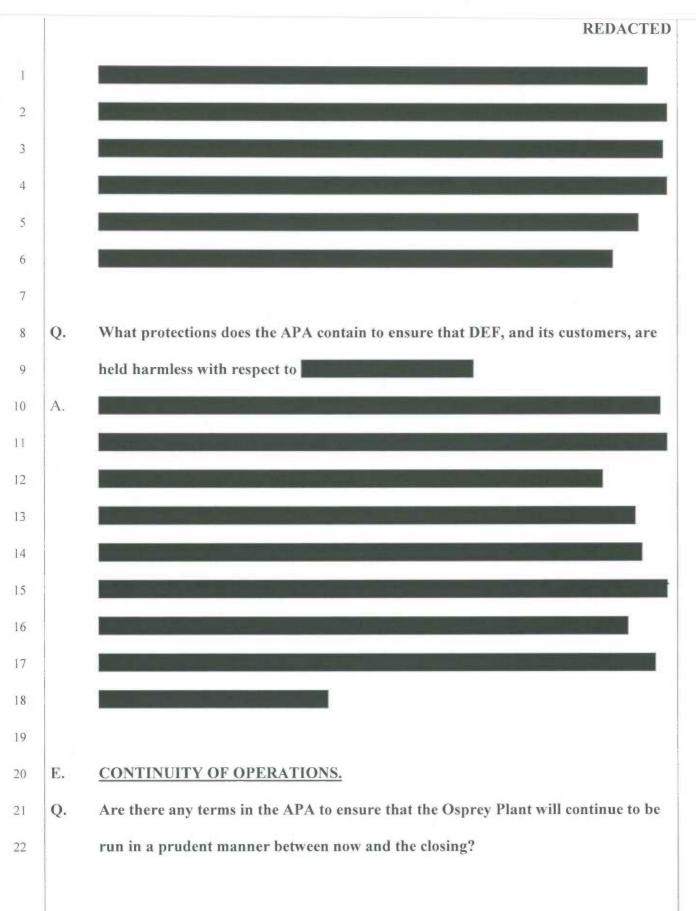
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1	Q.	What is the significance of
2	А.	DEF negotiated
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7		, the overall acquisition of the
8		Osprey Plant remains the most cost effective alternative. The overall cost effectiveness of
9		the Osprey Plant acquisition is further explained in Mr. Borsch's testimony.
10		
11	Q.	What is the other regulatory approval that must be obtained before DEF can
12		acquire the Osprey plant?
13	А.	DEF must obtain approval from the FPSC to move forward with this acquisition.
14		
15	Q.	What happens under the APA if DEF does not obtain the required regulatory
16		approvals to acquire the Osprey Plant?
17	А.	DEF has the second seco
18		obtained. If FERC does not approve the acquisition by
19		
20		. The PPA with Calpine would
21		continue through January 2, 2017, and DEF would resume the Suwannee Project. The
22		Suwannee Project is described by Mr. Landseidel in his direct testimony in this
23		proceeding.

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1	Q.	Why must Calpine only
2		
3	A.	When Calpine and DEF began negotiations for this acquisition, the parties recognized
4		that obtaining
5		This is described in more detail in the exhibits to Mr. Borsch's direct testimony in this
6		proceeding.
7		
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11		
12	C.	DUE DILIGENCE RIGHTS.
13	Q.	Did DEF complete any due diligence between the execution of the term sheet and the
14		APA?
15	А.	Yes. DEF and Calpine provided for a due diligence period for DEF to assess and
16		evaluate the condition of the Plant, the operation and maintenance conditions and
17		requirements, environmental, water, and other site related permits and permit
18		requirements for continued operation of the Plant, and complete regulatory and financial
19		assessments associated with the Plant acquisition by DEF. Due diligence is a reasonable,
20		utility standard practice prior to any power plant acquisition and it is a necessary step in
21		the acquisition process to develop the terms and conditions of the final purchase
22		agreement. DEF and Calpine cooperated in the due diligence process for the Osprey
23		Plant acquisition between September and December 2014. This due diligence process

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1	А.	Yes. First, Calpine is obligated to operate the Plant consistent with good utility practice
2		and in material compliance with all applicable laws, regulations, orders, and permits. In
3	2 2 2 4 4	addition to the due diligence process explained above,
4		
5		
6		Those
7		provisions are contained in Section 5.02(a) and Section 5.06(c) of the Purchaser
8		Disclosure Schedule. See Exhibit No (MEP-2).
9		
10	Q.	What will happen to the employees currently working at the Osprey Plant?
11	А.	DEF and Calpine recognized that it is essential to ensure that Calpine's employees
12		remain engaged to prudently and safely operate the Osprey Plant between now and the
13		closing. Accordingly, the parties negotiated terms
14		그는 것은 사람은 것은 것이 같아? 것은 것은 것은 것은 것은 것은 것이 많다.
15		Those provisions are contained in Section 5.07 of Exhibit
16		No (MEP-2).
17		
18	V.	NEXT STEPS.
19	Q.	What are the next steps to implement the APA?
20	А.	One step is occurring now, with DEF's Petition for FPSC approval of the Osprey Plant
21		acquisition as a cost effective generation resource to meet DEF's remaining need for
22		generation prior to 2018. Likewise, the parties have or soon will file an application for
23		FERC approval of the acquisition and notification of the Plant acquisition with the DOJ

1 pursuant to the HSR Act. Thus, the parties have or soon will complete the petitions or applications for the requisite governmental or regulatory approvals of the Osprey Plant 2 acquisition pursuant to the terms of the APA. With respect to this filing, DEF has 3 provided the Commission with the information it needs to approve DEF's Petition to 4 determine that the Osprey Plant acquisition is a cost effective generation resource, with 5 the Suwannee Project as a reasonable alternative if buying the Osprey Plant is not 6 approved, to meet DEF's remaining need for additional generation capacity prior to 2018. 7 8 CONCLUSION. VI. 9 0. Is the APA between DEF and Calpine a reasonable agreement for DEF's acquisition 10 of the Osprey Plant for the benefit of DEF's customers? 11 Yes. DEF determined based on the term sheet between Calpine and DEF that the 12 A. potential acquisition of the Osprey Plant was cost effective for DEF's customers. DEF 13 confirmed this assessment in its due diligence review leading up to the APA. The APA 14 terms and conditions reasonably preserve the benefits of the potential acquisition of the 15 Osprey Plant for DEF's customers if the requisite governmental and regulatory approvals 16 are obtained and the Plant is ultimately acquired. 17 18 Does this conclude your testimony? **Q**. 19 Yes, it does. 20 Α.

IN RE: PETITION FOR DETERMINATION THAT THE OSPREY PLANT ACQUISITION AND, ALTERNATIVELY, THE SUWANNEE SIMPLE CYCLE PROJECT IS THE MOST COST EFFECTIVE GENERATION ALTERNATIVE TO MEET THE REMAINING NEED PRIOR TO 2018 FOR DUKE ENERGY FLORIDA, INC.

BY DUKE ENERGY FLORIDA, INC.

FPSC DOCKET NO.

DIRECT TESTIMONY OF BENJAMIN M. H. BORSCH

1	I.	INTRODUCTION AND QUALIFICATIONS.
2	Q.	Please state your name, employer, and business address.
3	A.	My name is Benjamin M. H. Borsch and I am employed by Duke Energy
4		Corporation ("Duke Energy"). My business address is 299 1 st Avenue North, St.
5		Petersburg, Florida.
6		
7	Q.	Please tell us your position with Duke Energy and describe your duties and
8		responsibilities in that position.
9	А.	I am the Director, IRP & Analytics – Florida. In this role, I am responsible for
10		resource planning for Duke Energy Florida, Inc. ("DEF" or the "Company"). I
11		am responsible for directing the resource planning process in an integrated
12		approach to finding the most cost-effective alternatives to meet the Company's

1		obligation to serve its customers in Florida. As a result, we examine both supply-
2		side and demand-side resources available and potentially available to the
3		Company over its planning horizon, relative to the Company's load forecasts, and
4		prepare and present the annual Duke Energy Florida Ten-Year Site Plan
5		("TYSP") documents that are filed with the Florida Public Service Commission
6		("FPSC" or the "Commission"), in accordance with the applicable statutory and
7		regulatory requirements. In my capacity as the Director, IRP & Analytics -
8		Florida, I oversaw the completion of the Company's 2013 and 2014 TYSP. I was
9		also responsible for the Company's evaluation of options to meet its needs for
10		reliable electric power prior to 2018.
11		
12	Q.	Please summarize your educational background and employment experience.
13	A.	I received a Bachelor's of Science and Engineering degree in Chemical
13 14	А.	I received a Bachelor's of Science and Engineering degree in Chemical Engineering from Princeton University in 1984. I joined Progress Energy in 2008
	А.	
14	Α.	Engineering from Princeton University in 1984. I joined Progress Energy in 2008
14 15	А.	Engineering from Princeton University in 1984. I joined Progress Energy in 2008 supporting the project management and construction department in the
14 15 16	Α.	Engineering from Princeton University in 1984. I joined Progress Energy in 2008 supporting the project management and construction department in the development of power plant projects. In 2009 I became Manager of Generation
14 15 16 17	A.	Engineering from Princeton University in 1984. I joined Progress Energy in 2008 supporting the project management and construction department in the development of power plant projects. In 2009 I became Manager of Generation Resource Planning for Progress Energy Florida, and following the 2012 merger
14 15 16 17 18	А.	Engineering from Princeton University in 1984. I joined Progress Energy in 2008 supporting the project management and construction department in the development of power plant projects. In 2009 I became Manager of Generation Resource Planning for Progress Energy Florida, and following the 2012 merger with Duke Energy I accepted my current position. Prior to joining Progress
14 15 16 17 18 19	Α.	Engineering from Princeton University in 1984. I joined Progress Energy in 2008 supporting the project management and construction department in the development of power plant projects. In 2009 I became Manager of Generation Resource Planning for Progress Energy Florida, and following the 2012 merger with Duke Energy I accepted my current position. Prior to joining Progress Energy, I was employed for more than five years by Calpine Corporation where I
14 15 16 17 18 19 20	Α.	Engineering from Princeton University in 1984. I joined Progress Energy in 2008 supporting the project management and construction department in the development of power plant projects. In 2009 I became Manager of Generation Resource Planning for Progress Energy Florida, and following the 2012 merger with Duke Energy I accepted my current position. Prior to joining Progress Energy, I was employed for more than five years by Calpine Corporation where I was Manager (later Director) of Environmental Health and Safety for Calpine's
14 15 16 17 18 19 20 21	A.	Engineering from Princeton University in 1984. I joined Progress Energy in 2008 supporting the project management and construction department in the development of power plant projects. In 2009 I became Manager of Generation Resource Planning for Progress Energy Florida, and following the 2012 merger with Duke Energy I accepted my current position. Prior to joining Progress Energy, I was employed for more than five years by Calpine Corporation where I was Manager (later Director) of Environmental Health and Safety for Calpine's Southeastern Region. In this capacity, I supported development and operations

L.		consultant with projects including development, permitting and compliance of
2		power plants and transmission facilities. I am a professional engineer licensed in
3		Florida and North Carolina.
4		
5	II.	PURPOSE AND SUMMARY OF TESTIMONY.
6	Q.	What is the purpose of your testimony in this proceeding?
7	A.	I am testifying on behalf of the Company in support of its Petition. I will provide
8		an overview of DEF's acquisition of the Osprey Plant from Osprey Energy
9		Center, LLC, as the assignee of Calpine Construction Finance Company, L.P.
10		("Calpine"), and the Company's Suwannee Simple Cycle Project. I will explain
11		that these generation alternatives meet DEF's remaining need prior to 2018 in the
12		most cost-effective manner for its customers. I will set forth the reasons why the
13		Company selected the Osprey Plant acquisition and the Suwannee Simple Cycle
14		Project as alternative most cost-effective generation resources to meet that need,
15		with the final generation resource addition dependent on regulatory approvals of
16		the Osprey Plant acquisition, including Federal Energy Regulatory Commission
17		("FERC") approval in accordance with the terms of the Asset Purchase and Sale
18		Agreement ("APA") between DEF and Calpine. I will also explain the
19		Company's decision to proceed with its Petition to obtain a determination by the
20		Commission that the Osprey Plant acquisition and, alternatively, the Suwannee
21		Simple Cycle Project is the most cost-effective generation alternative to meet
22		DEF's remaining need prior to 2018.
23		

1	Q.	Are you sponsoring any exhibits to your testimony?
2	A.	Yes. I am sponsoring the following exhibits to my testimony:
3		• Exhibit No (BMHB-1), a composite exhibit of (i) my direct testimony
4		and exhibits and (ii) the direct testimony and exhibits of DEF's expert Julie
5		Solomon, who performed the FERC Competitive Analysis Screen qualitative
6		analysis for DEF's evaluation of generation alternatives to meet its need prior
7		to 2018, filed with the Commission in Docket No. 140111-EI on May 27,
8		2014;
9		• Exhibit No (BMHB-2), a composite exhibit of (i) my rebuttal testimony
10		and exhibits and (ii) the rebuttal testimony and exhibits of DEF's expert Julie
11		Solomon, who performed the FERC Competitive Analysis Screen
12		qualitative analysis for DEF's evaluation of generation alternatives to meet its
13		need prior to 2018, filed with the Commission in Docket No. 140111-EI on
14		August 5, 2014;
15		• Exhibit No (BMHB-3), the Company's final detailed economic analysis
16		results that demonstrate the Osprey Plant acquisition is a more cost-effective
17		generation alternative than the Suwannee Simple Cycle Project, if the
18		requisite regulatory approvals for the Osprey Plant acquisition are obtained in
19		accordance with the terms of the Asset Purchase and Sale Agreement
20		("APA") between DEF and Calpine; and
21		• Exhibit No (BMHB-4), the Company's forecast of summer peak
22		demands and reserves with and without the Osprey Plant acquisition and,

1		alternatively, with and without the Suwannee Simple Cycle Project additional
2		generation capacity prior to 2018.
3		The portions of the composite exhibits containing my prior direct and rebuttal
4		testimony and exhibits in Docket No. 140111-EI and Exhibits Nos (BMHB-
5		3) and (BMHB-4) were prepared under my direction and control, and each is
6		true and accurate. The portions of the composite exhibits containing the direct
7		and rebuttal testimony and exhibits of Julie Solomon were prepared at DEF's
8		request and relied upon by DEF as true and accurate in the course of DEF's
9		Integrated Resource Planning ("IRP") process and generation resource planning
10		decisions.
11		
12	Q.	Please summarize your testimony.
12 13	Q. A.	Please summarize your testimony. DEF needs the Osprey Plant acquisition and, alternatively, the Suwannee Simple
13		DEF needs the Osprey Plant acquisition and, alternatively, the Suwannee Simple
13 14		DEF needs the Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle Project by the summer of 2017 to meet its 20 percent Reserve Margin
13 14 15		DEF needs the Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle Project by the summer of 2017 to meet its 20 percent Reserve Margin commitment and to serve its customers' future electrical power needs in a reliable
13 14 15 16		DEF needs the Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle Project by the summer of 2017 to meet its 20 percent Reserve Margin commitment and to serve its customers' future electrical power needs in a reliable and cost-effective manner. As I explained in my direct testimony in Docket No.
13 14 15 16 17		DEF needs the Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle Project by the summer of 2017 to meet its 20 percent Reserve Margin commitment and to serve its customers' future electrical power needs in a reliable and cost-effective manner. As I explained in my direct testimony in Docket No. 140111-EI, included as part of Composite Exhibit No. (BMHB-1) to my
13 14 15 16 17 18		DEF needs the Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle Project by the summer of 2017 to meet its 20 percent Reserve Margin commitment and to serve its customers' future electrical power needs in a reliable and cost-effective manner. As I explained in my direct testimony in Docket No. 140111-EI, included as part of Composite Exhibit No. (BMHB-1) to my direct testimony in this docket, DEF's remaining need for additional generation in
13 14 15 16 17 18 19		DEF needs the Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle Project by the summer of 2017 to meet its 20 percent Reserve Margin commitment and to serve its customers' future electrical power needs in a reliable and cost-effective manner. As I explained in my direct testimony in Docket No. 140111-EI, included as part of Composite Exhibit No(BMHB-1) to my direct testimony in this docket, DEF's remaining need for additional generation in 2017 is driven by generation plant retirements and additional customer and peak
13 14 15 16 17 18 19 20		DEF needs the Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle Project by the summer of 2017 to meet its 20 percent Reserve Margin commitment and to serve its customers' future electrical power needs in a reliable and cost-effective manner. As I explained in my direct testimony in Docket No. 140111-EI, included as part of Composite Exhibit No (BMHB-1) to my direct testimony in this docket, DEF's remaining need for additional generation in 2017 is driven by generation plant retirements and additional customer and peak load demand. The Company initially determined in its IRP process that the

energy resources and conservation measures, to meet the Company's generation capacity needs prior to 2018.

1

2

3 As also explained in the direct testimony and exhibits in Docket No. 140111-EI included as Composite Exhibit No. (BMHB-1), the Company 4 evaluated the Suwannee Simple Cycle Project and the Hines Chillers Power 5 Uprate Project against power purchase agreements and generation facility 6 acquisition proposals from third-party generators, and none of these proposals 7 initially compared more favorably, on a quantitative and qualitative basis, to the 8 Company's Projects. As a result, DEF initially petitioned the Commission for a 9 determination of need for the Suwannee Simple Cycle Project and the Hines 10 Chillers Power Uprate Project as the most cost effective generation alternatives to 11 meet DEF's need prior to 2018. The Commission approved DEF's petition with 12 respect to the Hines Chillers Power Uprate Project in Order No. PSC-14-0590-13 FOF-EI. 14

As I explained in my rebuttal testimony in Docket No. 140111-EI, 15 included as part of Composite Exhibit No. ____ (BMHB-2) to my direct testimony 16 in this docket, DEF entertained additional generation facility acquisition proposals 17 even after it filed its petition and direct testimony in Docket No. 140111-EI. On 18 the first day of the evidentiary hearing in Docket No. 140111-EI, Calpine 19 ultimately submitted an offer that closed the gap between the cost-effectiveness of 20 the Osprey Plant acquisition and the Suwannee Simple Cycle Project. As a result, 21 DEF and Calpine reached an agreement in principle for the Osprey Plant 22 acquisition on terms more cost effective for DEF's customers than the Suwannee 23

6

Simple Cycle Project, pending DEF and Calpine's agreement to an APA and
conditioned upon regulatory approval of the acquisition. That same day DEF
withdrew its petition with respect to the Suwannee Simple Cycle Project in
Docket No. 140111-EI.
DEF and Calpine have now agreed to an APA for the Osprey Plant. DEF
and Calpine agreed that DEF's acquisition of the Plant to meet DEF's remaining
need for additional generation capacity by the summer of 2017 is conditioned
upon the timely receipt of all required regulatory approvals for the acquisition. If
the requisite regulatory approvals are timely received, as defined in the APA, by
DEF will purchase the Osprey Plant as the most cost-effective
generation alternative to meet its remaining need prior to 2018. If the requisite
regulatory approvals are not timely received, then DEF cannot purchase the
Osprey Plant and DEF will move forward with the Suwannee Simple Cycle
Osprey Plant and DEF will move forward with the Suwannee Simple Cycle Project as the most cost effective generation alternative to meet DEF's remaining
Project as the most cost effective generation alternative to meet DEF's remaining
Project as the most cost effective generation alternative to meet DEF's remaining generation capacity need by the summer of 2017.
Project as the most cost effective generation alternative to meet DEF's remaining generation capacity need by the summer of 2017. For this reason, DEF petitions the Commission to approve the Osprey
Project as the most cost effective generation alternative to meet DEF's remaining generation capacity need by the summer of 2017. For this reason, DEF petitions the Commission to approve the Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle Project as the
Project as the most cost effective generation alternative to meet DEF's remaining generation capacity need by the summer of 2017. For this reason, DEF petitions the Commission to approve the Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle Project as the most cost effective generation alternative to meet DEF's remaining need for
Project as the most cost effective generation alternative to meet DEF's remaining generation capacity need by the summer of 2017. For this reason, DEF petitions the Commission to approve the Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle Project as the most cost effective generation alternative to meet DEF's remaining need for additional generation capacity prior to 2018. The Osprey Plant acquisition is the

because DEF does not receive timely regulatory approvals for that acquisition, the

7

1		Suwannee Simple Cycle Project is the most cost effective alternative to maintain
2		DEF's electric system reliability and integrity, and provide DEF's customers with
3		adequate electricity at a reasonable cost, by that summer. DEF must proceed with
4		this petition now because DEF will not have sufficient time to petition the
5		Commission for approval of the Suwannee Simple Cycle Project before DEF
6		must recommence that Project to place it in service to meet DEF's remaining
7		generation need, if DEF does not receive the requisite regulatory approvals for the
8		Osprey Plant acquisition and, therefore, is unable to purchase the Osprey Plant.
9		We, accordingly, have provided the Commission the information needed to
10		approve both the Osprey Plant acquisition and the Suwannee Simple Cycle
11		Project alternative now and request that the Commission approve the Osprey
12		Plant acquisition and, alternatively, the Suwannee Simple Cycle Project as the
13		most cost-effective alternatives to meet the Company's remaining need for
14		additional generation capacity by the summer of 2017.
15		
16	III.	DEF'S REMAINING GENERATION NEED PRIOR TO 2018.
17	Q.	Can you generally explain the Company's remaining need for additional
18		generation capacity prior to 2018?
19	A.	Yes. DEF still has a need for additional generation capacity prior to 2018
20		consistent with what I described in my direct testimony in Docket No. 140111-EI.
21		See Composite Exhibit No (BMHB-1). As I explained there, the Company
22		faced resource planning decisions leading up to and early in 2013 that affected the
23		Company's near-term need in the ten-year planning period for generation capacity

1		to meet customer energy and reliability needs. As a result, during the Company's
2		annual IRP analysis, the Company identified near-term substantial generation
3		capacity needs. This analysis was first reflected in the Company's 2013 TYSP
4		and the Company's continuing IRP process and analysis that resulted in its 2014
5		TYSP confirmed this need. The IRP process that led to the identification of the
6		Company's need prior to 2018 is explained in detail in my direct testimony and
7		exhibits, including the 2014 TYSP, in Composite Exhibit No (BMHB-1) to
8		my direct testimony.
9		Basically, the generation plant retirements and load growth that I
10		described in Docket No. 140111-EI contribute to the Company's generation
11		capacity needs prior to 2018 to reliably serve DEF's customers. See Composite
12		Exhibit No (BMHB-1). In Commission Order No. PSC-14-0590-FOF-EI,
13		the Commission approved the Company's Hines Chillers Power Uprate Project to
14		meet part of that need. The Company's remaining need for additional generation
15		capacity in the summer of 2017 is approximately 180 Megawatts ("MW") and
16		grows to over 300 MW in the summer of 2018.
17		
18	Q.	What is the Company's plan to meet its remaining generation capacity needs
19		prior to 2018?
20	А.	The most cost-effective resource plan to meet the Company's generation capacity
21		need prior to 2018 is the acquisition of the Calpine Osprey Plant in accordance
22		with the terms of the APA between DEF and Calpine. The Osprey Plant (or
23		Osprey Energy Center) is an existing 599 MW (nominal) natural gas-fired,

1		combined cycle generation plant located in Polk County, Florida. DEF will close
2		on the Osprey Plant acquisition in January 2017 if the requisite regulatory
3		approvals in accordance with the terms of the APA are received. DEF cannot
4	-	purchase the Osprey Plant to fulfill its remaining generation capacity needs prior
5		to 2018 if these regulatory approvals are not obtained. If DEF cannot purchase
6		the Osprey Plant, there will be no closing, and DEF must recommence the
7		Suwannee Simple Cycle Project to meet DEF's remaining need for additional
8		generation capacity by the summer of 2017. The Suwannee Simple Cycle Project
9		involves the construction of a new 320 MW simple cycle combustion turbine
10		plant consisting of two F class combustion turbine units at the Company's
11		existing Suwannee River power plant site. These units would come into service
12		prior to the summer of 2017 if DEF recommences the Suwannee Simple Cycle
13		Project by This is the most cost-effective generation resource
14		plan that is available to the Company to meet the Company's remaining
15		generation capacity needs for its customers prior to 2018.
16		
17	Q.	Does this plan satisfy the Company's remaining need for generation capacity
18		prior to 2018?
19	А.	Yes. DEF still needs additional generation capacity by the summer of 2017 to
20		fulfill its Reserve Margin obligations and reliably serve customers even with the
21		Commission's approval of the Hines Chillers Power Uprate Project in Order No.
22		PSC-14-0590-FOF-EI to meet part of DEF's need for generation capacity prior to
23		2018. The Company's current plan to meet its remaining generation capacity

t		need by the summer of 2017 with either the Osprey Plant, if the requisite
2		regulatory approvals for that acquisition are timely obtained, or the Suwannee
3		Simple Cycle Project, if those approvals are not obtained, does not materially
4		change DEF's remaining need for additional generation capacity prior to 2018. In
5		other words, DEF needs additional generation capacity by the summer of 2017
6		regardless whether the source of that generation capacity is the Osprey Plant or
7		the Suwannee Simple Cycle Project.
8		
9	Q.	In Docket No. 140111-EI, the Suwannee Simple Cycle Project was proposed
10		to meet a 2016 need. What has changed?
11	А.	When DEF prepared its analysis presented in Docket No. 140111-EI, DEF
12		recognized that there was additional engineering required to confirm the schedule
13		for the installation of the Hines Chillers Power Uprate Project. By comparison,
14		the Suwannee Simple Cycle Project is a well-defined project of a type which DEF
15		has substantial experience. Thus, DEF decided to schedule the Suwannee Simple
16		Cycle Project for the earlier in-service date and allow additional time for the
17		Hines Chillers Power Uprate Project to be completed. In the interim, engineering
18		of the Hines Chillers Power Uprate Project has proceeded to a level that DEF is
19		confident of its completion and availability for service before the summer of
20		2016. This and DEF's agreement to a PPA with Calpine for firm capacity and
21		energy from the Osprey Plant commencing in October 2014 gave DEF the
22		flexibility to delay the in-service date of the Suwannee Simple Cycle Project to
23		the spring of 2017, allowing DEF and Calpine the opportunity to seek regulatory

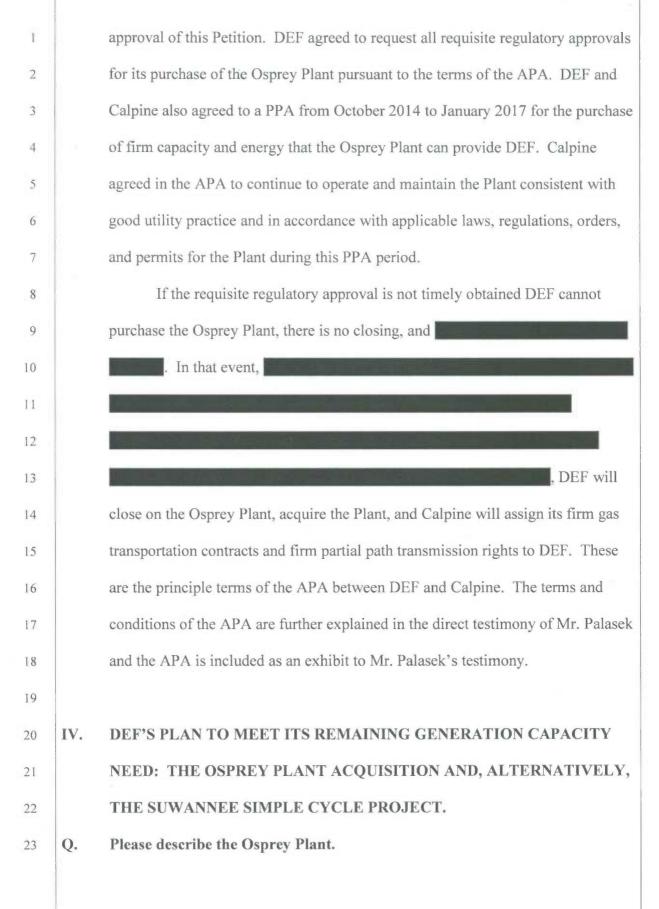
1		approvals necessary to complete the Osprey Plant acquisition while preserving the
2		opportunity to meet the capacity need through completion of the Suwannee
3		Simple Cycle Project in the event DEF and Calpine are unable to receive the
4		necessary regulatory approvals for the acquisition.
5		
6	Q.	Is the Company's current decision with respect to its generation needs prior
7		to 2018 consistent with the 2013 Settlement Agreement?
8	А.	Yes. The Osprey Plant acquisition and, alternatively, the Suwannee Simple Cycle
9		Project are the types of generation options specifically contemplated in the 2013
10		Settlement Agreement to meet the Company's generation capacity needs prior to
11		2018. The parties to the 2013 Settlement Agreement agreed that DEF could seek
12		Commission approval for the costs of this additional generation in the 2013
13		Settlement Agreement. The Osprey Plant acquisition, and the Suwannee Simple
14		Cycle Project in the event the Osprey Plant is not acquired, is the most cost-
15		effective generation option to meet that remaining need prior to 2018.
16		As I explained in my direct testimony in Docket No. 140111-EI, DEF met
17		with the parties to the 2013 Settlement Agreement to explain DEF's approach to
18		its generation needs prior to 2018 and, ultimately, DEF's analyses and decision to
19		meet that need consistent with the terms of the 2013 Settlement Agreement. See
20		Composite Exhibit No (BMHB-1). DEF continued to explain its approach to
21		meet its generation needs prior to 2018 when DEF presented its direct and rebuttal
22		testimony and exhibits in Docket No. 140111-EI, which the parties to the 2013
23		Settlement Agreement received. See Composite Exhibits Nos(BMHB-1)

1		and (BMHB-2). No party to the 2013 Settlement Agreement expressed to
2		DEF that DEF has not complied with the 2013 Settlement Agreement.
3		
4	Q.	Did the Company petition the Commission for approval of the Osprey Plant
5		acquisition in Docket No. 140111-EI to meet its need prior to 2018?
6	А.	No. DEF petitioned the Commission for approval of the Suwannee Simple Cycle
7		Project and the Hines Chillers Power Uprate Project to meet its need for
8		additional generation capacity prior to 2018 in Docket No. 140111-EI. DEF
9		explained in detail its IRP process and the results of the Company's evaluation of
10		the generation resource alternatives that led DEF to initially select the Suwannee
11		Simple Cycle Project and the Hines Chillers Power Uprate Project as the most
12		cost effective generation alternatives to meet its need prior to 2018 in the direct
13		testimony and exhibits in Docket No. 140111-EI. See Composite Exhibit No.
14		(BMHB-1).
15		DEF, nevertheless, continued to discuss its need prior to 2018 with
16		Calpine and NRG Florida LP ("NRG"), who had both made power purchase
17		agreement ("PPA") and generation facility acquisition proposals to meet that
18		Company need, even after DEF filed its petition and direct testimony and exhibits
19		in Docket No. 140111-EI. DEF explained to Calpine and NRG the impediments
20		to selecting their proposals to meet DEF's need and encouraged them to make
21		final and best offers because DEF was genuinely interested in their proposals to
22		meet DEF's need if they offered superior customer value compared to DEF's
23		Suwannee Simple Cycle Project.

Ι		After DEF filed its petition in Docket No. 140111-EI, DEF received
2		several offers from them that DEF evaluated and ultimately rejected because they
3		did not provide customers a more cost effective generation alternative, on a
4		quantitative and qualitative basis, than the Suwannee Simple Cycle Project to
5		meet DEF's need prior to 2018. DEF's quantitative and qualitative evaluations of
6		the cost effectiveness of these offers are discussed in detail and explained in the
7		rebuttal testimony and exhibits in Docket No. 140111-EI. See Composite Exhibit
8		No(BMHB-2). As a result, DEF proceeded to hearing on the cost
9		effectiveness of the Suwannee Simple Cycle Project and the Hines Chillers Power
10		Uprate Project to meet its need for additional generation capacity prior to 2018.
11		
12	Q.	Can you explain what occurred at the hearing in Docket No. 140111-EI?
13	A.	Yes. On the first day of the evidentiary hearing, Calpine made an additional offer
14	:	that "closed the gap" between the cost effectiveness of the Osprey Plant
14 15		
	2	that "closed the gap" between the cost effectiveness of the Osprey Plant
15	2	that "closed the gap" between the cost effectiveness of the Osprey Plant acquisition proposal and the Suwannee Simple Cycle Project. Calpine presented
15 16		that "closed the gap" between the cost effectiveness of the Osprey Plant acquisition proposal and the Suwannee Simple Cycle Project. Calpine presented DEF with a term sheet that addressed the quantitative and qualitative factors that
15 16 17		that "closed the gap" between the cost effectiveness of the Osprey Plant acquisition proposal and the Suwannee Simple Cycle Project. Calpine presented DEF with a term sheet that addressed the quantitative and qualitative factors that had resulted in DEF's rejection of Calpine's prior offers for the reasons described
15 16 17 18		that "closed the gap" between the cost effectiveness of the Osprey Plant acquisition proposal and the Suwannee Simple Cycle Project. Calpine presented DEF with a term sheet that addressed the quantitative and qualitative factors that had resulted in DEF's rejection of Calpine's prior offers for the reasons described in the rebuttal testimony and exhibits included in Composite Exhibit No
15 16 17 18 19		that "closed the gap" between the cost effectiveness of the Osprey Plant acquisition proposal and the Suwannee Simple Cycle Project. Calpine presented DEF with a term sheet that addressed the quantitative and qualitative factors that had resulted in DEF's rejection of Calpine's prior offers for the reasons described in the rebuttal testimony and exhibits included in Composite Exhibit No
15 16 17 18 19 20		that "closed the gap" between the cost effectiveness of the Osprey Plant acquisition proposal and the Suwannee Simple Cycle Project. Calpine presented DEF with a term sheet that addressed the quantitative and qualitative factors that had resulted in DEF's rejection of Calpine's prior offers for the reasons described in the rebuttal testimony and exhibits included in Composite Exhibit No
15 16 17 18 19 20 21		that "closed the gap" between the cost effectiveness of the Osprey Plant acquisition proposal and the Suwannee Simple Cycle Project. Calpine presented DEF with a term sheet that addressed the quantitative and qualitative factors that had resulted in DEF's rejection of Calpine's prior offers for the reasons described in the rebuttal testimony and exhibits included in Composite Exhibit No

1		DEF agreed to the term sheet and moved to withdraw the Suwannee
2		Simple Cycle Project from Docket No. 140111-EI. DEF explained to the
3		Commission that DEF and Calpine had reached an agreement in principle for
4		DEF to purchase the Calpine Plant subject to DEF's due diligence review of the
5		Osprey Plant and DEF and Calpine agreeing to the terms and conditions of an
6		APA for that Plant acquisition. DEF further explained that DEF would present
7		the most cost effective alternative to meet DEF's remaining need for generation
8		capacity prior to 2018 in a later Commission proceeding. The Commission
9		granted DEF's motion. DEF has now completed its due diligence reviews,
10		executed an APA with Calpine to acquire the Osprey Plant, and is petitioning the
11		Commission to determine that the Osprey Plant and, alternatively, the Suwannee
12		Simple Cycle Project, is the most cost effective generation alternative to meet
13		DEF's remaining need prior to 2018, depending on timely requisite regulatory
14		approval for the Osprey Plant acquisition.
15		
16	Q.	Did the Company receive any additional offers from NRG after DEF
17		announced that it had reached an agreement in principle for the Osprey
18		Plant acquisition with Calpine?
19	А.	No. The last offer NRG made to DEF for the acquisition of the NRG plant was
20		prior to the hearing in Docket No. 140111-EI and it was rejected because it was
21		not quantitatively and qualitatively the most cost effective generation alternative
22		to meet DEF's need prior to 2018. The reasons DEF rejected NRG's last offer are
23		explained in detail in the rebuttal testimony in Docket No. 140111-EI attached as

1		Composite Exhibit No (BMHB-2).
2		
3	Q.	Have DEF and Calpine executed a final agreement for DEF's acquisition of
4		the Osprey Plant?
5	А.	Yes. DEF completed its due diligence reviews and found no material
6		impediments to DEF's acquisition of the Osprey Plant. DEF therefore executed
7		an APA with Calpine for the Osprey Plant on December 17, 2014. The APA
8		incorporates and expands upon the term sheet provisions between DEF and
9		Calpine and it includes terms and conditions that address the requisite regulatory
10		approvals and DEF's due diligence reviews. The results of DEF's due diligence
11		reviews of the Osprey Plant acquisition are addressed in more detail in the direct
12		testimony of Mr. Edmondson. The APA terms and conditions are explained in
13	2	more detail in the direct testimony of Mr. Palasek and the APA is included as an
14		exhibit to Mr. Palasek's testimony in this proceeding.
15		
16	Q.	Can you please generally describe the terms of the APA between DEF and
17		Calpine for DEF's acquisition of the Osprey Plant?
18	А.	Yes. DEF agrees to purchase the Osprey Plant from Calpine for \$166 million,
19		subject to certain specified adjustments, and close on this transaction if the
20		requisite regulatory approvals for the acquisition are timely obtained and the Plant
21		passes DEF's final due diligence assessment prior to closing, currently planned in
22		the APA for January 2017. The requisite regulatory approvals include FERC and
23		DOJ approvals of DEF's acquisition of the Osprey Plant and Commission



1	A. Th	ne Osprey Plant is an existing natural gas-fired, combined cycle generation plant
2	wi	ith a nominal baseload capacity of approximately 534 MW and duct firing
3	ca	pability to produce up to 599 MW for approximately 60 MW of cost-effective
4	pe	aking capacity. The Osprey Plant was placed in commercial service in 2004.
5		The Osprey Plant contains two Siemens Westinghouse combustion
6	tu	rbines and one steam turbine with two heat recovery steam generators in a 2 by
7	1 0	combined cycle plant configuration. The Osprey Plant generates electricity in
8	tw	vo stages, first by firing the combustion turbines, and second by using the hot
9	ga	s from the combustion turbines to produce steam through the heat recovery
10	ste	eam generators, which is fed into the steam turbine to generate additional
11	ele	ectricity. The combined cycle plant configuration makes the most of the input
12	fu	el, by burning it and using the waste heat from that process to generate
13	ele	ectricity and, therefore, the combined cycle technology is an efficient plant
14	de	sign to produce electrical energy.
15		The Osprey Plant technology and equipment vintage also is similar to the
16	teo	chnology and equipment at other DEF generation units. The Plant location is
17	ge	ographically close to some of these DEF generation units at DEF's Intercession
18	Ci	ty and Hines Energy Center power plant sites. As a result, the Osprey Plant
19	pr	ovides DEF the opportunity to leverage the existing Plant equipment and
20	in	frastructure to provide DEF customers a cost effective generation resource.
21		Natural gas is the single fuel source for the Osprey Plant. The natural gas
22	is	supplied by Gulfstream Natural Gas System, L.L.C. ("Gulfstream") under an
23	ex	isting long-term firm natural gas transportation contract. There is no dual fuel

1		capability for the Osprey Plant. The majority of DEF's existing combined cycle
2		and combustion turbine power plants, however, have dual fuel capability and this
3		existing dual fuel capability on DEF's system provides adequate fuel resource
4		reliability for DEF's customers even without dual fuel capability at the Osprey
5		Plant.
6		The Osprey Plant is located in the Tampa Electric Company ("TEC")
7		Balancing Area Authority ("BAA") and it is currently interconnected with TEC.
8		There currently is partial path firm point-to-point transmission service for 249
9		MW of the Osprey Plant generation capacity across the TEC BAA to DEF's
10		system. If DEF's acquisition of the Osprey Plant is approved in accordance with
11		the terms of the APA, DEF currently plans to build transmission network
12	-	upgrades to directly connect the Osprey Plant to DEF's system to obtain the full
13		output from the Osprey Plant. These transmission interconnection costs have
14		been and continue to be included in DEF's evaluation of the cost effectiveness of
15		the Osprey Plant acquisition. The planned transmission network upgrades and
16		costs to directly connect the Osprey Plant to DEF's system are explained in more
17		detail in the direct testimony of Mr. Scott.
18		
19	Q.	You explained that the Osprey Plant was placed in commercial service in
20		2004. Did DEF account for the age of the Osprey Plant in its evaluation of
21		the cost effectiveness of acquiring the Plant?
22	А.	Yes. DEF understands that the Osprey Plant is now ten years old and that it will
23		be another two years older before it is purchased by DEF. Because DEF is buying

1		a "used" Plant, DEF has consistently included expected capital maintenance and
2		operation and maintenance ("O&M") costs based on the age and condition of the
3		Plant in its evaluation of the Plant acquisition price and the cost effectiveness of
4		the Plant. DEF also conducted a detailed due diligence review of the Plant
5		condition and performance before DEF executed the APA. Based on this detailed
6		due diligence review, DEF developed a better understanding of the Plant
7		condition and the necessary capital and O&M maintenance costs upon acquiring
8		the Plant to incorporate it into DEF's system consistent with DEF's combined
9		cycle fleet program maintenance practices and procedures. These capital and
10		O&M costs were included in the evaluation of the cost effectiveness of the
11		Osprey Plant acquisition to meet DEF's remaining need for additional generation
12	z z	capacity prior to DEF's decision to acquire the Plant.
13		
14	Q.	Please describe the Suwannee Simple Cycle Project.
15	А.	The Suwannee Simple Cycle Project consists of two F class combustion turbine
16		generators, two generator step-up transformers, fuel oil and demineralized water
17		storage tanks, and related balance of plant facilities that will be installed at the
18		Company's existing Suwannee River power plant site in Suwannee County,
19		Florida.
20		The Suwannee power plant site has existing infrastructure to support the
21		Suwannee Simple Cycle Project. The Suwannee plant site has existing gas- and
22		oil-fired combustion turbines, steam units, and a transmission switchyard, among
23		other facilities. The new F class combustion turbine generators will be connected

1		via a gas lateral to the Florida Gas Transmission gas pipeline and to the existing
2		site metering and regulating station. One combustion turbine will be connected to
3		the existing 115 kv transmission switchyard and the other combustion turbine will
4		be connected to the existing 230 kv transmission switchyard. This existing
5		infrastructure at the Suwannee site reduces the cost of the Suwannee Simple
6		Cycle Project.
7		The estimated cost of the Suwannee Simple Cycle Project, including the
8		Allowance for Funds Used during Construction ("AFUDC"), is \$195.1 million.
9		The Suwannee Simple Cycle Project is explained in more detail in the direct
10		testimony of Mr. Landseidel in this proceeding.
П		
12	Q.	What are the benefits of the Suwannee Simple Cycle Project that make this
12 13	Q.	What are the benefits of the Suwannee Simple Cycle Project that make this Project the most cost-effective DEF self-build generation option to meet
	Q.	
13	Q.	Project the most cost-effective DEF self-build generation option to meet
13 14	Q. A.	Project the most cost-effective DEF self-build generation option to meet DEF's remaining need for additional generation capacity prior to 2018, if
13 14 15		Project the most cost-effective DEF self-build generation option to meet DEF's remaining need for additional generation capacity prior to 2018, if DEF cannot purchase the Osprey Plant?
13 14 15 16		Project the most cost-effective DEF self-build generation option to meet DEF's remaining need for additional generation capacity prior to 2018, if DEF cannot purchase the Osprey Plant? There are customer benefits associated with the location of the Suwannee Simple
13 14 15 16 17		Project the most cost-effective DEF self-build generation option to meet DEF's remaining need for additional generation capacity prior to 2018, if DEF cannot purchase the Osprey Plant? There are customer benefits associated with the location of the Suwannee Simple Cycle Project at an existing Company power plant site. First, there are limited
13 14 15 16 17 18		Project the most cost-effective DEF self-build generation option to meet DEF's remaining need for additional generation capacity prior to 2018, if DEF cannot purchase the Osprey Plant? There are customer benefits associated with the location of the Suwannee Simple Cycle Project at an existing Company power plant site. First, there are limited transmission system network upgrades and costs for the Suwannee Simple Cycle
13 14 15 16 17 18 19		Project the most cost-effective DEF self-build generation option to meet DEF's remaining need for additional generation capacity prior to 2018, if DEF cannot purchase the Osprey Plant? There are customer benefits associated with the location of the Suwannee Simple Cycle Project at an existing Company power plant site. First, there are limited transmission system network upgrades and costs for the Suwannee Simple Cycle Project associated with the transmission interconnection of the combustion
13 14 15 16 17 18 19 20		Project the most cost-effective DEF self-build generation option to meet DEF's remaining need for additional generation capacity prior to 2018, if DEF cannot purchase the Osprey Plant? There are customer benefits associated with the location of the Suwannee Simple Cycle Project at an existing Company power plant site. First, there are limited transmission system network upgrades and costs for the Suwannee Simple Cycle Project associated with the transmission interconnection of the combustion turbines at the existing Suwannee site. These transmission costs and benefits are
13 14 15 16 17 18 19 20 21		Project the most cost-effective DEF self-build generation option to meet DEF's remaining need for additional generation capacity prior to 2018, if DEF cannot purchase the Osprey Plant? There are customer benefits associated with the location of the Suwannee Simple Cycle Project at an existing Company power plant site. First, there are limited transmission system network upgrades and costs for the Suwannee Simple Cycle Project associated with the transmission interconnection of the combustion turbines at the existing Suwannee site. These transmission costs and benefits are explained in the direct testimony of Mr. Scott in this proceeding. Second, the

1		associated with this additional generation capacity. This Project provides DEF the
2		ability to substantially increase its summer generation capacity to meet customer
3		energy demand while maintaining its compliance with current and future
4		environmental regulations.
5		These benefits make the Suwannee Simple Cycle Project more
6		economically beneficial to customers than similar generation capacity installed at
7		a greenfield site. For these reasons, DEF's IRP process demonstrated that the
8		economics favored the Suwannee Simple Cycle Project over other available
9		options to meet its need prior to 2018. The results of this process and the
10		Company's evaluation that led the Company to conclude that, based on price and
11		non-price attributes, the Suwannee Simple Cycle Project was the most cost-
12		effective self-generation alternative to meet DEF's need prior to 2018 are
13		explained in detail in the direct testimony included as Composite Exhibit No.
14		(BMHB-1).
15		
16	Q.	Why did DEF select the Osprey Plant over the Suwannee Simple Cycle
17		Project to meet DEF's remaining need for generation capacity prior to 2018?
18	А.	DEF and Calpine reached an agreement in principle in the term sheet and later
19		agreed to an APA for DEF to acquire the Osprey Plant on a cost-effective basis
20		for DEF's customers, subject to timely requisite regulatory approvals for the Plant
21		acquisition and Calpine continuing to prudently operate and maintain the Plant
22		prior to DEF purchasing it. DEF updated its Cumulative Present Value Revenue
23		Requirements ("CPVRR") analysis based on the APA and DEF's due diligence

1		reviews and determined that the Osprey Plant acquisition was more cost effective
2		than the Suwannee Simple Cycle Project. The updated CPVRR analysis includes
3		the updated purchase price in the APA, the capital and O&M costs required to
4		acquire the Osprey Plant and incorporate that Plant into and operate it on DEF's
5		system, and other necessary adjustments to reflect changes in DEF's system. The
6		results of this CPVRR analysis demonstrate that the Osprey Plant acquisition is
7		more cost effective than the Suwannee Simple Cycle Project for DEF's
8		customers. The Osprey Plant acquisition has a favorable CPVRR differential of
9		about \$61 million in this evaluation compared to the Suwannee Simple Cycle
10		Project. A summary of that CPVRR analysis is included as Exhibit No.
11		(BMHB-3) to my direct testimony.
12		
12	Q.	Were the same evaluation methods used to determine the most cost effective
	Q.	Were the same evaluation methods used to determine the most cost effective generation alternative in Docket No. 140111-EI used in the evaluation of the
13	Q.	
13 14	Q. A.	generation alternative in Docket No. 140111-EI used in the evaluation of the
13 14 15		generation alternative in Docket No. 140111-EI used in the evaluation of the Osprey Plant acquisition APA?
13 14 15 16		generation alternative in Docket No. 140111-EI used in the evaluation of the Osprey Plant acquisition APA? Yes. DEF evaluated the acquisition of the Osprey Plant under the APA using the
13 14 15 16 17		generation alternative in Docket No. 140111-EI used in the evaluation of the Osprey Plant acquisition APA? Yes. DEF evaluated the acquisition of the Osprey Plant under the APA using the same evaluation methods that DEF used to determine the most cost effective
13 14 15 16 17 18		generation alternative in Docket No. 140111-EI used in the evaluation of the Osprey Plant acquisition APA? Yes. DEF evaluated the acquisition of the Osprey Plant under the APA using the same evaluation methods that DEF used to determine the most cost effective generation alternative in Docket No. 140111-EI. See Composite Exhibit No
13 14 15 16 17 18 19		generation alternative in Docket No. 140111-EI used in the evaluation of the Osprey Plant acquisition APA? Yes. DEF evaluated the acquisition of the Osprey Plant under the APA using the same evaluation methods that DEF used to determine the most cost effective generation alternative in Docket No. 140111-EI. See Composite Exhibit No (BMHB-1). DEF conducted an economic evaluation based on the fixed and
13 14 15 16 17 18 19 20		generation alternative in Docket No. 140111-EI used in the evaluation of the Osprey Plant acquisition APA? Yes. DEF evaluated the acquisition of the Osprey Plant under the APA using the same evaluation methods that DEF used to determine the most cost effective generation alternative in Docket No. 140111-EI. See Composite Exhibit No (BMHB-1). DEF conducted an economic evaluation based on the fixed and variable Plant acquisition costs and economic resource optimization analyses
13 14 15 16 17 18 19 20 21		generation alternative in Docket No. 140111-EI used in the evaluation of the Osprey Plant acquisition APA? Yes. DEF evaluated the acquisition of the Osprey Plant under the APA using the same evaluation methods that DEF used to determine the most cost effective generation alternative in Docket No. 140111-EI. See Composite Exhibit No (BMHB-1). DEF conducted an economic evaluation based on the fixed and variable Plant acquisition costs and economic resource optimization analyses were performed. DEF also evaluated the technical feasibility and viability of the

environmental impacts and compliance, and regulatory feasibility, among other factors, through its due diligence reviews of the Plant condition and performance. These due diligence reviews are explained in more detail in the direct testimony of Mr. Edmondson.

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The Company conducted a detailed economic evaluation of the Osprey Plant acquisition compared to DEF's Suwannee Simple Cycle Project. This detailed economic evaluation included all costs, including gas transportation and transmission cost impacts, in an optimization analysis of the optimal resource plan for the Osprey Plant acquisition and the Suwannee Simple Cycle Project for a period of thirty years to capture all costs associated with each proposal and the type of units that make up the optimal resource plan including each proposal.

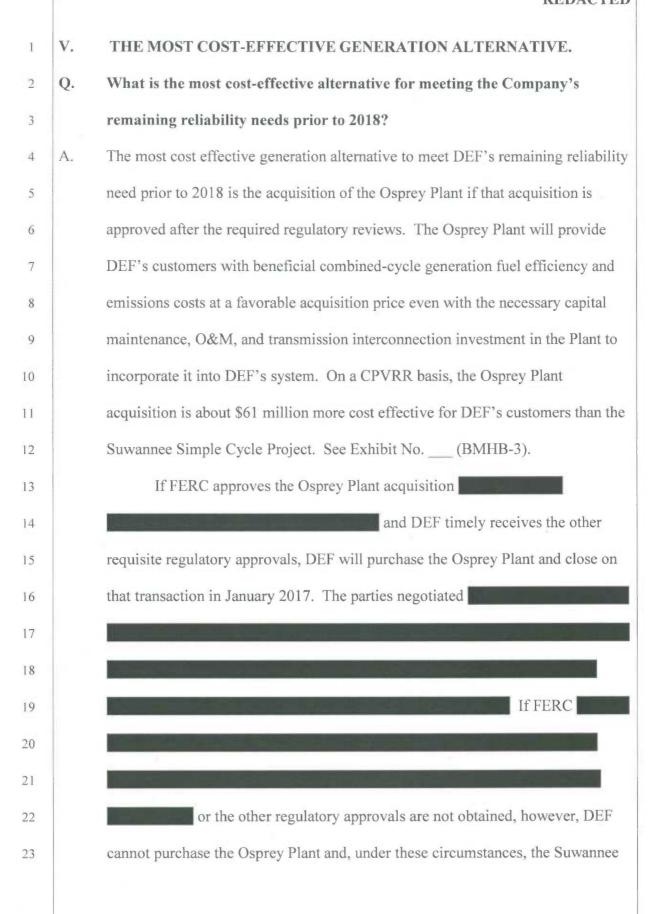
Other inputs in the optimization model include the load and energy 12 forecast and the costs and characteristics (such as heat rates, outage rates, and 13 maintenance requirements) of the Company's existing generating units and power 14 purchase agreements. Costs and operating characteristics of potential future 15 supply-side resources, which could be generating units or purchases, are included 16 in the resource optimization model. The resource optimization model runs 17 develop alternative resource plans to meet the projected future customer 18 requirements using all possible combinations of resources, and it calculates the 19 CPVRR for each combination. The model then sorts each alternative from lowest 20 to highest cost. From an economics-only perspective, the lowest cost plan is the 21 optimal plan. The optimization analysis was performed using the same process 22 combining the outputs of the Strategist optimization and Energy Portfolio 23

1		Manager ("EPM") production cost models used to evaluate the generation options
2		in Docket No. 140111-EI. See Composite Exhibit No (BMHB-1).
3		The resource optimization analysis assessed the impact of the Osprey
4		Plant acquisition on total system costs and compared those costs to the costs of
5		the Company's base case self-build generation plan including the Suwannee
6		Simple Cycle Project. The optimization analysis shows the net impact of the
7		Osprey Plant acquisition and the impact the Osprey Plant acquisition has on
8		system capital revenue requirements and fixed and operating costs. The analysis
9		explicitly examines the relative impacts on system costs for fuel and variable
10		O&M of the other units on DEF's system and any impact on DEF's purchased
11		power costs. The objective function of the resource optimization model is to
12		minimize the CPVRR for the DEF generation system, subject to the 20 percent
13		Reserve Margin constraint. As shown in Exhibit No (BMHB-3), the Osprey
14		Plant acquisition has a favorable CPVRR of about \$61 million.
15		
16	Q.	Did the Company perform any sensitivity analyses in its evaluation of the
17		cost-effectiveness of the Osprey Plant acquisition?
18	A.	Yes. DEF performed high gas price and no carbon ("CO ₂ ") price sensitivity
19		analyses to establish the robustness of DEF's conclusion and to indicate how the
20		results will vary based on variation in fuel and emission pricing, typically two of
21		the most sensitive inputs to the production cost model. DEF determined that the
22		Osprey Plant acquisition was even more cost effective in the high gas price
23		sensitivity. Although the Osprey Plant acquisition is less cost effective in the no

1		CO_2 price sensitivity than the base generation plan including the Suwannee
2		Simple Cycle Project, DEF continues to believe that some form of greenhouse gas
3		regulation imposing an effective price on CO ₂ emissions is the more likely long
4		term scenario. Overall, based on the detailed economic evaluation results, the
5		cost sensitivity and due diligence quantitative and qualitative factors, the most
6		cost effective generation alternative for DEF's customers is the Osprey Plant
7		acquisition, if the requisite regulatory approvals for the acquisition are timely
8		obtained. See Exhibit No(BMHB-3).
9		2
10	Q.	What impact will the addition of the Osprey Plant have upon DEF's Reserve
11		Margin and its ability to provide reliable service to its customers?
12	А.	As shown in Exhibit No (BMHB-4), the addition of the Osprey Plant to
13		DEF's system will increase DEF's summer peak Reserve Margin to 20.6 percent
14		in the summer of 2017. This is because DEF only has firm transmission rights to
15		249 MW of the Osprey Plant generation capacity until the transmission network
16		upgrades necessary to directly connect the Osprey Plant to DEF's system are
17		completed. DEF estimates that the transmission network upgrades will not be
18		complete until 2020. The exhibit shows that DEF will have a total generating
19		capability of approximately 11,222 MW by the summer of 2017 if DEF closes on
20		the Osprey Plant acquisition following the regulatory approvals for the acquisition
21		in accordance with the terms of the APA. The total generation capability includes
22		the installation of the Hines Chillers Power Uprate Project previously approved
23		by the Commission. DEF's Reserve Margin will decrease to 18 percent in the

1		summer of 2017 if the Osprey Plant acquisition is not added to DEF's system.
2		The Osprey Plant acquisition allows DEF to satisfy its commitment to maintain a
3		minimum 20 percent Reserve Margin in 2017 to provide DEF's customers with
4		reliable electric service.
5		
6	Q.	What is the impact of the Suwannee Simple Cycle Project on the Company's
7		Reserve Margin?
8	А.	If DEF does not close the Osprey Plant acquisition in accordance with the terms
9		of the APA, the addition of the Suwannee Simple Cycle Project to DEF's system
10		will increase DEF's summer peak Reserve Margin to 20.7 percent in the summer
11		of 2017. See Exhibit No (BMHB-4). The exhibit shows that DEF will have
12		a total generating capability of approximately 11,230 MW by the summer of 2017
13		if the Suwannee Simple Cycle Project is installed because DEF could not
14		purchase the Osprey Plant. The total generation capability includes the
15		installation of the Hines Chillers Power Uprate Project previously approved by
16		the Commission. DEF's Reserve Margin will decrease to 18 percent in the
17		summer of 2017 if the Suwannee Simple Cycle Project is not added to DEF's
18		system. DEF needs this alternative, additional generation capacity in the summer
19		of 2017 to satisfy its minimum 20 percent Reserve Margin obligation to provide
20		reliable electric service to its customers.
21		
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1	0	Simple Cycle Project is the most cost-effective generation alternative to meet
2		DEF's remaining need for additional generation capacity prior to 2018. See
3		Composite Exhibit No (BMHB-1).
4		
5	Q.	Did DEF evaluate the Osprey Plant acquisition based on the same
6		fundamental modeling data that DEF used to evaluate the most cost effective
7		generation alternative in Docket No. 140111-EI?
8	А.	Yes. As I explained above, the term sheet was executed on August 25, 2014 at
9		the start of the hearing in Docket No. 140111-EI. DEF had shared with Calpine
10		the results of DEF's CPVRR evaluation of Calpine's offers to sell DEF the
11		Osprey Plant using the same fundamental modeling data DEF used to evaluate the
12		cost effectiveness of all generation capacity alternatives, including the Suwannee
13		Simple Cycle Project, to meet its need for additional generation capacity prior to
14		2018. See Composite Exhibit Nos. (BMHB-1) and (BMHB-2). As a
15		result, Calpine understood the economic gap between its offers and the Suwannee
16		Simple Cycle Project and the qualitative factors that had to be addressed to make
17		the Osprey Plant acquisition more cost effective on a quantitative and qualitative
18		basis than the Suwannee Simple Cycle Project. Because the August 25, 2014
19		term sheet addressed the economic gap and redressed the qualitative factors that
20		DEF had identified, DEF readily determined from the face of the term sheet that
21		the Osprey Plant acquisition appeared to be a more cost effective alternative than
22		the Suwannee Simple Cycle Project, on a quantitative and qualitative basis, to
23		meet DEF's remaining need for reliable generation capacity prior to 2018, subject

1		to DEF's due diligence and agreement to an asset purchase agreement for the	
2		Plant.	
3			
4	Q.	Were there any updates to the CPVRR evaluation of the Osprey Plant	
5		acquisition after DEF and Calpine agreed to the term sheet?	
6	А.	Yes. DEF refined the CPVRR evaluation after the term sheet was executed to	
7		include changes in the revenue requirements for the Osprey Plant acquisition	
8		based on the capital and O&M maintenance costs derived from the Company's	
9		due diligence reviews of the Osprey Plant condition and performance that were	
10		conducted between execution of the term sheet and execution of the APA. These	
11		changes and other intervening resource plan modeling adjustments are reflected in	
12		the CPVRR evaluation included in Exhibit No (BMHB-3) that was used to	
13		determine that the Osprey Plant acquisition was the most cost effective generation	
14		alternative to meet DEF's need for additional generation capacity prior to 2018	
15		before DEF and Calpine agreed to and executed the APA for the Osprey Plant	
16		acquisition.	
17			
18	Q.	Were there any changes to the fundamental modeling data used in the	
19		CPVRR evaluation of the Osprey Plant acquisition based on DEF's ongoing	
20		IRP process before DEF executed the APA to acquire the Osprey Plant?	
21	А.	No. As I explained above, DEF continued to evaluate the cost effectiveness of the	
22		Osprey Plant acquisition based on the same fundamental modeling data that was	
23		used to determine the cost effectiveness of the generation alternatives in Docket	

1		No. 140111-EI and the term sheet for the Osprey Plant acquisition between DEF
2		and Calpine. DEF's IRP update process continued in 2014, ultimately for
3		preparation of the Company's 2015 TYSP, but that process was not complete by
4		the time the APA was approved by the Board of Directors on December 8, 2014.
5		Final information for updates to the Company's key corporate forecasts in its IRP
6		process - DEF's load, economic, and financial forecasts - used to prepare the
7		2015 TYSP was not available by December 8, 2014. The decision to enter into
8		the APA for the Osprey Plant acquisition was based on 2014 TYSP IRP process
9		information because that was the best resource planning information available to
10		the Company at the time that decision was made. See Exhibit No (BMHB-
11		3).
12		
12 13	Q.	Did DEF consider its Demand Side Management Program in its evaluation of
	Q.	Did DEF consider its Demand Side Management Program in its evaluation of the most cost effective generation to meet DEF's remaining need prior to
13	Q.	
13 14	Q. A.	the most cost effective generation to meet DEF's remaining need prior to
13 14 15		the most cost effective generation to meet DEF's remaining need prior to 2018?
13 14 15 16		the most cost effective generation to meet DEF's remaining need prior to 2018? Yes, energy conservation and direct load control programs are always a part of the
13 14 15 16 17		the most cost effective generation to meet DEF's remaining need prior to 2018? Yes, energy conservation and direct load control programs are always a part of the Company's IRP process and they were considered in connection with our
13 14 15 16 17 18		the most cost effective generation to meet DEF's remaining need prior to 2018? Yes, energy conservation and direct load control programs are always a part of the Company's IRP process and they were considered in connection with our continuing evaluation of the Company's remaining near-term generation capacity
13 14 15 16 17 18 19		the most cost effective generation to meet DEF's remaining need prior to 2018? Yes, energy conservation and direct load control programs are always a part of the Company's IRP process and they were considered in connection with our continuing evaluation of the Company's remaining near-term generation capacity need. The Company's current demand-side management ("DSM") programs
13 14 15 16 17 18 19 20		the most cost effective generation to meet DEF's remaining need prior to 2018? Yes, energy conservation and direct load control programs are always a part of the Company's IRP process and they were considered in connection with our continuing evaluation of the Company's remaining near-term generation capacity need. The Company's current demand-side management ("DSM") programs were included in the Company's CPVRR evaluation included in Exhibit No
 13 14 15 16 17 18 19 20 21 		the most cost effective generation to meet DEF's remaining need prior to 2018? Yes, energy conservation and direct load control programs are always a part of the Company's IRP process and they were considered in connection with our continuing evaluation of the Company's remaining near-term generation capacity need. The Company's current demand-side management ("DSM") programs were included in the Company's CPVRR evaluation included in Exhibit No (BMHB-3). A detailed description of the Company's DSM programs is contained

1		programs cannot replace or defer the Company's remaining need for additional
2		generation capacity on its system prior to 2018.
3	1 4	Although the final order was received too late to include it in the updated
4		CPVRR, DEF did consider the Commission's decision in Docket No. 130200-EI.
5		In the Company's DSM goals docket the Commission voted on November 25,
6		2014 to approve DEF's future DSM goals for the period 2015 to 2024. Over the
7		next ten years DEF's DSM goals are generally lower than the existing DSM
8		goals. All other things being equal, then, the Company's near-term DSM goals
9		will cause an increase in DEF's firm summer peak demand prior to 2018. Based
10		on these DSM goals, there are no additional DSM measures or programs that can
11		replace or defer the Company's remaining need for additional generation capacity
12		prior to 2018 to reliably serve DEF's customers. The Company's remaining need
13		for additional generation capacity by the summer of 2017 is not affected by the
14		outcome of Docket No. 130200-EI.
15		
16	Q.	Are there any recent renewable energy sources and technologies that can
17		meet DEF's remaining need for additional generation capacity prior to 2018?
18	А.	No. The Company does evaluate the timeline for new technologies, including
19		renewable energy sources and technologies, on a continuing basis as part of its
20		IRP process and as part of its evaluation of responses to its Request for
21		Renewables ("RFR") that continuously solicits proposals for renewable energy
22		projects. However, no commercially available, economically feasible renewable

generation resource or resource proposal currently exists to displace or defer DEF's remaining generation capacity needs prior to 2018.

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VI. CONSEQUENCES OF DELAY.

Q. What is the impact of delaying Commission approval of DEF's Petition?

A. DEF needs Commission approval for the Osprey Plant acquisition, and, 6 7 alternatively, the Suwannee Simple Cycle Project at this time to ensure that DEF meets its remaining reliability needs prior to 2018 in the most cost effective 8 manner for DEF's customers. DEF cannot delay its petition to this Commission 9 10 because there is insufficient time before DEF must recommence the Suwannee Simple Cycle Project to preserve the benefits of that cost effective Project for 11 customers to meet DEF's remaining need for generation capacity by the summer 12 of 2017, if DEF does not obtain the requisite regulatory approvals to purchase the 13 Osprey Plant. 14

DEF must recommence the Suwannee Simple Cycle Project by 15 for that Project to be in commercial service by the summer of 2017. As I 16 explained above, if DEF cannot buy the Osprey Plant the Suwannee Simple Cycle 17 Project is the most cost effective generation alternative to meet DEF's remaining 18 need for additional generation capacity by the summer of 2017. To preserve this 19 generation alternative for customers DEF must request all requisite regulatory 20 approvals for the Osprey Plant acquisition and have an adequate determination of 21 those regulatory approvals by 22

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1	DEF and Calpine agreed that this is the fundamental principle of the
2	regulatory approval conditions precedent to DEF's obligation to purchase the
3	Osprey Plant in the APA. To this end, Calpine and DEF agreed to cooperate with
4	all requests for regulatory approval, including this Petition, to obtain a decision
5	from the requisite regulatory bodies on approval of the Osprey Plant acquisition
6	by Ensuring that DEF can provide customers the benefits of one
7	of these two most cost effective generation alternatives to meet its need prior to
8	2018, whichever alternative the circumstances warrant, is central to the deal
9	between DEF and Calpine in the APA.
10	DEF and Calpine agreed in the APA to preserve the benefits of the most
11	cost-effective generation alternative for customers to meet DEF's remaining need
12	prior to 2018, regardless of the outcome of the requisite regulatory approvals for
13	the Osprey Plant acquisition. DEF and Calpine structured the deal in the APA for
14	both generation capacity projects, with DEF proceeding to close on the Osprey
15	Plant acquisition in the event of timely regulatory approval, and with DEF
16	proceeding with the Suwannee Simple Cycle Project in the event regulatory
17	approval for the acquisition is not timely obtained. In this way, DEF mitigates the
18	risk to customers of regulatory approvals beyond DEF's and Calpine's control.
19	For this reason, the Osprey Plant acquisition and the Suwannee Simple Cycle
20	Project are inextricably intertwined in the APA and they cannot logically or
21	practicably be evaluated separately by the Commission. As a result, DEF cannot
22	present, and the Commission cannot consider one project without the other in

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1		determining the most cost-effective generation alternative to meet DEF's
2		remaining need prior to 2018.
3		DEF has provided the Commission the information necessary to approve
4		its Petition to alternatively purchase the Osprey Plant or build the Suwannee
5		Simple Cycle Project to ensure that DEF's customers receive the benefits of the
6		most cost effective generation alternative to meet their reliability needs by the
7		summer of 2017 regardless of the outcome of the requisite regulatory reviews.
8		This decision will allow DEF to add additional generation capacity to meet its
9		reliability commitment to customers without any risk of interruption of service in
10		the event of unanticipated forced outages or other contingencies for which DEF
11		maintains reserves.
12		
12	VII.	CONCLUSION.
	VII. Q.	CONCLUSION. Please summarize DEF's request for relief from the Commission in this
13		
13 14		Please summarize DEF's request for relief from the Commission in this
13 14 15	Q.	Please summarize DEF's request for relief from the Commission in this Petition.
13 14 15 16	Q.	Please summarize DEF's request for relief from the Commission in this Petition. DEF needs the Osprey Plant and, alternatively, the Suwannee Simple Cycle
13 14 15 16 17	Q.	Please summarize DEF's request for relief from the Commission in this Petition. DEF needs the Osprey Plant and, alternatively, the Suwannee Simple Cycle Projects to maintain its electric system reliability and integrity and to provide its
13 14 15 16 17 18	Q.	Please summarize DEF's request for relief from the Commission in thisPetition.DEF needs the Osprey Plant and, alternatively, the Suwannee Simple CycleProjects to maintain its electric system reliability and integrity and to provide itscustomers with adequate electricity at a reasonable cost. DEF will not both buy
13 14 15 16 17 18 19	Q.	Please summarize DEF's request for relief from the Commission in this Petition. DEF needs the Osprey Plant and, alternatively, the Suwannee Simple Cycle Projects to maintain its electric system reliability and integrity and to provide its customers with adequate electricity at a reasonable cost. DEF will not both buy the Osprey Plant and build the Suwannee Simple Cycle Project. DEF will build
13 14 15 16 17 18 19 20	Q.	Please summarize DEF's request for relief from the Commission in this Petition. DEF needs the Osprey Plant and, alternatively, the Suwannee Simple Cycle Projects to maintain its electric system reliability and integrity and to provide its customers with adequate electricity at a reasonable cost. DEF will not both buy the Osprey Plant and build the Suwannee Simple Cycle Project. DEF will build the Suwannee Simple Cycle Project only if DEF cannot buy the Osprey Plant.
 13 14 15 16 17 18 19 20 21 	Q.	Please summarize DEF's request for relief from the Commission in this Petition. DEF needs the Osprey Plant and, alternatively, the Suwannee Simple Cycle Projects to maintain its electric system reliability and integrity and to provide its customers with adequate electricity at a reasonable cost. DEF will not both buy the Osprey Plant and build the Suwannee Simple Cycle Project. DEF will build the Suwannee Simple Cycle Project only if DEF cannot buy the Osprey Plant. DEF will realistically know if it can obtain the requisite regulatory approvals to

1		commercial service by the summer of 2017. DEF, therefore, will either purchase
2		the Osprey Plant or build the Suwannee Simple Cycle Project to meet its
3		commitment to maintain a 20 percent Reserve Margin by the summer of 2017.
4		The Osprey Plant acquisition or, alternatively, the Suwannee Simple Cycle
5		Project will satisfy DEF's generation reliability commitment by improving not
6		just the quantity, but also preserving the quality of DEF's total reserves,
7		maintaining an appropriate portion of physical generating assets in the Company's
8		overall resource mix. The Company has exhausted conservation measures cost
9		effectively available to the Company and there are no reasonably available
10		renewable energy resources or technologies to meet the Company's remaining
11		near-term reliability needs in the summer of 2017. The Osprey Plant acquisition
12		and, alternatively, the Suwannee Simple Cycle Project is the most cost-effective
13		resource to meet customer reliability needs in this time period. We, accordingly,
14		request that the Commission approve the Osprey Plant acquisition and,
15		alternatively, the Suwannee Simple Cycle Project as the most cost-effective
16		alternatives to meet the Company's remaining need for additional generation
17		capacity prior to 2018.
18		
19	Q.	Does this conclude your testimony?
20	A.	Yes, it does.
21		

1	HEARING OFFICER BROWN: With that, I have
2	approved the stipulation of issues in the record
3	in this case and a recommended order reflecting
4	the stipulation will be forthcoming to you and be
5	presented to the Commission for approval very
6	soon. I know that you all are wondering when.
7	
	We'll work on that pretty swiftly.
8	If there's nothing else to address.
9	MR. REHWINKEL: One last thing, and Mr. Moyle
10	pointed out to me. I told you there was a healthy
11	margin of value for the customers. And that
12	number is not confidential, it's \$61 million. And
13	we appreciate the effort you and the Staff have
14	taken to facilitate this stipulation and we thank
15	you for your action today.
16	HEARING OFFICER BROWN: Well, thank you all
17	for coming up with a proposed stipulation that's
18	in the best interest of the customers, and look
19	forward to supporting it at the Commission
20	Conference.
21	Mr. Murphy.
22	MR. MURPHY: Just one clarification. By
23	waiving post-hearing filings, they've waived the
24	brief and exceptions to the recommended order?
25	HEARING OFFICER BROWN: I agree.

1	Is that correct?
2	MS. TRIPLETT: Yes.
3	MR. WRIGHT: Yes.
4	MR. MOYLE: My understanding and we
5	haven't had a recommended order proceeding to deal
б	with in many, many years so we're kind of yes,
7	that's right, we're not going to take any issue
8	with it, but you're the decider on this one.
9	HEARING OFFICER BROWN: It was fun.
10	MR. MOYLE: That's right.
11	HEARING OFFICER BROWN: Made it very easy.
12	MR. REHWINKEL: And yes for Public Counsel
13	and PCS.
14	HEARING OFFICER BROWN: Okay. Well, thank
15	you. Again, appreciate you all working together
16	and coming up with the best solution. And with
17	that, I will adjourn this hearing.
18	(Whereupon, proceedings were concluded at
19	9:55 a.m.)
20	
21	
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23	
24	
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1	CERTIFICATE OF REPORTER
2	STATE OF FLORIDA)
3	COUNTY OF LEON)
4	I, MICHELLE SUBIA, Registered Professional
5	Reporter, certify that the foregoing proceedings were
б	taken before me at the time and place therein
7	designated; that my shorthand notes were thereafter
8	translated under my supervision; and the foregoing
9	pages, numbered 6 through 133, are a true and correct
10	record of the aforesaid proceedings.
11	I further certify that I am not a relative,
12	employee, attorney or counsel of any of the parties,
13	nor am I a relative or employee of any of the parties'
14	attorney or counsel connected with the action, nor am
15	financially interested in the action.
16	DATED this 4th day of June, 2015.
17	
18	
19	Michel Sulic
20	MICHELLE SUBIA, RPR

MICHELLE SUBIA, RPR NOTARY PUBLIC COMMISSION #FF127508 EXPIRES JUNE 7, 2018

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