1		BEFORE THE		
2	FLORIDA	PUBLIC SERVICE COMMISSION		
3	In the Matter of:			
4	PETITION FOR INCRE. BY FLORIDA POWER &	ASE IN RATES DOCKET NO. 080677-E LIGHT COMPANY.	,I	
5	2009 DEPRECIATION	AND DISMANTLEMENT DOCKET NO. 090130-E	I	
6	STUDY BY FLORIDA P COMPANY.	OWER & LIGHT		
7				7
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10		VOLUME 9		
11	Pa	ages 946 through 1103		
12	ELECTRONIC A CONVEN	VERSIONS OF THIS TRANSCRIPT ARE HIENCE COPY ONLY AND ARE NOT		
13	THE OFFICI THE .PDF VERS	AL TRANSCRIPT OF THE HEARING, SION INCLUDES PREFILED TESTIMONY.		
14	PROCEEDINGS:	HEARING		
15	COMMISSIONERS		2	
16	PARTICIPATING:	CHAIRMAN MATTHEW M. CARTER COMMISSIONER LISA POLAK EDGAR		
17		COMMISSIONER KATRINA J. MCMURRIAN COMMISSIONER NANCY ARGENZIANO		
18		COMMISSIONER NATHAN A. SKOP		
19	DATE:	Thursday, August 27, 2009		
20	TIME:	Commenced at 9:38 a.m.		
21	PLACE:	Betty Easley Conference Center Room 148	SATE 9	
22		4075 Esplanade Way Tallahassee, Florida	E	oH CI
23	REPORTED BY:	LINDA BOLES, RPR. CRR	MUM T	41851
24		Official FPSC Reporter (850) 413-6734	t t t	0.00 M
25	ADDEADANCES	(As heretofore noted )	100 C	bsc.
20		(IIS HELECOLOLE HOLEG.)	<u>د</u>	LL.,
	FLORIDA	A PUBLIC SERVICE COMMISSION		

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1	PROCEEDING
2	(Transcript continues in sequence from Volume
3	8.)
4	CHAIRMAN CARTER: Good morning. I'd like to
5	call this conference to order, this hearing to order.
6	When last we left, we had taken a motion, actually an
7	objection under advisement.
8	Ms. Helton, good morning.
9	MS. HELTON: Good morning, Mr. Chairman.
10	After the hearing concluded last night, the parties and
11	staff discussed the issue further and I went back
12	upstairs and talked further with staff, and staff is no
13	longer pursuing entering deposition transcripts into the
14	record wholesale. They wanted to do that for efficiency
15	reasons, and at this time we believe that any
16	efficiencies gained would be lost, especially due to the
17	parties' rights to make objections that are not waived
18	by operation of law. So we are not pursuing that.
19	CHAIRMAN CARTER: Okay. So
20	MS. HELTON: So I guess the, Mr. Young's
21	request to have the deposition of Mr. Stall admitted
22	into the record should be denied.
23	CHAIRMAN CARTER: Okay. Motion denied. Your
24	motion, your objection is sustained, by the way, to the
25	parties. Okay? I got kind of squirrely with that
	FLORIDA PUBLIC SERVICE COMMISSION

1 yesterday. Of course I think it was yesterday. Maybe 2 it was last night. 3 Call your next witness. 4 **MR. BUTLER:** Mr. Chairman? 5 CHAIRMAN CARTER: Yes, sir. 6 MR. BUTLER: While the witness is getting 7 seated, a couple of brief preliminary matters. 8 CHAIRMAN CARTER: Okay. You're recognized. MR. BUTLER: One is that we have Exhibit 402 9 that had been identified but had not been distributed 10 11 vesterday. This is the one that has the CEO 12 compensation comparison that includes stock holdings, 13 and we can distribute that at this time if that would be 14 appropriate. CHAIRMAN CARTER: Yes. That would be fine. 15 Because that's the one that would be entered under 16 exhibit -- Witness Slattery will be dealing with that? 17 MR. BUTLER: That's right. 18 CHAIRMAN CARTER: Yeah. Let's make sure we 19 20 get that to all the parties now. 21 MR. MOYLE: Right. And just so the record is clear, we continue to maintain our objection. 22 23 CHAIRMAN CARTER: Absolutely. MR. MOYLE: And, you know, don't want to waive 24 that by the mere fact that it's being distributed. 25

CHAIRMAN CARTER: No. No. No. No. No. We wouldn't take it that way. I think it's just being distributed for ease of operation so people can look it over and --

MR. BUTLER: And to be sure that the parties have it for as much time as possible before Ms. Slattery takes the stand.

8 The other matter, Mr. Chairman, is that we 9 would like to at least open the dialogue of possible 10 agreements on some way to improve the efficiency of the 11 examination next week, sort of whether there are any 12 scheduling arrangements that we can agree with parties 13 to, you know, to work, excuse me, work toward for how to 14 use our time efficiently next week.

15 I mean, we're going to have obviously the 16 Intervenor case and then our rebuttal case. And given the fact that we obviously are going to have to be 17 18making some significant moves forward to get all of this done by next Friday, close of business, we're thinking 19 that maybe it would make sense to end up having a, a day 20 that is devoted to examination of their witnesses and a 21 day that would be devoted to examination of our 22 23 witnesses and, you know, try to schedule something that 24 is sort of a time certain.

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And there may be other ways to skin the cat

here, but I just would like to get the dialogue opened on what might make sense to help move things along efficiently.

4 CHAIRMAN CARTER: Okay. I'll tell you what I'll do is that during the break, the morning break, you 5 guys can kind of get together and talk. And obviously, 7 whatever you guys bring to me, I will -- I would rather it be something that all the parties are in agreement with. Otherwise, I really -- so during the break you guys can talk about that. And I'll give you a break this morning for that and you guys can talk, well, for that and a couple of other things too, but you can talk about it during the break.

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Mr. Moyle?

15 MR. MOYLE: No. We -- on the Intervenor side 16 we share similar concerns and we have a lot of witnesses 17 on our side and want to give them the opportunity to be 18 heard as well. Maybe we can also talk on certain 19 witnesses of FP&L. Some of them have already testified, 20 but, you know, sometimes direct and rebuttal is put in 21 at the same time just to save time, so maybe we can talk 22 about that as well.

23 CHAIRMAN CARTER: Like I said, is that 24 yesterday I talked about the, the collegiality of the 25 lawyers that practice before us, and you guys always do

1 that and we, we appreciate that and I'm sure the parties 2 appreciate that. So, like I say, this morning, during 3 the break, give you guys an opportunity to talk about it. And if you bring it to me together, and we'll be 4 more than happy to try to accommodate you. Okay. 5 6 Mr. Beck, good morning. MR. BECK: Mr. Chairman, good morning. 7 Thank you. I would like to ask with respect to one of our 8 9 witnesses, Kim Dismukes, she's been in town since Monday. I've talked with Florida Power & Light and I'd 10 11 like to ask her to be excused from the possibility of 12 testifying today or tomorrow, which I realize is highly unlikely, and then she would come back next week. 13 CHAIRMAN CARTER: Okay. Is that --14 15 Mr. Butler? That's fine. 16 MR. BUTLER: CHAIRMAN CARTER: What about the other 17 parties? Are you guys comfortable with that? 18 MR. WRIGHT: Yes, sir. 19 20 CHAIRMAN CARTER: Okay. 21 MR. BECK: Thank you. CHAIRMAN CARTER: And if by, if by, Mr. Beck, 22 if by the grace of God we make some movement and all 23 24 like that, we'll just bring her in on, at a different 25 level. Okay?

1	MR. BECK: Thank you.
2	CHAIRMAN CARTER: All right. That's fine.
3	Just when we get there, just kind of make sure you
4	remind me of that.
5	We're dealing with preliminary matters right
6	now. Any further, from the parties, any further
7	preliminary matters? Okay.
8	Yes, sir.
9	MR. ROSS: Good morning. FPL calls Dr.
10	Rosemary
11	CHAIRMAN CARTER: Whoa. Whoa. Whoa. Hold
12	up.
13	MR. ROSS: I'm sorry.
14	CHAIRMAN CARTER: Preliminary matters first.
15	I'll get with you in a second.
16	Staff, any preliminary matters from you?
17	MS. BROWN: No, Mr. Chairman.
18	CHAIRMAN CARTER: Okay. So, okay, no further
19	preliminary matters from any of the parties.
20	Okay. You're recognized.
21	MR. ROSS: Good morning. FPL calls Dr.
22	Rosemary Morley to the stand, and Dr. Morley has been
23	sworn.
24	CHAIRMAN CARTER: Okay. Great.
25	DR. ROSEMARY MORLEY
	FLORIDA PUBLIC SERVICE COMMISSION

1	was called as a witness on behalf of Florida Power &
2	Light Company and, having been duly sworn, testified as
3	follows:
4	DIRECT EXAMINATION
5	BY MR. ROSS:
6	<b>Q.</b> Would you please state your name and business
7	address?
8	A. Rosemary Morley, 700 Universe Boulevard, Juno
9	Beach, Florida.
10	<b>Q.</b> By whom are you employed and in what capacity?
11	<b>A.</b> I am employed by Florida Power & Light as the
12	Director of Load Forecasting.
13	<b>Q.</b> Have you prepared and caused to be filed 33
14	pages of prefiled direct testimony in this proceeding?
15	A. Yes, I have.
16	<b>Q.</b> Do you have any changes or revisions to your
17	prefiled direct testimony?
18	A. No, I do not.
19	$\mathbf{Q}$ . If I asked you the same questions contained in
20	your direct testimony, would your answers be the same?
21	A. Yes.
22	MR. ROSS: Mr. Chairman, I ask that the
23	prefiled direct testimony of Dr. Rosemary Morley be
24	inserted into the record as though read.
25	CHAIRMAN CARTER: The prefiled testimony of
	FLORIDA PUBLIC SERVICE COMMISSION

1	the witness will be inserted into the record as though
2	read.
3	BY MR. ROSS:
4	<b>Q.</b> Are you also sponsoring any exhibits to your
5	direct testimony?
6	A. Yes, I am.
7	<b>Q.</b> And do those exhibits consist of 14 pages
8	shown as Exhibit RM-1 through RM-11 on staff's exhibit
9	list?
10	A. Yes.
11	MR. ROSS: Mr. Chairman, I would note that Dr.
12	Morley's exhibits have been premarked for identification
13	as Exhibits 40 through 50.
14	CHAIRMAN CARTER: For the record, Exhibits
14 15	<b>CHAIRMAN CARTER:</b> For the record, Exhibits marked for identification as 40 through 50. Thank you.
14 15 16	CHAIRMAN CARTER: For the record, Exhibits marked for identification as 40 through 50. Thank you. (Exhibits 40 through 50 marked for
14 15 16 17	CHAIRMAN CARTER: For the record, Exhibits marked for identification as 40 through 50. Thank you. (Exhibits 40 through 50 marked for identification.)
14 15 16 17 18	CHAIRMAN CARTER: For the record, Exhibits marked for identification as 40 through 50. Thank you. (Exhibits 40 through 50 marked for identification.)
14 15 16 17 18 19	CHAIRMAN CARTER: For the record, Exhibits marked for identification as 40 through 50. Thank you. (Exhibits 40 through 50 marked for identification.)
14 15 16 17 18 19 20	CHAIRMAN CARTER: For the record, Exhibits marked for identification as 40 through 50. Thank you. (Exhibits 40 through 50 marked for identification.)
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14 15 16 17 18 19 20 21 22	CHAIRMAN CARTER: For the record, Exhibits marked for identification as 40 through 50. Thank you. (Exhibits 40 through 50 marked for identification.)
14 15 16 17 18 19 20 21 22 23	CHAIRMAN CARTER: For the record, Exhibits marked for identification as 40 through 50. Thank you. (Exhibits 40 through 50 marked for identification.)
14 15 16 17 18 19 20 21 22 23 24	CHAIRMAN CARTER: For the record, Exhibits marked for identification as 40 through 50. Thank you. (Exhibits 40 through 50 marked for identification.)
14 15 16 17 18 19 20 21 22 23 24 25	CHAIRMAN CARTER: For the record, Exhibits marked for identification as 40 through 50. Thank you. (Exhibits 40 through 50 marked for identification.)
14 15 16 17 18 19 20 21 22 23 24 25	CHAIRMAN CARTER: For the record, Exhibits marked for identification as 40 through 50. Thank you. (Exhibits 40 through 50 marked for identification.)

### - 000957

1		<b>BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION</b>
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF DR. ROSEMARY MORLEY
4		<b>DOCKET NO. 080677-EI</b>
5		
6	Q.	Please state your name and business address.
7	А.	My name is Dr. Rosemary Morley, and my business address is Florida Power
8		& Light Company, 700 Universe Blvd., Juno Beach, Florida 33408.
9	Q.	By whom are you employed and what is your position?
10	А.	I am employed by Florida Power & Light Company ("FPL" or the
11		"Company") as the Director of Load Forecasting and Analysis.
12	Q.	Please describe your duties and responsibilities as FPL's Director of Load
13		Forecasting and Analysis.
14	А.	I am responsible for the development of FPL's peak demand, energy,
15		customer and economic forecasts.
16	Q.	Please describe your educational background and professional
17		experience.
18	А.	I hold a bachelor's degree (B.A.) with honors in economics from the
19		University of Maryland and a master's degree (M.A.) in economics from
20		Northwestern University. In 2005, I earned a Doctorate in Business
21		Administration (D.B.A.) from Nova Southeastern University. I began my
22		career with FPL in 1983 as an Assistant Economist. I have since held a
23		variety of positions in the forecasting, planning and regulatory areas.

1		Between 1996 and 2007, I was the Rate Development Manager for FPL.
2		During that time I testified on a number of issues, including the forecast of
3		billing determinants by rate class and the Company's load research studies. I
4		am a member of the National Association of Business Economists and the
5		Institute of Business Forecasting and Planning.
6	Q.	Are you sponsoring any exhibits in this case?
7	A.	Yes. I am sponsoring the following exhibits:
8		RM-1 Cumulative Customer Growth Since 1985
9		• RM-2 Cumulative Increase in NEL Since 1985
10		• RM-3 NSAs, Customer Growth, and the Change in Inactive Meters
11		• RM-4 Population Forecasts from the University of Florida
12		• RM-5 Increase in the Average Annual Number of Customers
13		RM-6 Annual NSAs
14		• RM-7 Increase in Minimal Usage Customers
15		RM-8 Forecasting Variance
16		• RM-9 Annual Energy Use per Customer
17		RM-10 NEL Forecast and Actuals
18		• RM-11 Billed Sales, Customers and Use by Class

1	Q.	Are you sponsoring or co-sponsoring any Minimum Filing Requirements
2		(MFRs) in this case?
3	A.	Yes. I am sponsoring the following MFRs:
4		C-40, O & M Compound Multiplier Calculation
5		• E-18, Monthly Peaks
6		• F-6, Forecasting Models – Sensitivity of Output to Changes in Input
7		Data
8		• F-7, Forecasting Models – Historical Data
9		I am co-sponsoring the following MFRs:
10		• C-12, Administrative Expenses
11		• C-15, Industry Association Dues
12		C-33, Performance Indices
13		C-34, Statistical Information
14		• C-36, Non-Fuel Operation and Maintenance Expense Compared to
15		CPI
16		C-37, O&M Benchmark Comparison by Function
17		• E-9, Cost of Service – Load Data
18		• E-11, Development of Coincident and Noncoincident Demands for
19		Cost Study
20		• E-12, Adjustment to Test Year Revenue
21		• E-15, Projected Billing Determinants - Derivation
22		• E-16, Customers by Voltage Level
23		• E-19a, Demand and Energy Losses

1		• E-19b, Energy Losses
2		• E-19c, Demand Losses
3		• F-5, Forecasting Models
4		• F-8, Assumptions
5		In addition, I am sponsoring or cosponsoring the following 2009 supplemental
6		MFR schedules that FPL has agreed with the Florida Public Service
7		Commission ("FPSC" or the "Commission") Staff and the Office of Public
8		Counsel to file:
9		• C-12, Administrative Expenses
10		• C-15, Industry Association Dues
11		C-34, Statistical Information
12		C-37, O&M Benchmark Comparison by Function
13		• F-5, Forecasting Models
14		• F-6, Forecasting Models – Sensitivity of Output to Changes in Input
15		Data
16		• F-7, Forecasting Models – Historical Data
17		• F-8, Assumptions
18	Q.	What is the purpose of your testimony?
19	A.	The purpose of my testimony is to: (i) describe FPL's load forecasting
20		process; (ii) give a historical perspective of FPL's customer and sales growth
21		between 1985 and 2005; (iii) discuss the load forecast presented by the
22		Company in its last rate proceeding and the factors which have driven the
23		actual level of customers and sales since that time; (iv) identify the underlying

1 methodologies and assumptions of the customer growth, energy use per 2 customer, and Net Energy for Load (NEL) forecasts; and (v) present the 3 customer and sales forecast by revenue class. The forecast of customers and 4 sales by revenue class forms the basis for the base revenue forecast supported by FPL witness Deaton. Finally, (vi) my testimony discusses the inflation 5 6 forecast, including the Consumer Price Index (CPI) forecast used in 7 computing the Commission's operations and maintenance (O&M)8 Benchmark.

### 9 Q. Please summarize your testimony.

10 A. My testimony presents FPL's customer and load projections through 2011, 11 and discusses the growth FPL has experienced since 1985 as well as the 12 slowdown in customer and sales growth experienced since 2006. The average 13 number of FPL customers was virtually flat in 2008 while NEL contracted by 14 2.9%. Hampered by slower population growth, the number of customers is 15 expected to increase by only 0.2% in 2009 and 0.6% in 2010 before 16 rebounding to 1.3% in 2011. Likewise, FPL's forecast indicates that the 17 contraction in total energy sales will continue in the near term with a 1.4% 18 decline in NEL in 2009. Due to higher customer growth and the addition of 19 new wholesale load, NEL is projected to increase by 0.7% in 2010 and 1.6% 20 in 2011.

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### I. OVERVIEW OF LOAD FORECASTING PROCESS

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### Q. What principles does FPL rely on in developing its load forecast?

4 Α, FPL relies on three principles in developing its load forecast. First, a load 5 forecast depends on an understanding of the underlying data. As a result, the 6 most relevant and timely data should be carefully examined. This includes a 7 review not only of the variables to be forecast, but also of the factors which may influence future values. Accordingly, FPL reviews demographic and 8 9 economic projections from a number of industry experts, including the University of Florida and Global Insight. Second, a load forecast should be 10 based on statistically sound models. In this regard, FPL relies on 11 12 econometrics as the primary tool for projecting future levels of customers and sales. An econometric model is a numerical representation, obtained through 13 statistical estimation techniques, of the degree of relationship between a 14 dependent variable, e.g., NEL, and the independent (explanatory) variables. 15 FPL has consistently relied on econometric models for various planning 16 purposes and the modeling results have been reviewed and accepted by this 17 18 Commission in past proceedings. Third, a load forecast must reflect sound judgment. While intangible, sound judgment is critical, particularly during 19 periods of rapid change and uncertainty. 20

### 21 Q. What are the primary elements of the load forecast?

A. Two of the primary elements of the load forecast are total customers and NEL.
 NEL is energy generated net of plant use. A superior econometric forecasting

1 model is obtained if NEL, instead of billed energy sales, is matched to the 2 explanatory variables. This is because the NEL data does not have to be 3 attuned to account for billing cycle adjustments, which might distort the real 4 time match between the production and consumption of electricity. 5 Accordingly, FPL first develops the forecast of total customers and energy use per customer. The forecasts of total customers and energy use per customer 6 7 yield the NEL forecast. Forecasts of customers and billed sales by revenue 8 class are then developed and calibrated with the forecast of total customers 9 and NEL. Jurisdictional billed sales are computed by totaling the retail 10 revenue classes.

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#### **II. HISTORICAL PERSPECTIVE**

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#### 14 Q. Please describe FPL's service territory.

A. FPL's service territory covers approximately 27,650 square miles within
peninsular Florida, which ranges from St. Johns County in the north to MiamiDade County in the south, and westward to Manatee County. FPL serves
customers in 35 counties within this region. FPL currently serves about 4.5
million customers. This amounts to a population of about 8.8 million people.

### 20 Q. What customer and sales growth has FPL experienced since 1985?

A. As shown in Exhibit RM-1, FPL has added almost 1.9 million customers since
1985, the equivalent of more than 82,000 customers per year or an annual
growth rate of 2.4%. Energy use per customer, defined as NEL divided by the

1 total number of customers, increased at an annual rate of 0.6% or 140 kWh 2 per year between 1985 and 2008 for a cumulative increase of 15%. An increasing customer base combined with higher use per customer resulted in 3 4 substantial increases in NEL. Between 1985 and 2008 NEL increased at an 5 annual rate of 2,399 GWh or 3.0% per year. As shown in Exhibit RM-2, this 6 represents a cumulative increase of more than 55,000 GWh, a 98% increase 7 from the 1985 NEL. Peak demand increased at comparable rates during this 8 time. The 2008 summer peak was 10,423 MW above its 1985 level, a 98%9 increase.

### 10 Q. Has customer and sales growth been consistent since 1985?

11 A. No. Customer and sales growth was very high between 1985 and 2005 but 12 has slowed since 2006. Between 1985 and 2005, FPL's customer base grew 13 at an average annual rate of about 85,200 customers per year or 2.5% 14 annually. During the same time period, energy use per customer grew at an 15 average annual rate of 0.9% or 218 kWh per customer per year. NEL grew at 16 an annual rate of 3.5% or 2,765 GWh per year between 1985 and 2005. 17 Effectively, this rate meant that FPL's electric sales were doubling every 20 18 years. Between 1985 and 2005 growth was the norm and declines in NEL 19 occurred only sporadically, typically the result of abnormal weather.

## Q. What factors accounted for the tremendous customer and sales growth between 1985 and 2005?

A. Population growth and an expanding economy were the two principal drivers
behind this growth. During much of this time, the state's population growth

1 was one of the fastest in the nation. Florida's population expanded from 11.3 2 million in 1985 to more than 17.9 million in 2005. This represents an annual 3 growth rate of 2.3% or about 330,000 new Floridians a year. Likewise, the 4 state's economy, measured in terms of Gross Domestic Product (GDP), 5 increased by approximately 125% between 1985 and 2005, effectively more 6 than doubling the size of the state's economy. The state's population growth and economic expansion were strongly interrelated during this time and both 7 8 contributed to FPL's customer and sales growth.

9 Q. Please explain this interrelationship between the state's population
10 growth and economic expansion and how it impacted FPL's customer
11 and sales growth between 1985 and 2005.

12 A. As described by the Office of Economic and Demographic Research, population growth has traditionally been one of the primary drivers of the 13 14 state's economy. Most of the population growth between 1985 and 2005 was the result of net migration (more permanent residents moving into the state 15 than out of the state). Net migration, in turn, increased the demand for 16 housing and services, key sectors of the state's economy. The state's total 17 non-agricultural employment increased by 77% between 1985 and 2005 and at 18 times led the nation in job growth. An expanding economy supported 19 additional population growth. According to demographic experts, working 20 21 age adults seeking new job opportunities accounted for a sizeable share of in-22 migration between 1985 and 2005. Together, population growth and an expanding economy stimulated demand for goods and services of all kinds, 23

1 including electricity. Population growth resulted in increases in the number of 2 electric customers thereby leading to higher sales between 1985 and 2005. 3 Likewise, the expanding economy between 1985 and 2005 led to increasing energy use per customer across the company's major customer segments 4 5 (residential and commercial). 6 7 **III. FPL'S LOAD FORECAST FROM ITS LAST RATE PROCEEDING** 8 9 How well did FPL forecast customers and sales in the last rate case? **Q**. 10 Α. In the last rate case, total customers for the 2006 test year were projected to be 11 4,371,957. In part, this forecast reflected an adjustment FPL made to the 12 forecast for the assumption that lower customer growth would result from the 2004 hurricane season. The actual number of customers was 4,409,563, 13 14 which is 0.9% higher than projected. NEL for 2006 was projected to be 15 115,463 GWh while the actual level was 113,137 GWh, which is 2.0% lower 16 than projected. 17 Wasn't FPL's assumption that the customer forecast should be lowered **Q**. 18 to reflect the 2004 hurricane season proven unnecessary? 19 No, I don't believe so. Although FPL under-forecasted customers by 0.9%, A. 20 FPL's forecasted energy use per customer was 26,410 kWh, more than 2.9% 21 higher than the actual 2006 energy use per customer of 25,657 kWh. As 22 discussed in the next section of my testimony, 2006 marked the beginning of 23 the trend in lower energy use per customer we are currently experiencing. In

1 any event, FPL's assumption that the customer forecast should be lowered to 2 reflect the 2004 hurricane season improved the overall accuracy of the 2006 3 NEL forecast by offsetting the over-forecast of energy use per customer. 4 5 IV. CUSTOMER GROWTH, NSAs, AND SALES GROWTH SINCE FPL'S 6 LAST RATE PROCEEDING 7 8 **Q**. What customer growth has FPL experienced since 2005? 9 A. The average number of customers increased by 87,667 in 2006 or a 10 percentage gain of 2.0%. On an annual average basis customer growth 11 remained strong in 2007 with an increase of 87,027 for another 2.0% gain. However, monthly data show that by the second half of 2007 customer growth 12 13 was decelerating. The slowdown became more pronounced in 2008 and by 14 August 2008 FPL began experiencing monthly declines in the number of 15 customers on a year over year basis. In other words, the total number of customers in August 2008 was less than the total number in August 2007. 16 17 Based on available records extending back to 1965, this was the first year over year decline in customers in the Company's history. Exhibit RM-3 shows the 18 19 change in FPL's monthly customers on a year over year basis. By December 20 2008 the year over year decline in customers had reached 11,239. Due to 21 stronger growth in the first months of the year, average number of customers 22 increased by 13,140 in 2008, a minimal gain of 0.3%. Again based on

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available records extending back to 1965, this represented the lowest rate of customer growth in the Company's history.

## 3 Q. Has the decline in customer growth led to a reduction in the number of 4 new service accounts?

5 A. Although below prior years, the absolute level of NSAs has remained high. 6 Over 58,000 NSAs were added in 2008. Cumulatively, this brings the total 7 number of NSAs added since 2006 to over 280,000. As shown in Exhibit 8 RM-3, the decline in customer growth has been more dramatic than the 9 change in the number of NSAs. Despite the 58,000 NSAs added in 2008, 10 there was a net loss of more than 11,000 customers between December 2007 11 and December 2008.

12 Q. What accounts for the discrepancy between customer growth and NSAs?

A. NSAs are based on the gross number of new service installations. Customer
growth, on the other hand, reflects the net impact of new service installations,
combined with changes in the number of inactive accounts and other factors.
As shown in Exhibit RM-3, there has been a substantial buildup in inactive
meters since 2007. The growth in inactive meters diminishes the customer
growth that would otherwise result from new service installations.

19 Q. What energy use per customer and sales growth has FPL experienced
20 since 2006?

A. Energy use per customer has declined consistently since 2006. Energy use per customer declined by 0.4% in 2006, then by 0.9% in 2007 and by another
3.1% in 2008. By 2008 energy use per customer had fallen to its lowest level

since 1999. The combination of slower customer growth and declining use
 per customer has resulted in dramatically lower and ultimately negative sales
 growth. The growth in NEL fell from an annual increase of 1.7% in 2006 to a
 1.0% increase in 2007. In 2008 there was a 2.9% contraction in NEL.

# 5 Q. What factors explain the stagnant customer and sales growth experienced 6 since 2006?

7 A. Reduced population growth and the economic slowdown are responsible for 8 much of the stagnation in customer and sales growth. Slower population 9 growth has curtailed FPL's customer growth while the economic slowdown 10 has dampened energy use per customer. Due to the economic slowdown, 11 customers have become more apprehensive about their expenditures and have 12 been restricting their consumption of goods and services, including electricity. 13 Moreover, the slowdown in Florida's population growth and economic 14 recession are reinforcing one another, just as the converse did earlier in the 15 decade. With the collapse of the housing boom, employment in the 16 construction sector, previously one of the state's leading sources of job 17 creation, began growing at a much slower pace in 2006. By January 2007 18 employment in the construction sector was contracting in absolute terms. Led 19 by losses in the construction sector, total non-agricultural employment began 20 falling in the second half of 2007. As of December 2008, the state was losing 21 jobs at an annual rate of 3.2% or 255,200 jobs per year. With fewer job 22 opportunities the in-migration of job seekers stalled. Population growth

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1		slowed from 2.4% in 2006 to 1.8% in 2007. By 2008 population growth had
2		fallen to 0.7% a year.
3		
4	V	7. UNDERLYING METHODOLOGIES AND ASSUMPTIONS OF THE
5	(	CUSTOMER GROWTH, ENERGY USE PER CUSTOMER, AND NEL
6		FORECASTS
7		
8		A. CUSTOMER GROWTH FORECAST
9		
10	Q.	What is the primary determinant of customer growth?
11	A.	Customer growth is primarily determined by changes in population.
12		Accordingly, FPL forecasts total customers using an econometric model with
13		population and seasonal factors as the explanatory variables.
14	Q.	What source does FPL rely on for its population projections?
15	А.	FPL relies on population projections produced by the University of Florida's
16		Bureau of Economic and Business Research. FPL's customer growth forecast
17		is based on the University of Florida's October 2008 population projections,
18		the most recent projections available at the time the forecast was developed.
19	Q.	How do the October 2008 population projections compare with prior
20		projections?
21	А.	The October 2008 population projections are significantly below prior
22		projections. As shown in Exhibit RM-4 the University of Florida revised its
23		population projections four times between November 2007 and October 2008.

Each revision has been progressively more pessimistic about the state's population growth through 2011. The University of Florida's October 2008 population projections assume minimal net migration into Florida through 2010. As a result, the University of Florida's October 2008 projections show an annual rate of population growth of only 0.4% in 2009 and 0.5% in 2010. By 2011 a modest rebound of 1.2% is projected.

### Q. How does FPL's forecast of total customers compare with recent actual customer growth?

9 A. FPL's forecast shows a continued slowdown in customer growth consistent
10 with recent actuals. On an average annual basis there was a 0.3% increase in
11 customers in 2008. FPL is projecting a 0.2% increase for 2009 followed by a
12 0.6% increase in 2010. Driven by a higher rate of population growth,
13 customer growth in 2011 should rebound to 1.3%. The forecasted changes in
14 the annual number of customers are provided in Exhibit RM-5.

- 15 Q. What is FPL's forecast of NSAs?
- 16 While below their historical levels the forecasted number of NSAs remains Α. 17 large. As shown in Exhibit RM-6 the number of NSAs is expected to fall 18 from over 58,000 in 2008 to 44,000 in 2009 and then increase slightly to 19 47,000 in 2010. By contrast, the annual number of NSAs consistently 20 exceeded 100,000 between 2001 and 2006. The forecast of NSAs is based on 21 an econometric model which uses current and lagged housing starts as 22 explanatory variables. The forecast of housing starts was provided by Global 23 Insight.

### Q. How does FPL's forecast of total customers compare with the projected number of NSAs?

A. Consistent with recent actuals, the absolute number of NSAs is projected to
remain high relative to customer growth. Thus while customer and sales
growth have both dropped dramatically, from 2006 through 2010 FPL is still
projected to add over 370,000 NSAs. These 2006 through 2010 NSAs are
roughly equivalent to the total number of customers FPL serves in Sarasota
and St Lucie Counties. This is significant because FPL must build the
necessary infrastructure required to serve these new accounts.

### 10 Q. Is FPL's projected number of total customers reasonable?

11 A. Yes. The forecast incorporates the most recent population projections from 12 the University of Florida available at the time the forecast was developed. 13 The customer forecast is based on sound statistical methods previously 14 reviewed and approved by the Commission. A comparison of the forecasted 15 number of total customers with recent actuals further supports the 16 reasonableness of the forecast.

17

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#### **B. FORECAST OF ENERGY USE PER CUSTOMER AND NEL**

19

#### 20 Q. What are the primary determinants of energy use per customer?

A. The primary determinants of energy use per customer include the economy,
weather, the price of electricity, changes in the appliance stock and the
addition of new wholesale contracts. Accordingly, FPL's forecast of energy

use per customer reflects each of these factors. FPL forecasts energy use per
 customer using an econometric model with explanatory variables representing
 a number of these factors. The remaining factors are used to adjust the output
 of the econometric model.

# 5 Q. How does FPL measure the influence of the economy in forecasting 6 energy use per customer?

7 Α. Real household disposable income is used as an explanatory variable in FPL's 8 econometric model of energy use per customer. Real household disposable 9 income is defined as total personal income less income taxes, adjusted for 10 inflation and divided by the total number of households. Real household 11 disposable income reflects the income households have available to spend on goods and services of all kinds, including electricity. Consistent with energy 12 use per customer, real household disposable income is expressed on a per 13 household basis. Unlike other measures of income, real household disposable 14 income incorporates the impact of income taxes and thus reflects the income 15 16 available for consumption.

17 Q. How did FPL develop its forecast of real household disposable income?

A. FPL developed its forecast after reviewing forecasts of real household
disposable income from a number of sources, including Global Insight,
Moody's Economy.com, and the Florida State Legislature. FPL also studied
the past cycles in real household disposable income, particularly the declines
experienced during past recessions. Finally, FPL considered other indicators,
such as the consumer confidence index and employment data. To an extent,

1 2 such indicators can provide a more timely view of the economy than that available in formal projections which may only be released a few times a year.

### 3 Q. What is FPL's outlook for real household disposable income?

4 Α. Real household disposable income is projected to decline by 2.3% in 2009 5 followed by a 0.6% decline in 2010 and a positive 0.7% growth rate in 2011. 6 The depth of the decline in real household disposable income is consistent 7 with the forecast developed by Global Insight in July 2008. Specifically, FPL, 8 like Global Insight, assumes that the largest monthly declines in real 9 household disposable income will be experienced in early 2009 with a 4.3% 10 decline over the prior year. Thus, the most severe declines in real household disposable income are forecasted to occur in early 2009. FPL's forecast then 11 assumes a lingering recession followed by a gradual recovery. The timing of 12 this recovery is based on the historical performance of real household 13 disposable income in severe recessions. During severe recessions, such as 14 that experienced in the mid-1970s, real household disposable income may 15 continue to decline (albeit at progressively slower rates) for several quarters 16 before reaching a trough. In fact, during the mid-1970's recession real 17 household disposable income continued to contract for more than a year 18 following the official end of the recession. Accordingly, FPL's forecast of 19 real household disposable income assumes that positive growth in real 20 21 household disposable income will not occur until 2011.

### Q. How does FPL's forecast of real household disposable income compare with past recessions?

3 Α. The forecasted declines in real household income are less severe than those 4 experienced in the mid-1970s but are more severe than those experienced 5 during recessions in the early 1990s and 2000s. In making comparisons with 6 past recessions it is important to remember that the Florida economy has generally performed better than the U.S. economy as a whole. This is not 7 8 expected to be the case in the current recession. Indeed, the state's weaker 9 performance is already evident in employment figures which show that 10 Florida is shedding jobs at a faster rate than the national economy. Likewise, 11 the housing crisis has been more acute in Florida than in the U.S. as a whole.

#### 12

#### Q. Is FPL's forecast of real household disposable income reasonable?

Yes. FPL's forecast of real household disposable income reflects reasonable 13 Α. 14 adjustments to Global Insight's forecast. Based on the most timely and 15 relevant information available, Global Insight's forecasts appear to be overly 16 optimistic in terms of the speed of the recovery. Global Insight's July 2008 forecast indicated a significant drop in real household disposable income in 17 early 2009 followed by a rapid recovery. Forecasts from other sources 18 suggested a more pessimistic outlook. Moody's Economy.com indicated a 19 much sharper drop and more gradual recovery in real household disposable 20 21 income while forecasts from the state legislature assumed consistently lower 22 income levels. Perhaps more importantly, key developments in late 2008, 23 including the credit freeze and federal bailout of major financial institutions,

further depressed the consensus view of the economy. By November 2008, 1 2 the National Association of Business Economists announced that most of its 3 members were forecasting a prolonged recession. Likewise, in October 2008 the National Economic Estimating Conference of the Florida Legislature 4 5 announced that it was using a combination of baseline and pessimistic forecasts from Global Insight rather that the single baseline forecast normally 6 used. Given all of these factors, the adjustments to Global Insight's forecast 7 incorporated in FPL's forecast of real household disposable income were 8 9 warranted. Accordingly, FPL adjusted Global Insight's forecast of real 10 household disposable income to reflect a lingering recession.

### 11 Q. How does FPL measure the influence of weather in forecasting energy use 12 per customer?

A. FPL measures the influence of weather based on cooling and heating degree
hours. Historical cooling and heating degree hours are explanatory variables
in the energy use per customer model. The forecasted number of cooling and
heating degree hours is based on twenty year averages.

# 17 Q. How does FPL measure the influence of price in forecasting energy use 18 per customer?

A. FPL uses the real price of electricity as an explanatory variable in forecasting
energy use per customer. The real price of electricity is determined by
adjusting the nominal price for inflation. The forecasted price of electricity is
consistent with fuel cost projections incorporated in FPL's most recent fuel
filing.

- Q. Does FPL capture the influence of changes in the appliance stock and
   efficiency standards in its forecast?
- Yes. FPL adjusts the output of its econometric model for changes in the 3 А. 4 appliance stock. FPL relies on estimates developed by ITRON, a leading 5 energy consulting firm. ITRON's estimates quantify the reduction in energy 6 use resulting from federally mandated efficiency standards, such as those 7 codified in the National Energy Policy Act (NEPACT) and the Energy Independence and Security Act (EISA). ITRON's estimates also incorporate 8 9 the impact of compact fluorescent light bulbs which are projected to 10 significantly reduce lighting loads in advance of the new incandescent 11 standards required in EISA.
- 12 Q. Has the Commission previously reviewed and accepted load forecasts
  13 incorporating adjustments for changes in the appliance stock?
- 14 A. Yes. All of the load forecasts in FPL's recent need determination filings have
  15 incorporated similar adjustments based on ITRON's estimates.
- Q. How does FPL adjust the output of its econometric model for ITRON's
  estimates of the energy savings resulting from NEPACT, EISA and
  compact fluorescent light bulbs?
- A. The output of the econometric model is first reduced by an estimate of
  incremental NEPACT, EISA and compact fluorescent light bulb energy
  savings not fully embedded in the historical data. The resulting forecast is
  then calibrated or anchored to the average level of 2008 sales.

1 Q.

### Are there any other adjustments to the output of econometric model?

2 Α. Yes. In addition to its role in the general economic decline, the housing crisis 3 has had a direct impact on energy use per customer. There has been an 4 unprecedented increase in the number of homes left vacant as a result of the 5 housing crisis. This increase in the number of empty homes has spurred the 6 increase in the number of inactive meters discussed earlier. In many cases, 7 however, these empty homes continue to be counted as active FPL accounts 8 because the electric service has not been disconnected. By maintaining an 9 active electric account, the owners of these homes are able to show the home 10 to potential buyers and avoid the mildew damage that occurs without proper 11 ventilation. Nevertheless, the electric usage of these homes is a fraction of the 12 use typical of occupied homes. As shown in Exhibit RM-7, the percentage of 13 residential customers using a minimal amount of electricity monthly, between 14 1 and 200 kWh, has risen dramatically with the onset of the housing crisis. 15 While there has always been a portion of customers using minimal amounts of 16 electricity, historically around 7% of residential customers have fallen into 17 this group. By the end of 2008 the percentage of residential customers using 18 minimal amounts of electricity had risen to 8.7%. As a result, FPL has 19 adjusted its forecasted energy use per customer for the increase in the number 20 of minimal usage customers.

- Q. Is the trend in minimal usage customers really significant in terms of
   FPL's energy use per customer?
- A. Absolutely. A one percentage point increase in the percentage of residential
  customers using between 1 and 200 kWh per month amounts to an increase of
  almost 40,000 in the number of minimal usage customers. Residential usage,
  moreover, is a significant component of FPL's sales. Residential customers
  account for 88% of FPL's customers and 51% of FPL's sales. As a result,
  shifts in residential usage can have a profound impact on energy use per
  customer.

## 10 Q. Isn't the increase in the number of minimal usage customers reflected in 11 other variables already included in the forecast?

The adjustment for the increase in the number of minimal usage 12 A. No. 13 customers is designed to reflect information not otherwise incorporated into 14 the forecast. First, the magnitude of the number of empty homes is almost 15 without historic precedent. The increase in the number of minimal usage 16 customers has paralleled the rise in vacancy rates during this recession. 17 Therefore, it's helpful to consider the data on vacancy rates gathered by the Census Bureau. According to the Census Bureau, national vacancy rates by 18 19 the end of 2008 were well above the levels experienced in past recessions, 20 including the severe mid-1970's recession. Moreover, during the current 21 recession vacancy rates in Florida have been consistently above the national 22 average. Second, the trend in empty homes has been accelerating in recent 23 months. Again, this can be seen both in terms of the increase in the number of

minimal usage customers and in terms of the reported vacancy rates. At the
start of 2008 the number of minimal usage customers was about 328,000. By
the start of 2009 the number of minimal usage customers had risen to more
than 350,000. Likewise, the Census Bureau reports that Florida's quarterly
vacancy rates in 2008 were consistently above the prior year's level.

Q. Is adjusting the output of an econometric model for additional
 information in this manner an accepted forecasting technique?

A. Yes. The Commission has reviewed and accepted other adjustments to FPL's
econometric models in past cases. These have included adjustments for
energy efficiency and additional wholesale contracts in FPL's most recent
need determination filing. In addition, industry and academic experts have
recognized that the performance of forecasts reflecting such adjustments is
frequently superior to that of forecasts produced on a purely mechanical basis.

14 Q. Is FPL making any adjustments to the output of its econometric model
15 for new wholesale contracts in its forecast?

A. Yes. FPL is adjusting the output of its econometric model to reflect the
addition of two new wholesale contracts. First, a 75 MW power sale to
Seminole Electric Cooperative is projected for December 2008 through
December 2009. Second, partial requirements service to the Lee County
Cooperative begins in 2010. Lee County is projected to add an additional
1,228 GWh to NEL in 2010.

Q. Do the adjustments FPL is making to the output of its econometric model
 improve the accuracy of the forecast?

Yes. Although the econometric model is statistically sound and accurately 3 Α. reflects the historical data upon which it is based, it cannot reflect changes in 4 the environment not fully embedded in the historical data. For example, 5 events such as the rise in the number of empty homes and recent changes in 6 appliance standards are not adequately reflected in the model which is based 7 on historical data from January 1998 through October 2008. Thus, absent the 8 adjustments FPL is making to the output of its econometric model, energy use 9 per customer and ultimately NEL would likely be over-forecasted. As 10 discussed in FPL witness Hanser's testimony, this is evident in the pattern of 11 consistently negative residuals between March 2008 and October 2008. 12 Recent actuals provide additional support for FPL's position that the 13 adjustments to the econometric model are appropriate. Exhibit RM-8 shows 14 the output of the econometric model, the forecasted energy use per customer 15 with FPL's adjustments, and the actual energy use per customer for the 16 November 2008 through January 2009 time period. The exhibit shows that 17 the adjustments to the output of the econometric model significantly improve 18 the accuracy of the forecast based on the most recent period for which actuals 19 20 are available.

21 Q. What is FPL's forecasted energy use per customer?

A. FPL is forecasting a 1.7% decline in energy use per customer in 2009
followed by a 0.1% increase in 2010. The decline in 2009 is a continuation of
the three year trend in declining energy use per customer FPL has experienced 1 since 2006. Indeed, the forecasted decline in 2009 actually represents a 2 slower rate of decline than the 3.1% decline experienced in 2008. With the 3 additional load from Lee County and modest improvements in the economy, 4 5 energy use per customer in 2010 is expected to remain virtually flat. With stronger economic growth, the projected energy use per customer increases by 6 0.3% in 2011. Exhibit RM-9 shows the actual and forecasted energy use per 7 8 customer.

9

#### What is FPL's forecasted NEL? Q.

Based on the forecast of total customers and energy use per customer, FPL is 10 A. forecasting a 1.4% decline in NEL in 2009 followed by a 0.7% increase in 11 2010. With higher customer growth and economic improvements, NEL is 12 projected to grow at a rate of 1.6% in 2011. Exhibit RM-10 shows the 13 forecasted levels of NEL. 14

15 Q. Is FPL's NEL forecast reasonable?

Yes. The forecast reflects a careful review of the factors influencing energy 16 A. use per customer. The forecast is based on sound statistical methods 17 18 previously reviewed and approved by the Commission. In addition, a 19 comparison of the forecast with recent actuals suggests that the forecast is 20 reasonable.

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#### VI. CUSTOMERS AND SALES BY REVENUE CLASS

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#### Q. How does FPL forecast customers by revenue class?

As discussed in detail in MFR F-5, econometric models are developed to 4 Α. 5 forecast customers in the residential, commercial, industrial, and street & 6 highway revenue classes. Customer forecasts for the public authority, metrorail and wholesale classes are based on class specific information. 7 The 8 residential customer forecast is adjusted for the difference between the sum of 9 the revenue classes and the overall customers derived from the total customer 10 model.

## 11 Q. What are the primary inputs to determine the growth in customers by12 class?

- A. The growth in customers is primarily driven by population and economic activity. Population projections are the key inputs in forecasting of residential customers, which account for 88% of FPL's total customers. Economic activity is a key driver to both the commercial and industrial customers forecast. The number of street & highway lighting customers is projected as a function of residential customers. The customer forecast for other revenue classes is customer specific.
- 20 Q. How does FPL forecast billed sales?

A. A line loss factor and a billing cycle adjustment are applied to the NEL
 forecast to arrive at a forecast of total billed sales. Revenue class models are
 then developed to distribute the forecast of total billed sales to the different

revenue classes. Billed sales for the residential and commercial sector are
 adjusted proportionately for the difference between the sum of the revenue
 classes and the forecast of total billed sales. FPL's process and models used
 for forecasting billed sales are discussed in detail in MFR F-5.

5 Q. How does FPL forecast billed sales by revenue class?

A. Separate econometric models are developed for the residential, commercial,
and industrial revenue classes. Sales forecasts for the public authority, metrorail and wholesale classes are based on class specific information.

9 Q. What are the primary inputs to determine the growth in energy sales by
10 class?

11 Α. The key drivers for the revenue class models are similar to the assumptions 12 discussed earlier for the NEL forecast. These include real household 13 disposable income, the real price of electricity, cooling & heating degree 14 hours and changes in the appliance stock and efficiency standards which are 15 used to forecast residential sales. The commercial sales model relies upon a 16 similar mix of inputs, but uses employment rather than real household 17 disposable income. The industrial model incorporates housing starts as an 18 economic driver.

19 Q. What is FPL's customer and billed sales forecast by class?

A. A summary of FPL's billed sales, billed use per customer, and number of
customers by class can be found in Exhibit RM-11. Residential customers are
projected to grow at an annual rate of 0.05% in 2009, 0.4% in 2010 and 1.1%
in 2011. Residential billed sales are projected to decline by 2.2% in 2009, by

1		1.2% in 2010, and grow by 0.4% in 2011. Commercial customers are
2		expected to grow by 1.8% in 2009, 2.3% in 2010, and 2.5% in 2011.
3		Commercial billed sales are projected to decline by 1.5% in 2009 and grow by
4		1.2% and 2.6% in 2010 and 2011 respectively.
5	Q.	Is FPL's forecast of customers and billed sales by revenue class
6		reasonable?
7	A.	Yes. A forecast is considered reasonable if good judgment is used in
8		estimating and testing the models and if the results make sense when
9		compared to prior similar situations. FPL followed this approach in preparing
10		the forecast.
11		
12		VII. JURISDICTIONAL SALES
13		
13 14	Q.	How is FPL's forecast of billed jurisdictional sales determined?
13 14 15	<b>Q.</b> A.	How is FPL's forecast of billed jurisdictional sales determined? FPL's forecast of billed jurisdictional sales, or retail sales, is based on the
13 14 15 16	<b>Q.</b> A.	How is FPL's forecast of billed jurisdictional sales determined? FPL's forecast of billed jurisdictional sales, or retail sales, is based on the summation of the billed sales by retail revenue class.
13 14 15 16 17	Q. A. Q.	How is FPL's forecast of billed jurisdictional sales determined? FPL's forecast of billed jurisdictional sales, or retail sales, is based on the summation of the billed sales by retail revenue class. What is FPL's forecast of billed jurisdictional sales?
13 14 15 16 17 18	Q. A. Q. A.	<ul> <li>How is FPL's forecast of billed jurisdictional sales determined?</li> <li>FPL's forecast of billed jurisdictional sales, or retail sales, is based on the summation of the billed sales by retail revenue class.</li> <li>What is FPL's forecast of billed jurisdictional sales?</li> <li>FPL is forecasting billed jurisdictional sales of 101,078 GWh for 2009, a</li> </ul>
13 14 15 16 17 18 19	Q. A. Q. A.	<ul> <li>How is FPL's forecast of billed jurisdictional sales determined?</li> <li>FPL's forecast of billed jurisdictional sales, or retail sales, is based on the summation of the billed sales by retail revenue class.</li> <li>What is FPL's forecast of billed jurisdictional sales?</li> <li>FPL is forecasting billed jurisdictional sales of 101,078 GWh for 2009, a decline of 1.8% from 2008. This represents a lower rate of decline than the</li> </ul>
13 14 15 16 17 18 19 20	Q. A. Q. A.	<ul> <li>How is FPL's forecast of billed jurisdictional sales determined?</li> <li>FPL's forecast of billed jurisdictional sales, or retail sales, is based on the summation of the billed sales by retail revenue class.</li> <li>What is FPL's forecast of billed jurisdictional sales?</li> <li>FPL is forecasting billed jurisdictional sales of 101,078 GWh for 2009, a decline of 1.8% from 2008. This represents a lower rate of decline than the 2.4% experienced in 2008. For 2010 FPL is forecasting billed jurisdictional</li> </ul>
13 14 15 16 17 18 19 20 21	Q. A. Q. A.	<ul> <li>How is FPL's forecast of billed jurisdictional sales determined?</li> <li>FPL's forecast of billed jurisdictional sales, or retail sales, is based on the summation of the billed sales by retail revenue class.</li> <li>What is FPL's forecast of billed jurisdictional sales?</li> <li>FPL is forecasting billed jurisdictional sales of 101,078 GWh for 2009, a decline of 1.8% from 2008. This represents a lower rate of decline than the 2.4% experienced in 2008. For 2010 FPL is forecasting billed jurisdictional sales of 101,029 GWh, a decline of 0.05% from 2009. By 2011 billed</li> </ul>
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> </ol>	Q. A. Q. A.	<ul> <li>How is FPL's forecast of billed jurisdictional sales determined?</li> <li>FPL's forecast of billed jurisdictional sales, or retail sales, is based on the summation of the billed sales by retail revenue class.</li> <li>What is FPL's forecast of billed jurisdictional sales?</li> <li>FPL is forecasting billed jurisdictional sales of 101,078 GWh for 2009, a decline of 1.8% from 2008. This represents a lower rate of decline than the 2.4% experienced in 2008. For 2010 FPL is forecasting billed jurisdictional sales of 101,029 GWh, a decline of 0.05% from 2009. By 2011 billed jurisdictional sales is forecasted to rebound to a 1.5% growth rate and reach</li> </ul>
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> <li>23</li> </ol>	Q. A. Q.	<ul> <li>How is FPL's forecast of billed jurisdictional sales determined?</li> <li>FPL's forecast of billed jurisdictional sales, or retail sales, is based on the summation of the billed sales by retail revenue class.</li> <li>What is FPL's forecast of billed jurisdictional sales?</li> <li>FPL is forecasting billed jurisdictional sales of 101,078 GWh for 2009, a decline of 1.8% from 2008. This represents a lower rate of decline than the 2.4% experienced in 2008. For 2010 FPL is forecasting billed jurisdictional sales of 101,029 GWh, a decline of 0.05% from 2009. By 2011 billed jurisdictional sales is forecasted to rebound to a 1.5% growth rate and reach 102,514 GWh.</li> </ul>

# Q. How does FPL's forecast of billed jurisdictional sales compare with historical data?

The level of forecasted billed jurisdictional sales is below the growth in sales 3 Α. FPL has historically experienced. For example, billed jurisdictional sales 4 grew by 2.9% between 1999 and 2006. This growth was comprised of 2.3% 5 annual growth in the average number of customers and 0.6% annual growth in 6 7 jurisdictional use per customer. By contrast, the average number of customers is projected to grow by only 0.8% per year between 2006 and 2010 while 8 9 jurisdictional use per customer is projected to decline by 1.4% per year during the same time period. As a result, billed jurisdictional sales is projected to 10 decline at an average annual rate of 0.6% between 2006 and 2010. On a 11 12 weather normalized basis, the decline is slightly higher with a 0.8% average 13 annual rate of decline in jurisdictional billed sales between 2006 and 2010. 14 Nevertheless, the forecasted declines in billed jurisdictional sales are not extreme given recent trends. The forecast declines in billed jurisdictional 15 16 sales in 2009 and 2010 are less severe than the 2.4% decline experienced in 17 2008. Likewise, the 1.5% increase in billed jurisdictional sales forecasted for 2011 is comparable to the increases experienced in 2006 and 2007. 18

19 Q. Is FPL's forecast of billed jurisdictional sales reasonable?

A. Yes. The forecast is consistent with the forecasts of NEL and billed sales by
revenue class previously discussed. The forecast is based on statistical
methods previously reviewed and accepted by the Commission. In addition,
the forecast appears reasonable based on historical billed jurisdictional sales.

#### VIII. MONTHLY PEAKS

#### 3 Q. How does FPL develop its forecast of annual peaks?

The summer and winter peaks are each forecasted using an econometric Α. 4 The summer peak model incorporates real household disposable 5 model. income, the real price of electricity, cooling degree hours in the day prior to 6 the peak, and the average temperature on the day of the peak as explanatory 7 variables. The winter peak model uses real household disposable income, 8 heating degree hours the day before and the morning of the peak, and average 9 10 temperature on the day of the peak as explanatory variables. The summer and winter peak forecasts are also adjusted for changes in the appliance stock, new 11 wholesale contracts, and the impact of empty homes. 12

#### 13 Q. How does FPL develop its forecast of monthly peaks?

A. Monthly peaks, other than summer and winter, are developed using the
average historical ratios of monthly peaks to summer peak. This monthly
average is then multiplied by the corresponding summer peak to estimate the
monthly peak in any given year of the forecast period.

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#### IX. INFLATION FORECAST

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Q. What measures of inflation does FPL incorporate into its budget
assumptions?

A. FPL incorporates a number of measures of inflation in its budget assumptions
 including CPI, the Producer Price Index (PPI) for all commodities, PPI for
 intermediate goods, PPI for finished goods, and the Gross Domestic Product
 deflator, among others. The CPI forecast is also used in computing the
 Commission's O&M Benchmark.

#### 6 Q. How did FPL develop its CPI forecast?

A. FPL developed its CPI forecast based on a review of multiple inflation
scenarios from Global Insight and other publicly available forecasts. FPL also
considered the historical trends in CPI. FPL's forecast was ultimately derived
by averaging baseline and pessimistic scenarios from Global Insight.

#### 11 Q. What is FPL's forecast of CPI?

A. FPL is forecasting a 2.0% increase in the CPI in 2009 and 2010. This
represents a decline from the 3.8% rate of inflation experienced in 2008. The
forecasted decline in the rate of inflation is consistent with the consensus view
that the recession will dampen pressure on prices. Overall from 2006 to 2010,

### 16 the cumulative effect of inflation as measured by CPI is approximately 11%.

## 17 Q. How does FPL's CPI forecast compare with the historical rate of 18 inflation?

A. The forecast for 2009 and 2010 is below the long-term average rate of
inflation. The CPI has averaged a 2.8% annual increase in the last ten years
and a 3.1% annual increase since 1985. An inflation forecast below the longrun average rate of inflation is to be expected given the lingering recession
projected thru 2010.

### 1 Q. Is FPL's CPI forecast reasonable?

2 A. Yes. FPL's forecast is consistent with the consensus view that inflation will

3 moderate as a result of the economic slowdown. In addition, FPL's forecast

- 4 appears reasonable when compared with historical trends in inflation.
- 5 Q. Does this conclude your direct testimony?
- 6 A. Yes.

BY MR. ROSS: 1 Dr. Morley, have you prepared a summary of 2 0. your direct testimony? 3 Α. Yes, I have. 4 CHAIRMAN CARTER: Dr. Morley, you're familiar 5 with the light system? You were here Monday when I 6 7 mentioned those? 8 THE WITNESS: Yes. CHAIRMAN CARTER: Okay. Good. 9 MR. MOYLE: Mr. Chairman, can I just --10 11 CHAIRMAN CARTER: Yes, sir. MR. MOYLE: -- before she begins, I don't want 12 13 to interrupt, but on a point of clarification, we've just been handed a document. Is this the same document 14 15 that's attached to the prefiled testimony or is this 16 being given out for some other reason? MR. ROSS: These are, these are the same 17 18 document that's attached to the prefiled testimony and it's a document that Dr. Morley is going to use in her 19 20 oral summary. 21 MR. MOYLE: Okay. Thanks. But there's no 22 change as to what's in the prefiled? 23 MR. ROSS: No, sir. 24 MR. MOYLE: Okay. Thank you. 25 CHAIRMAN CARTER: Mr. Wright, did you have a FLORIDA PUBLIC SERVICE COMMISSION

comment?

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2 MR. WRIGHT: I had the same question, Mr. 3 Chairman. I thought that these might be revised 4 exhibits. I just wanted a clarification. Thank you, 5 sir.

CHAIRMAN CARTER: Okay. All right. You may proceed.

8 BY MR. ROSS:

**Q.** Dr. Morley, would you please provide your summary to the Commission?

A. Yes.

Good morning, Commissioners. The purpose of my testimony is to present and support FPL's customer and sales forecast. FPL's forecast effectively meets three criteria: It is realistic, fact-based and is designed to accurately project the 2010 and 2011 test years.

18 I would now like to briefly address each of 19 these criteria. First, a forecast is considered 20 realistic if its results are reasonable given recent 21 experience and historical trends. Our forecast of 22 energy use per customer illustrates this. In past 23 decades, energy use per customer generally increased, 24 but this has not been the case for a number of years. 25 As the chart immediately behind me shows, energy use per

customer has fallen since peaking in 2003, and the rate of this contraction accelerated last year.

FPL's forecast indicates that this trend will 3 continue in 2009, albeit at a more moderate pace, before 4 energy use per customer stabilizes in 2010 and then 5 increases slightly in 2011. Based on recent experience 6 and historical trends, this forecast represents a 7 realistic and balanced projection of energy use per 8 The same holds true for our forecast of 9 customer. 10 customers, which is shown on the adjacent chart, and of 11 sales.

12 Second, FPL's forecast is fact-based because 13 it appropriately reflects the factors determining our 14 customer and sales growth. Customer growth is 15 determined by population growth. With the state's 16 unemployment rate exceeding the national rate, the flow 17 of job seekers migrating to Florida has all but ceased 18 and is now offset by migration out of the state.

Demographic experts expect this trend to continue until population growth rebounds modestly in 2011. Consistent with these independent projections, FPL is forecasting little customer growth in 2009, followed by a slight improvement in 2010 and a return to more typical growth in 2011.

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Energy use per customer is influenced by the

economy, weather, electric prices, efficiency standards and the volume of our wholesale transactions. Each of these factors is appropriately reflected in our forecast.

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In terms of the economy, there is now 5 universal consensus that Florida is facing its most 6 severe recession in decades. History shows that the 7 recovery from such a significant economic downturn will 8 not happen overnight. Moreover, with a severely damaged 9 housing sector and virtually no population growth, 10 Florida is likely to lag the national recovery. 11 Accordingly, FPL's forecast is based on the lingering 12 recession Florida is likely to face through 2010, 13 14 followed by a gradual recovery in 2011.

Third and finally, FPL closely monitors the accuracy of its forecast, and the most recent data available confirmed that our sales forecast is extremely accurate. We expect this trend to continue and our forecast should provide an accurate projection of the test years. This concludes my summary.

21 MR. ROSS: Mr. Chairman, we tender the witness 22 for cross.

CHAIRMAN CARTER: Thank you. Before we
proceed, let me -- Mr. Wright and Mr. Moyle gave me this
list and I kind of jumbled it up, but I think our order

is OPC, SFHHA, FIPUG, the Attorney General, Mr. Stewart, 1 FRS, South Daytona, then staff. Is that the right 2 3 order? MR. MOYLE: Yes, sir. 4 CHAIRMAN CARTER: Okay. You may proceed. 5 CROSS EXAMINATION 6 BY MS. CHRISTENSEN: 7 Good morning, Dr. Morley. I'm Patty 8 Q. Christensen with the Office of Public Counsel. 9 I'd like to take you through the steps and the 10 process you used in developing your forecast. You would 11 agree that you ran a regression for the net energy load; 12 is that correct? 13 14 Α. Yes. And the net energy load is expressed as a use 15 Q. 16 per customer; correct? 17 Α. Yes. We ran an econometric model in which the 18 dependent variable was energy use per customer, and the econometric model is certainly one of our steps in the 19 20 process, not the only step, because we made appropriate 21 adjustments to the output of that model to ensure the 22 accuracy of our forecast. 23 Well, let me ask you about some of the Q. 24 independent variables which you used as inputs into your 25 model which you found significant.

Would you agree that those would include 1 cooling degree hours, heating degree hours, the Florida 2 household disposable income, real price, February dummy 3 variables, March 2003 dummy variables, and then 4 auto-regressive term to address audit correction? 5 Α. Yes. 6 Okay. Were there any other significant Q. 7 variables which you used as inputs into the model? 8 No. Those were the inputs. 9 Α. Okay. And you would agree that the time frame 10 Q. that was used in the model covered the historical 11 databases of January 1998 through October of 2008? 12 That's correct. 13 Α. Okay. In developing the Florida household 14 Q. disposable income, you made adjustments to the database 15 provided by Global Insight; is that correct? 16 17 We looked at a variety of estimates of Α. Yes. real household disposable income. We also reviewed the 18 19 history on the performance of real household disposable income. And what we saw is that during severe 20 recessions there's, and particularly when there's a 21 22 decline in employment, there tends to be a decline in real household disposable income as well. So we took 23 that into account as well as our inputs from Global 24 25 Insight.

Okay. So your adjustments were based on some Q. 1 assumptions about the economic recovery; correct? 2 They were based on the history of what Yes. 3 Α. actually happens in Florida when we have a severe 4 decline in real household disposable income. The best 5 example historically we had of that was the mid '70s 6 recession, because that was prior to this recession the 7 most severe recession that we've had. 8 So in modeling of that we saw that, you know, 9 it doesn't happen, recovery like from a severe recession 10 doesn't happen overnight. It tends to take quite some 11 time. And in fact I think in the mid '70s recession, I 12 think real household disposable income in Florida 13 declined for, I think it was about a year after the, you 14 know, official end of the recession was declared. So 15 based on that data we developed our forecast of real 16 17 household disposable income. 18 Q. And in developing those adjustments, you assumed the steepest decline would be in April 2009; 19 20 correct? 21 Yes. We assumed the sharpest percentage Α. 22 decline would be in April 2009. That was consistent 23 with, with Global Insight. And then we assumed a

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**Q.** So would you agree that FPL just felt that

lingering recession through 2010.

Global Insight did not pick the recessionary trends in 1 their forecast of Florida household disposable income? 2 Could you repeat that last phrase? 3 Α. Did -- I'm assuming since you made adjustments Q. 4 to it, it was FPL's belief or feeling that Global 5 Insight did not pick the recessionary trends in their 6 forecast, the correct ones for Florida household 7 disposable income? 8 I don't think that's true. It wasn't 9 Α. No. based on a feeling or a belief. It was based on the 10 data. And in fact I think Global Insight's overall 11 assessment on the Florida economy was negative, but I 12 think in this particular series they -- frankly, they 13 didn't get it right. I think we did get it right. 14 Now the real price forecast that you used came 15 0. 16 from the financial business unit; correct? It's true that the nominal price came 17 Α. Yes. 18 from the financial business unit. 19 And the real price forecast was developed in Q. 20 the last guarter of 2008; correct? That's correct. 21 Α. Since you were, since you were forecasting the 22 Q. 23 use per customer, the regression basically established 24 the historical relationship between each of the 25 independent variables, which we discussed earlier, and FLORIDA PUBLIC SERVICE COMMISSION

the historic, historical use per customers; correct? 1 Α. Yes. 2 And in your Exhibit RM-9 you show a trend of 3 Ο. declining energy use per customer starting in about 4 2006. 5 Yes. That's the same chart that's shown Α. 6 behind me. 7 Okay. And this decline in energy use is 8 ο. reflected in your historical database of use per 9 10 customer; correct? 11 Α. Yes. Is part of the reason for this reduction due 12 **O**. to the increase in the minimum use accounts? 13 Yes, partially. I think especially in 2000 14 Α. 15 and -- in the later half of 2008, that's when we really saw a significant acceleration in the number of minimum 16 use customers, towards the second half of 2008. 17 So as customers converted from a regular use 18 0. 19 account to a minimum use account, the reduction in kWh 20 used to affect the customer per use in your historical 21 database; correct? 22 I'm sorry. I'm going to really have to ask Α. 23 you to repeat that. 24 Certainly. So as customers convert from Q. 25 regular use accounts to a minimum use account, the FLORIDA PUBLIC SERVICE COMMISSION

reduction in the kWh use would affect the per -- the use per customer used in your historical database; correct?

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A. Yes. Yes, to an extent. Of course, as I said, we've actually seen an acceleration in the number of minimum use customers or what we sometimes call empty homes. And that acceleration towards the latter half of 2008 and in fact what we continue to see today was not in historical data.

9 Q. Well, let me ask you this, and I think you may 10 have mentioned it in your opening statement. After 11 reviewing your forecasts, you determined that it was 12 necessary to make some out-of-model adjustments; 13 correct?

14 Α. Yes. Absolutely. If I could explain for a 15 moment, is we have an econometric model that creates a 16 historical relationship. But rather than, you know, 17 blindly following that model, we carefully look at how 18 that model is performing and whether it's tending to underforecast or overforecast. And what we saw in the 19 20 model is beginning in March of 2008 there was a 21 consistent pattern of overforecasting. And in fact I 22 think between March and December 2008 it was 23 overforecasting by about 3.3 percent, and that tendency 24 to overforecast actually got worse in the later months 25 of 2008 in part because of this acceleration in the

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number of empty homes.

So what we did is we developed a variety of adjustments. We looked at other data, we looked at how the number of empty homes is increasing, and we made adjustments. And those adjustments reduced the forecast by about 3.4 percent. So those adjustments were necessary to improve the accuracy of the forecast and that's why we made them.

9 Q. And I appreciate that long explanation, and I
10 would like to delve into that with some short,
11 hopefully, questions about the adjustments that you did
12 make.

The adjustments to the regression model include the energy efficiency adjustment, adjustments for change in wholesale load, the reanchoring adjustment and the minimum use customer adjustment; is that correct?

19 Q. And in developing the reanchoring adjustment, 20 you first adjusted the net energy for load forecast by 21 the energy efficiency and the wholesale loads; correct?

A. Yes. The reanchoring was based on sort of an average level of 2008 use per customer, so that ended up reducing the forecast by about 1.3 percent. So that was a necessary step in addressing this tendency to

A. Yes.

overforecast. But of course it did not fully address 1 the tendency to overforecast, since that tendency was 2 between 3.3 and 4.4 percent. 3 Okay. Well, continuing on the same theme, Q. 4 after you made those adjustments, then you compared the 5 revised net energy load to the actual net energy load 6 for each month of 2008; is that correct? 7 Α. Yes. 8 Okay. And I think, as you said, the revised 9 Q. NEL was still higher than the actual NEL by an average 10 11 of 1.29 percent; correct? 12 The 1.29 percent was our reanchoring Α. 13 adjustment. Yes. 14 Q. So the question, or the answer to my question 15 was your forecast was still 1.29 percent off of the 16 actual; correct? 17 Yes, for the year 2008 as a whole. However, Α. 18 the trend was actually much worse than that. If we 19 looked at the March through the December, it was far 20 larger than that 1.3 percent. 21 Q. Okay. So moving on to the additional forecast 22 for 2009, 2010 and 2011, you decided to apply the 23 1.29 percent, and that's what you're calling the 24 reanchoring adjustment? 25 Α. Yes.

Okay. And now FPL assumed that the average 1 Q. historical percentage of minimum use homes was 7 2 percent; correct? 3 Yes. And that was based on the average during Α. 4 the 2003 and 2004 period. And the reason we picked that 5 period is that was a time when vacancy rates in Florida 6 7 were, were near their long-term average, so that's why 8 we picked that number. 9 Okay. Well, and in discussing the minimum use Q. 10 homes you would agree that they were increasing in 2008; 11 correct? 12 Α. Oh, yes. I mean, there was a significant 13 acceleration, particularly in the last half of 2008. 14 And in fact that percent continues to go up today. 15 Q. Okay. And so you would agree that the percent 16 of minimum use homes in 2008 was above the historical 17 average that you used of 7 percent; correct? 18 Α. Yes. And particularly an acceleration in the 19 later months. 20 Q. And have you calculated what the percentage 21 was for 2008? 22 I, I'm sure that I have. I don't know it off Α. 23 the top of my head. 24 Let me ask you this. Do you know how much the 0. 25 correction to the load forecast would have been if you FLORIDA PUBLIC SERVICE COMMISSION

had made an adjustment for minimum use accounts in 2008?
A. Yes. For the year as a whole it would have been about, I think, 0.77 percent.

Q. So you agree that if you had made the adjustment for the minimum use accounts in 2008, the revised NEL after the energy efficiency and the wholesale adjustments would have been made would have caused it to have been lower; correct?

A. Yes. But it still, again, the overall problem
was an overforecasting error between 3.3 and
4.4 percent. So adding in the reanchoring, which was
about 1.3, and adding in the empty homes, which was
about .77, still did not totally address that problem.

14 Q. After you compared the revised NEL forecast to 15 the actual forecast, I think you agreed with me that the 16 revised NEL forecast would have been lower. And 17 therefore if you compared that revised forecast to the 18 actual NEL, the difference would have been less; 19 correct?

A. The difference would still not have addressed our overforecasting problem, which ranged from 3.3 to 4.4 percent. Even if we add in -- we have to add in all three adjustments, energy efficiency, empty homes, and reanchoring.

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**Q.** Understandable. But let me make sure I get an

answer to the question that I asked, which was when you compared the revised NEL to the actual after you had, if you had included a minimum use adjustment in 2008, the difference would have been less; correct?

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5 A. Yes. However, it's, you know, in order to 6 address the overforecasting problem, we needed all three 7 adjustments.

8 Q. So the average percent difference would have 9 been less than the 1.29 that you used for the 10 reanchoring adjustment; correct? If you had included 11 the energy efficiency adjustment, the wholesale 12 adjustment and made a minimum use adjustment in 2008, 13 your reanchoring adjustment would have been less than 14 the 1.29 that you used.

A. I don't agree, because our overall objective
 was to address that 3.3 to 4.4 percent overforecasting.

Q. Well, let me ask you this. In 2009, 2010 and 2011, you applied both a reanchoring and a minimum use adjustment; correct?

A. Yes. And that's one of the primary reasons our forecast for 2009 is as accurate as it is.

22 **Q.** Let me change subjects a little bit. In 23 general when you are running a regression model and you 24 see that the fit of the model is becoming less accurate 25 over time, wouldn't you search for other independent

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variables that would improve the equation?

A. Oh, absolutely. And I think we, we spent many months trying to get the model right, and we also spent a lot of time looking at what the appropriate variables would be. And I think that's why we've ended up with the model we have and the adjustments we have, and that's why we are getting such an accurate forecast.

Q. Well, let me ask you this. After -- we talked
about the independent variables that you had used and
then you said you started to see the model trending
differently. Did you test any other independent,
independent variables to try and get a better fit in the
NEL model?

14 Α. We, as I said, we have looked at many models 15 over the last year or so. We've looked at many 16 variables. I think one of the things we came up with is 17 the adjustments for empty homes, which I think is very 18 appropriate. It's giving us a much more accurate 19 forecast. So have we looked at different variables, 20 have we looked at different models? Absolutely. And I 21 think we've got it right.

Q. Well, did you test using the minimum use
accounts as an independent variable in the forecast
rather than using it as an out-of-model adjustment?
A. I think we did. I know we looked at using

vacancies as a variable, and that tended to, you know, 1 really depress the forecast because it had a coefficient 2 greater than one. So I think the more conservative 3 approach we took, and I say conservative in terms of its 4 5 impact on the load forecast, we took the more 6 conservative route of using the minimum use adjustment 7 as an adjustment, not an independent variable. Okay. So you're uncertain as to whether or 8 Q. 9 not you actually ran the minimum use accounts as an 10 independent variable? I would say no, I'm not uncertain. We did not 11 Α. 12 use minimum use adjustment as the independent variable. 13 We did use vacancy rates, and that created a lower 14 forecast than, than what we have. 15 Do you know how much lower? Q. 16 Α. No, I do not. If I could explain that a 17 little bit more. In what we're doing with the empty 18 homes adjustment, we are just literally adjusting for 19 the fact that we have empty homes. I think when we 20 create, add vacancy rates as a variable, we're not only 21 doing that, but we're also taking into account like a 22 wealth effect, which is also depressing use per 23 customer. So we took the more conservative route of 24 just using the empty homes or minimum use adjustment as 25 an adjustment, not a variable within the model.

Well, in making the minimum use account Q. 1 adjustment, you selected the minimum use account 2 percentage from 2003 and 2004 as representative of the 3 historical average; correct? 4 That's correct. Α. 5 Okay. But the historical energy use data 6 Q. reflected the use of all of FPL's customers, including 7 minimum use customers; correct? 8 That's correct. Although you find with a 9 Α. regression model that it sometimes does not fully 10 reflect changes in the environment, and that's why we 11 saw the problem in the model where we were 12 overforecasting and we needed to make the adjustment. Ι 13 think it's not as simple as a matter of fact of, oh, 14 this was occurring at such and such a date, therefore 15 the model must reflect it, because the data and the 16 forecasting error showed that wasn't the case. 17 Wouldn't you agree though that the historical 18 Q. database reflects periods that were considered closer to 19 20 the long-term averages? I think the, the best measure of the 21 No. Α. 22 long-term average is what was happening in vacancy rates, and I think vacancy rates were very near their 23 historical average between 2003 and 2004. 24 But isn't it true that your historical 25 Q.

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database of use per customers reflected the minimum use accounts from 1998 through October 2008?

A. Yes, it did. And that's why when we make the adjustment for minimum use customers -- we've always had a certain level of minimum use customers. We're not adjusting for that. We're only adjusting for the delta, if you will, the increase in minimum use per customers that we've had above that long-term average.

9 Q. Let me change a little bit. If the economy
10 recovers, recovery occurs at a faster pace than you've
11 modeled in your Florida household disposable income,
12 then the result would be an increase in the expected
13 NEL; correct?

14 Yes. All things being equal, that would be Α. 15 the case. Of course in real life all things are never 16 equal. And in fact I think, if anything, we might have 17 been a little optimistic in our forecast of real 18 disposable income. We assumed that this recession was 19 not going to be as severe as the mid '70s recession, and 20 unfortunately we know now it's actually more severe. 21 And I think that's, just to give you an example, we've 22 lost almost a half a million jobs in Florida. Our 23 percentage decline in employment is actually greater 24 than it was in the mid '70s recession, and unfortunately 25 the recession is not over yet.

1 Ο. If the percentage of the minimum use accounts 2 declines at a faster rate than you have assumed, then 3 the result would also be an increase in the expected NEL; correct? 4 Yes, in theory. Of course, the reality is we, 5 Α. the increase in empty homes is actually occurring faster 6 7 than we forecasted. So that's the reality. Now does FPL get its database for population 8 Q. projections from UF Bureau of Economic and Business 9 Research? 10 11 Α. Yes, we do. Okay. And how often did UF generally update 12 Q. its population projections in the 2000, 2007 time frame? 13 Quite a few. I would say -- I can't give you 14 Α. an exact number, but I think in general we may look at 15 it anytime there's a revision to the population. 16 17 Do they generally put out their population Q. projections on an annual basis, biannual basis during 18 19 that time frame? 20 There have been a number of revisions Α. No. 21 recently to the Florida population. In fact, to give 22 you an example, our forecast is based on the 23 October 2008 Florida population forecast. Since that time two things have happened. In March of 2009 the 24 25 University of Florida issued another forecast that was

lower than what we're forecasting. So that's a risk to the forecast that our load forecasts may actually be too

The other thing that happened quite recently is that the University of Florida issued an estimate for the, for the population in Florida, not a projection, but an estimate of the actual population as of April 2009. And that estimate shows that we are, instead of growing, we lost population I think around by about 58,000 in this year. So those are certain things that happened after we developed the forecast, and those would tend to depress our forecast or reduce the level.

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high.

13 So back to my, my question, I guess, and Q. following up I think on some of the information I heard 14 15 in your response, you would agree that in the 2008, 2009 16 time frame U of F has generated more population forecasts or more frequent population forecasts than it 17 generally had done in the past concerning the 2000 to 18 2007 time frame. 19

Yes. And all of those forecasts have been 20 Α. 21 progressively lower.

22 MS. CHRISTENSEN: No further questions. 23 CHAIRMAN CARTER: Thank you. 24 Mr. Wiseman? 25

MR. WISEMAN:

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Thank you, Mr. Chairman.

1	CROSS EXAMINATION
2	BY MR. WISEMAN:
3	<b>Q</b> . Good morning again, Dr. Morley. Ken Wiseman
4	for the South Florida Hospital and Healthcare Council
5	Association. Excuse me.
6	A. Good morning.
7	<b>Q.</b> Dr. Morley, you're the Director of Load
8	Forecasting and Analysis for FPL; is that correct?
9	A. Yes.
10	<b>Q.</b> And as I understand it, in that capacity
11	you're responsible for development of FPL's peak demand
12	energy customer and economic forecast; is that right?
13	A. Yes.
14	<b>Q.</b> Now would you agree that the forecasts that
15	you provide are a major input to the forecast of base
16	revenues for FPL for 2010 and 2011?
17	A. Yes.
18	<b>Q.</b> And would you also agree that the customer and
19	sales forecasts that you provide are very important, are
20	very important in determining billing determinants for
21	FPL?
22	A. Yes.
23	<b>Q.</b> Now let's just speak hypothetically. To the
24	extent that you would build, I'm sorry, that you would
25	forecast customer growth in kilowatt hours of, let's
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1	say, 2 percent, all other things being equal, that would
2	translate to lower billing determinants than if you were
3	to forecast customer growth in kilowatt hour sales of,
4	let's say, 10 percent?
5	A. Yes. I'm going to repeat the question to make
6	sure I got it right.
7	Q. Sure.
8	<b>A.</b> I think you're saying that if customer growth
9	changes by 10 percent, that's probably a bad number,
10	1 percent, there would be a, all things being equal, a
11	corresponding impact on the sales forecast.
12	<b>Q.</b> Yes. And, and the higher the forecast, the
13	higher the billing determinants. And vice versa, the
14	lower the forecast, the lower the billing determinants;
15	correct?
16	A. Yes.
17	<b>Q.</b> Okay. Now would you agree that lower billing
18	determinants means that you're spreading the cost of
19	providing service over fewer units that leads to a
20	higher unit rate; is that correct?
21	A. I yes, I think that's true, all things
22	being equal. However, I'm not qualified to discuss the
23	cost side of the equation in terms of how changes in
24	load would affect our cost.
25	<b>Q.</b> Yeah. And I'm going to ask you, I understand

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that's someone else's area of testimony. I'm going to just ask you one more question about billing determinants at a very high level just to put things in context.

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As an example, let's say we have a utility that has a cost of service of \$100, and let's say that it has consumption of 100 kilowatt hours per year. Let's also say that the billing determinants are forecasted as 100 units. Under that hypothetical, the unit rate for electricity would be \$1; correct?

A. I think that hypothetical example is right.
I'm not sure how that would actually translate down to
the rate class level. You might want to discuss that
with Ms. Deaton.

Q. I will discuss that later with Ms. Deaton.
Again, just a couple of very high level questions to put
things into context.

18 So under my hypothetical -- and I apologize. 19 One thing I didn't say that was at least implicit within 20 the hypothetical is that the \$100 cost of service includes the authorized return of, return on equity for 21 the utility. Okay? So with that understanding, if the 22 23 utility sold 100 units of electricity at a dollar, it 24 would recover its full cost of service inclusive of its 25 return on equity; correct?

Mr. Wiseman, I think you're getting into cost 1 Α. 2 of service questions that I'm really not qualified to 3 answer on. All right. That's, that's fine. I'll ask 4 Q. 5 Ms. Deaton that question. You would agree that the Florida economy has 6 7 been hit pretty hard by the economic downturn; correct? 8 Α. Yes. And now do you recall that SFHHA asked -- it 9 Q. 10 served FPL with a request for production of documents 11 that was in fact directed to you that asked you to 12 produce documents that discussed the, or referred to the 13 slowdown that commenced in customer growth in 2008? Do 14 you recall that discovery request? 15 Α. Yes. 16 And you recall you did produce a number of Q. 17 documents responsive to that request; correct? 18 Α. Yes. Very many documents. 19 0. All right. I am going to -- I'd like to go 20 through a number of those documents, if we could. And 21 we'll start with -- Ms. Spina is going to assist me in 22 ----23 CHAIRMAN CARTER: Do you need a number, Mr. 24 Wiseman? 25 MR. WISEMAN: Yes, I do need a number. FLORIDA PUBLIC SERVICE COMMISSION

CHAIRMAN CARTER: Commissioners, we're at 405. 1 405 is the next number. Short title? 2 MR. WISEMAN: Economic Indicators. 3 CHAIRMAN CARTER: Excellent. 4 MR. WISEMAN: You know, after your discussion 5 on Monday I went back and changed the cover sheets on 6 every one of these. I think I came up with some really 7 shortened. 8 CHAIRMAN CARTER: You did. You did a 9 fantastic job. Thank you so much. 10 MR. WISEMAN: I pulled staples out with my 11 12 fingers to do it too. CHAIRMAN CARTER: Very good. Number 405, 13 Commissioners, economic analysis -- Economic Indicators. 14 Economic Indicators. 15 (Exhibit 405 marked for identification.) 16 17 BY MR. WISEMAN: Dr. Morley, do you need a minute to leaf 18 Q. through these, through these documents? 19 20 Α. I would appreciate that. Thank you. Sure. Go ahead. Just let me know when you're 21 0. 22 ready. 23 Α. I believe I'm ready. 24 Okay. Great. Now, first of all, you would Q. 25 agree that this is a report that FPL circulates that

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1 contains summaries of certain economic indicators that 2 impact FPL's performance? Is that a fair characterization of what these documents are? 3 4 Α. Yes. Now can you refer to the first document? And 5 Q. if you see -- and I'm referring to page -- it's Bates 6 7 Page FPL 11415. Do you have that? 8 Α. Yes. 9 Q. Now this is the cover page, or Page Number 10 1 of the report for August 2008; correct? 11 Α. Yes. 12 Now if I look at the second paragraph on that Q. 13 page, am I correct that it says that -- first I'm 14 looking, it says, "In August, FPL's customer count was 15 897 below August 2007." Do you see that? 16 Α. Yes. 17 And so that indicates that there was actually Q. 18 negative customer growth on FPL's system in August of 19 2008; correct? 20 Yes. And I believe this was the first month Α. 21 that pattern of year-to-year decline in customer growth 22 occurred. 23 Q. Yes. And, in fact, if you look at the very next sentence, it says that based upon the historical 24 25 records available, that was the first time that that had FLORIDA PUBLIC SERVICE COMMISSION

1	happened in FPL's history; correct?
2	A. Correct.
3	<b>Q.</b> Now continuing in that same paragraph,
4	skipping, I think, just one, two sentences, it indicates
5	that FPL continues to experience an increase in the
6	number of inactive meters. Do you see that?
7	A. Yes, I do.
8	<b>Q.</b> And can you explain what that means by
9	inactive meters?
10	A. Yes. I hope I'm not giving too long an
11	explanation here. But if we were to talk about the life
12	cycle of an account, is the first thing that happens is
13	there's a new service account, we go out and we put out
14	the meter and then that meter is turned on. That
15	becomes an active account. And when someone leaves or
16	moves and they decide not to keep their electricity on,
17	that becomes an inactive account. So it's where there's
18	a meter out there but it is no longer counted as an FPL
19	customer.
20	<b>Q.</b> Okay. And I think in the latter part of the
21	sentence I just read it indicates that inactive meters
22	were at an all-time high as of August 2008; correct?
23	A. Correct.
24	<b>Q.</b> All right. Now if we could turn to the report
25	for September 2008, which starts three pages later in
1 the document, this would be Bates Page FPL 111439. Can you let me know when you're there? 2 3 Α. I'm there. All right. In the -- well, I guess it's still 4 Q. 5 the first paragraph on this page. But maybe about 6 60 percent of the way down the page it indicates that 7 for the second month in a row FPL experienced negative 8 customer growth. Do you see that? 9 Α. I'm sorry. You're going to have to give me a 10 moment. 11 Sure. It's one, two, three, four, five, six, Q. 12 I think it's the seventh line down, about right in the 13 middle of the page. 14 I'm there. Α. 15 Right to left. And so in September 2008 for 0. 16 the second month in a row FPL experienced negative 17 customer growth again; is that correct? 18 Α. Yes. 19 And does it also indicate just two lines down 0. 20 from that that the number of inactive meters had 21 increased from, had increased from what you had seen in 22 August 2008; correct? 23 Α. Correct. 24 And it also indicates in the next line that Q. 25 the percentage of low use customers continues to FLORIDA PUBLIC SERVICE COMMISSION

increase; right? 1 2 Α. Yes. And the low use customers that that's 3 0. referring to are residential customers; is that true? 4 Α. Yes. 5 And those would be -- and low use is defined 6 Q. in this document as customers that are using between one 7 8 and 200 kilowatt hours per month. Is that what, how FPL 9 defines a low usage customer? 10 Α. Yes. All right. Can we refer now to the next 11 Q. 12 document in this packet, which is the report for 13 October 2008? And this is at Bates Page FPL 111436. I'm there. 14 Α. 15 All right. In, let's see, it's one, two, Q. 16 three, four lines down, it indicates that for the third 17 month in a row FPL is continuing to experience negative 18 growth. Is that true? 19 That's true. And I don't mean to jump ahead, Α. 20 but that continues to be true today. If we looked at 21 our most recent data, which would be for July, we are 22 continuing to experience a year-to-year decline in the number of customers. 23 And down in the last couple of lines at the 24 Q. 25 text above the data, it indicates that inactive meters

had grown to just about, just below 300,000; is that 1 2 true? 3 Α. Yes. And that was an increase of 56,000 inactive 4 Q. 5 meters as compared to October of 2007; correct? I'm sorry. You said 56 or 57? 6 Α. I hope I said 56. If I misspoke, I apologize. 7 Q. Yes. 56 is the correct number. 8 Α. All right. Now so that we don't burden the 9 Q. record, would you agree that -- first of all, the 10 reports that are here are the monthly reports through 11 12 March 2009. Would you agree that if we were to go 13 through these reports one by one, that the same trend 14 lines we've been discussing would be reflected in each 15 of those reports? Yes. I believe, as I mentioned a moment ago, 16 Α. 17 the trend in year-to-year declines in the number of 18 customers continues today. 19 All right. Now if we could have marked as the Q. 20 next exhibit in order, which I believe would be 406. 21 CHAIRMAN CARTER: You are correct, 406. And 22 you're doing a fantastic job with the short titles. 23 Keep your streak alive. 24 MR. WISEMAN: Hey, this one is right there as 25 well. Negative Sales Growth.

CHAIRMAN CARTER: Negative Sales Growth. 1 2 Perfect. Thank you. (Exhibit 406 marked for identification.) 3 BY MR. WISEMAN: 4 5 Q. Dr. Morley --CHAIRMAN CARTER: Hang on one second. 6 7 MR. WISEMAN: I'm sorry. CHAIRMAN CARTER: Let all the parties get a 8 copy. I appreciate your enthusiasm. I remember when I 9 was in ninth grade, Ms. Locklear said "Speed and 10 11 accuracy equals efficiency." So I appreciate your urge toward efficiency. You may proceed. 12 MR. WISEMAN: I'm trying. Thank you. 13 14 BY MR. WISEMAN: Dr. Morley, the document that's been marked 15 Q. 16 for identification as Exhibit 406, does this appear to 17 you to be an FPL presentation about the three topics 18 that we've been discussing, meaning inactive accounts, 19 negative customer growth and low usage customers? 20 Α. These are, these three pages are, certainly 21 the first two address that. I don't know what the -- I 22 don't have the full document in front of me, so I don't 23 know what the purpose of the full presentation is. But 24 I would certainly agree that the first two pages discuss 25 inactive accounts and low usage customers.

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1	<b>Q.</b> And the third page, I hope you have that,
2	shows the sales forecast information?
3	A. Yes. I have that.
4	${f Q}$ . Okay. Now this particular presentation, and
5	I'm referring now to the first page, so it's Page FPL
6	111446, shows that inactive accounts for 2008 were
7	reported at 57,000. That was the change in inactive
8	accounts. So the, in other words, that's the increase
9	in the number of inactive accounts in 2008; correct?
10	A. Yes.
11	${f Q}$ . And do you know, is that an actual number as
12	opposed in this document as opposed to a forecast?
13	A. Yes. The 2008 is an actual number.
14	<b>Q.</b> And then the 2009 number of 53,100 would
15	obviously be a forecast; correct?
16	A. No, actually it's not. I believe that's a
17	year to year based on January to January.
18	<b>Q.</b> Oh, thank you. I stand corrected.
19	All right. Now could we refer to the second
20	page of the document, Bates Page FPL 111447. As I look
21	at this page, at the graph here, it looks like low usage
22	residential customers has grown by approximately 1,
23	1 percent from January 2007 through December 2008; is
24	that correct?
25	A. If you'd give me just a moment. Could you
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repeat those periods?

Q. It looked to me like, and I'm just eyeballing it, but it looks to me like it's 1 percent, 1 percent growth in low usage residential customers from January 2007 through December 2008.

6 MR. ROSS: Mr. Chairman, while Dr. Morley is 7 pondering that, I would just like to request that if 8 counsel for the hospital association is going to use FPL 9 documents like this, which is something we produced and 10 we wouldn't have an objection to, they should at least 11 have some sort of a date on them. These presentations 12 have a cover page with a date on it, and that should also be included in the exhibit to give the witness some 13 14 context as to when this was presented.

15 MR. WISEMAN: Mr. Chair, we've tried to do 16 that where feasible. In many instances -- and where we 17 got a document with a cover page on it, the cover page is in these exhibits. But we also got certain 18 19 documents, and this in fact is one of them, where they 20 were just pieces of, of, from a larger presentation. So 21 I would like to try to accommodate FPL where possible. 22 This is one instance where we couldn't do that. 23

CHAIRMAN CARTER: Ms. Brubaker.

MS. BRUBAKER: Since these documents were, as I understand it, provided by FPL in response to a

production request and looking at the documents in 1 question, it does at least provide a date for the, the 2 source data. For instance, looking at the bottom of the 3 page, Bates stamped 111447, source, at the very bottom 4 5 of the page, source, FPL data through January 2009, I think that does at least provide some context of the 6 7 date, of the data, which is specifically what the 8 questions go to, rather than the presentation itself. So, you know, yes, in general, the best 9 practice is to have the entire document available. 10 Since the entire document didn't provide the information 11 12 of which counsel is asking, I think what is indicated on 13 the page is perhaps sufficient for this line of 14 guestioning. 15 CHAIRMAN CARTER: Okav. 16 You may proceed, Mr. Wiseman. 17 MR. WISEMAN: Thank you, Mr. Chair. 18 BY MR. WISEMAN: 19 I think, Dr. Morley, there was a pending 0. 20 question of just whether this page we've been referring 21 to, again, for clarity, FPL 111447, reflects a growth in 22 low usage residential customers of approximately 23 1 percent from January 2007 through -- it's either, it's 24 hard to tell on here -- it's actually, it's probably 25 through January 2009. And I just was asking if you

1 could verify that. Yes. I would agree with that. 2 Α. All right. And then if we could refer to the 3 ο. third page of the document. Looking at the bottom line, 4 total retail, it looks like to me that you, meaning FPL, 5 experienced negative customer growth in 2008 versus 6 2007, and that you were forecasting the same 7 relationship in 2009 versus 2008. Is that correct? 8 I'm sorry, Mr. Wiseman. Could you repeat that 9 Α. 10 question? 11 Yes. I'm just trying to see if I'm Q. 12 interpreting this last page correctly. And as I looked 13 at it, it indicates that FPL experienced negative 14 customer growth in 2008 versus 2007, and it was forecasting as of the date of this docket the same 15 16 relationship of negative customer growth in 2009 versus 2008. 17 18 No, I don't think that's right, in fact, Α. 19 because I know our customer forecasts were actually 20 showing positive customer growth, not negative customer 21 growth. I think you can see that if you look at the 22 line that says customers, 2009 versus 2008, you see a 23 positive 0.2 percent. 24 Q. Right. Well, I'm looking at -- again, I said 25 I'm looking at the line that says total retail. And if

1 I look at the right-hand, the, on the right-hand side of 2 the page, it says change, negative 0.2 percent. Doesn't 3 that indicate negative growth? 4 Α. Yes, it does. And maybe I misheard you. Ι 5 thought you said negative customer growth. 6 Q. I'm sorry if I used the words "customer 7 growth." I apologize. I did not intend to. 8 So this shows negative, actually this shows 9 negative kilowatt hour sales growth; would that be 10 accurate? 11 Α. Yes. And in fact, as I think I might have 12 mentioned in my opening summary, is we are forecasting a 13 decline in sales this year. 14 MR. WISEMAN: Now if I could have marked as 15 the next exhibit in order, it would be --16 CHAIRMAN CARTER: 407, Number 407. 17 MR. WISEMAN: And this one, the description is 18 Inactive Accounts. 19 CHAIRMAN CARTER: Oh, great. 20 MR. WISEMAN: I'm on a roll. 21 CHAIRMAN CARTER: You are indeed. 407, 22 Commissioners, Inactive Accounts. Thank you. 23 (Exhibit 407 marked for identification.) 24 You may proceed, Mr. Wiseman. 25 MR. WISEMAN: Thank you.

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## BY MR. WISEMAN:

Q. Dr. Morley, could you refer to, well, what's effectively the first page of the document, Bates Page FPL 111387? Now, first of all, you would agree that the data that are reflected on this page would be through February 2009; correct?

A. Yes.

Q. And if we look at the bar graph on the right-hand side where it says change in inactive accounts, am I correct that what this indicates is that inactive accounts as, through February 2009 was 54,100; correct?

A. Yes. There was an increase in inactive
accounts year to year in February of this year. And in
fact that trend continues today.

Q. Yes. So this was an -- we had looked at a
similar bar graph in the last exhibit, and this
indicates an increase in inactive accounts versus the
data that was shown through January 2009; correct?

A. Yes. The chart we're looking at now is
through February 2009. I believe the earlier chart was
through January.

Q. Okay. And then turning to the last page of
the document, we see another graph of low usage
residential customers. And would you agree that that

graph shows that the number of low usage customers is 1 continuing to grow from January 2009 through 2 February 2009; correct? 3 Α. Correct. 4 MR. WISEMAN: Okay. Now if we could have 5 marked as the next exhibit in order. 6 CHAIRMAN CARTER: That would be Number 408. 7 MR. WISEMAN: And the description of this 8 9 document is All Exec Meeting 11-20-08. CHAIRMAN CARTER: You were doing so well. 10 11 Let's try again. MR. WISEMAN: Well, see, I was trying to be 12 13 responsive to FPL's concern on this one because I wanted 14 to put a specific date on it. 15 CHAIRMAN CARTER: Okay. All Exec Meeting 16 11-20-08. That's what --17 MR. WISEMAN: Yes. 18 CHAIRMAN CARTER: Okay. Commissioners, for 19 the record 408 is All Exec Meeting 11-20-08. 20 (Exhibit 408 marked for identification.) 21 You had me spoiled with those two-word titles, 22 you know. But, you know. 23 MR. WISEMAN: Well, I was trying. 24 CHAIRMAN CARTER: You may proceed, 25 Mr. Wiseman. FLORIDA PUBLIC SERVICE COMMISSION

MR. WISEMAN: Thank you. 1 BY MR. WISEMAN: 2 Dr. Morley, can you -- first of all, just from 3 ο. the cover page to the actual presentation, this document 4 indicates that this was a presentation at an executive 5 meeting within FPL; would that be a correct 6 7 interpretation? Α. Not completely. I think this was material 8 prepared for an executive presentation. I don't know if 9 it actually ended up being presented or not. 10 All right. Can you turn to the page that has 11 Q. 12 the bullet points on it, so that would be Page FPL 111460. The fourth bullet point down indicates that the 13 14 rise in inactive meters and low usage customers 15 indicative of empty home are all, are at all-time highs. 16 Do you see that? 17 Α. I do. 18 And do you agree with that observation as of Q. November 20, 2008? 19 20 Α. Yes. 21 And would you agree with that -- is that true **Q**. 22 today as well? 23 Α. Yes. It continues to be true today. 24 MR. WISEMAN: All right. Now if we could 25 refer -- have marked as the next exhibit in order. FLORIDA PUBLIC SERVICE COMMISSION

CHAIRMAN CARTER: That would be Number 409. A 1 2 short title, please. MR. WISEMAN: I'm sorry. Is it four - okay. 3 4 Sorry. CHAIRMAN CARTER: Yes. 409. 5 MR. WISEMAN: Okay. Class Sales 2005-2008. 6 7 CHAIRMAN CARTER: Class Sales 2005-2008. 8 Thank you. (Exhibit 409 marked for identification.) 9 BY MR. WISEMAN: 10 11 Now, Dr. Morley, this was an interrogatory Q. 12 that SFHHA posed to Ms. Deaton, but am I correct that 13 you sponsored the answer to this interrogatory? That's correct. 14 Α. 15 Now would you agree that these data show that 0. 16 residential sales declined from 2005 to 2008? 17 Α. Yes. 18 Q. And would you agree that these data show that 19 sales to the commercial class increased from 2005 to 20 2008? 21 That's correct. And it also shows that Α. 22 industrial sales declined during that time. 23 **Q**. Fair enough. Now would you agree that FPL has 24 forecast sales into the future beyond 2011; is that 25 true? FLORIDA PUBLIC SERVICE COMMISSION

Α. Yes. 1 And would you agree with me that FPL is 2 Q. forecasting that commercial class sales will grow faster 3 than residential class sales? 4 That's correct. And just in terms of the 5 Α. order, the, we're forecasting commercial to grow 6 fastest, then residential, and then slower than that, 7 industrial. 8 All right. Now one forecast that FPL's 9 Q. performed post 2011 is contained in the Ten-Year Site 10 Plan; correct? 11 12 Α. Yes. MR. WISEMAN: Mr. Chair, if I could have the, 13 another exhibit marked for identification. 14 CHAIRMAN CARTER: That would be Number 410, 15 410. 410. 16 MR. WISEMAN: And this one, the description 17 18 was Ten-Year Site Plan 2009 to 2018. CHAIRMAN CARTER: Ten-Year Site Plan 2009 to 19 20 2018. (Exhibit 410 marked for identification.) 21 22 While she's passing those out, just for the 23 parties, I did say I was going to give you guys a break 24 this morning. And what my plans are is that we usually 25 give the court reporter about a two-hour -- we break

about two hours. So about 11:30 we'll do that break at 1 that point in time, give you an opportunity to go to the 2 necessary room as well as converse with one another on 3 that. So those are my plans for that. 4 We'll probably be on the same lunch schedule 5 as vesterday and the day before and the day before that, 6 or how many days are we -- whatever. We'll probably be 7 on the same lunch schedule, and that was 1:00 to 2:15, 8 so we'll probably do that. And we'll probably be on the 9 same evening schedule as we were for the -- was it two 10 days ago, three days? Well, I'll let you know before it 11 12 goes. 13 Okay. Mr. Wiseman, you may proceed. 14 MR. WISEMAN: Thank you. 15 BY MR. WISEMAN: Dr. Morley, does the document that you've been 16 Q. 17 handed, which has been marked for identification as 18 Exhibit Number 410, appear to you to be excerpts from 19 FPL's most recent Ten-Year Site Plan? 20 Α. Yes. 21 Could you refer to the -- it's the second page Ο. 22 of the exhibit with Bates Page FPL 068884, or it was 23 Page 34 of the original document. Do you see that? 24 Α. Yes, I do. 25 All right. If we look at the second paragraph Q.

on that page, about one, two, three, four, five, six, 1 the seventh line down, am I correct that it indicates 2 that FPL was projecting as of the time of this report 3 that customer growth in 2009 and 2010 would be 4 significantly below the historical average; is that 5 correct? 6 If you'll give me a moment. 7 Α. Q. Sure. 8 Could you repeat your question? 9 Α. In the second full, in the second 10 Yes. Q. paragraph, I think it's seven lines down from the top, 11 it indicates that FPL was projecting as of the time of 12 13 this document that customer growth in 2009 and 2010 would be significantly below the historical average; is 14 15 that correct? 16 Α. Yes. 17 And am I also right that in the next line in Q. that paragraph it indicates that FPL was projecting a 18 19 modest rebound in customer growth in 2011; is that 20 right? I think the next line refers to population 21 Α. 22 growth. 23 And if you read the entirety of that sentence, Q. 24 it says, "As population growth recovers, a modest 25 rebound in customer growth is projected in 2011." FLORIDA PUBLIC SERVICE COMMISSION

I apologize. Yes. Α. 1 Okay. If you could turn to the next page of 2 Q. the document, which was Page 35 of the original 3 document, and I'm looking at the carryover paragraph, 4 the very last sentence. Am I correct that it indicates 5 there that FPL was forecasting a resumption of cyclical 6 7 growth by 2012? Α. Yes. 8 All right. Now if we could turn to the next 9 Q. 10 page of the document, which is, it was Page 42 of the original document, and it's Bates Number FPL 068892. 11 If you look first at the -- it would be the 12 third column of data over from the left. It shows 13 gigawatt hour sales for rural and residential customers; 14 15 is that correct? 16 Α. Yes. 17 And that's an annual figure; right? Q. 18 Α. Correct. 19 So for 2009, FPL -- first of all, you Q. 20 performed the forecast that serves as the basis for the 21 numbers that are on this page; is that true? 22 Α. Yes. 23 Okay. So for 2009, FPL was forecasting Q. 24 residential sales of 52,041 gigawatt hours; correct? 25 Α. Yes. FLORIDA PUBLIC SERVICE COMMISSION

And for 2018 you forecast residential sales of Ο. 1 55,175 gigawatt hours; correct? 2 Α. Yes. 3 Would you accept, subject to check, that that Q. 4 shows a growth rate of six, approximately 6 percent 5 between 2009 and 2018? 6 7 Α. Yes. All right. Now if we go over to the right 8 Q. side of the page, there is similar data for commercial 9 class customers. Do you see there's a column, it's the 10 third column from the right, that indicates gigawatt 11 12 hour sales, and it indicates there that you had forecast for the commercial class gigawatt hour sales in 2009 13 would be 44,878; correct? 14 15 Α. Yes. 16 And you forecast for 2018 that gigawatt hour Q. 17 sales to the commercial class would be 58,198; correct? 18 Yes. Α. And will you accept, subject to check, that 19 Q. 20 your data show forecasted growth of sales to the 21 commercial class of approximately 25 percent between 22 2009 and 2018? 23 I can actually check that, if you'll give me a Α. 24 moment. 25 Q. Sure. FLORIDA PUBLIC SERVICE COMMISSION

1	A. And that's between 2009 and 2018?
2	Q. Yes.
3	A. I'm getting about 29, 30 percent.
4	<b>Q</b> . Oh, even better. All right. So you would
5	agree then that the trend you're seeing, the commercial
6	class growing faster than the residential class in terms
7	of sales per gigawatt hour, is something that you expect
8	to continue out into the future at least through 2018;
9	correct?
10	A. Yes. That's correct. The pattern that we
11	have seen historically is commercial growing the
12	fastest, then residential, then industrial. And I think
13	that's, that's what we're showing in the Ten-Year Site
14	Plan.
15	MR. WISEMAN: All right. One more exhibit, if
16	you will.
17	CHAIRMAN CARTER: Number 411. 411. Short
18	title?
19	MR. WISEMAN: And I tried to make this one as
20	short as I could, but I have to admit this one is not so
21	great. Demographic Estimating Report 10/17/08.
22	CHAIRMAN CARTER: Well, you sucker-punched me.
23	Since it's the last one, you hit me.
24	411, Commissioners, for your records. And the
25	short title, Demographic Estimating Report 10/17/08.

1	(Exhibit 411 marked for identification.)
2	You may proceed.
3	MR. WISEMAN: Thank you, Mr. Chairman.
4	BY MR. WISEMAN:
5	<b>Q.</b> Dr. Morley, first so can you just provide a
6	general description of what this document is?
7	A. Give me a moment.
8	Yes. The Office of Economic and Demographic
9	Research I guess provides the Florida State Legislature
10	with economic and demographic data. They are this is
11	an update from, I believe it's October 2008, which is
12	the same population forecast that we assume in our
13	forecast.
14	<b>Q.</b> All right. Now if you could turn to, it's the
15	fourth page of the exhibit. It's Bates Page FPL 111340.
16	Do you have that, Dr. Morley?
17	A. Ido.
18	<b>Q.</b> Okay. Would you agree that the data on this
19	page indicate that as of October 2008, the Office of
20	Economic and Demographic Research had estimated that the
21	population of Florida would grow less than 1 percent per
22	year in 2008, 2009 and 2010?
23	A. Yes.
24	<b>Q.</b> And would you agree that the Office of
25	Economic and Demographic Research is projecting from
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2011 through 2018 that Florida's population will grow in 1 a range of 1.22 to 1.65 percent per year? 2 Α. Yes. 3 Now can you refer to Bates Page 111349? It's ο. 4 a page that the title is Net Change in Florida Resident 5 Population. Do you have that? 6 7 Α. Yes, I do. Is it a correct interpretation of this graph 8 Ο. 9 that it shows that population started to decline, the 10 net change in Florida population started to change and 11 decline in approximately 2007, that it shows it dipping 12 down to a low in 2009 and then starting to trend upward, 13 up to, starting at around the, it looks like 2011, maybe the latter part of 2011? 14 15 Yes. And that's why our customer forecast Α. 16 shows what it does. 17 And then it shows the net change in Florida Q. 18 resident population pretty much staying the same 19 throughout 2018, possibly dipping just a tiny bit; is 20 that correct? 21 Α. Yes. 22 Ο. Okay. And next if you could refer to Page 23 111 -- Bates Page 111352. This is a page entitled 24 Growth in Florida, Resident Households. Do you have 25 that? FLORIDA PUBLIC SERVICE COMMISSION

Yes, I do. Α. 1 Would you agree that this graph shows a Q. 2 similar trend in the growth in Florida resident 3 households, meaning that growth begins to drop from 2007 4 through 2010, and then begins to recover in 2011, 5 basically holding steady, maybe declining a little tiny 6 bit through 2018; is that correct? 7 Α. Yes. 8 MR. WISEMAN: Thank you, Dr. Morley. Those 9 10 are all the questions I have. CHAIRMAN CARTER: Thank you, Mr. Wiseman. 11 12 Mr. Moyle. MR. MOYLE: Thank you, Mr. Chairman. 13 CROSS EXAMINATION 14 15 BY MR. MOYLE: Ms. Morley, good morning. 16 Q. Good morning. 17 Α. I have a few questions about your role in this 18 Q. case and some of the information you've provided. I 19 want to follow up a little bit. 20 I've heard of a saying that the only thing you 21 can be sure about with forecasts is that they'll be 22 23 wrong. Have you ever heard that, that saying? 24 Α. No, I haven't. You haven't? I think it's overstated. 25 Ι Q. FLORIDA PUBLIC SERVICE COMMISSION

think it was overstated, but I took it to be the point is, is that things change and forecasts need to be updated as time goes on. You'd agree with that, would you not?

I think that that depends. I think that 5 Α. we've, you know, obviously we've looked at the issue of 6 forecasting accuracy very thoroughly. And one thing we 7 have found is that the, one of the best indications of 8 whether a forecast for a future year is going to be on 9 track is how well that forecast is doing this year. And 10 the fact is our forecast this year is, is right on the, 11 is spot on. And historically that means that we're 12 13 going to have a good forecast in 2010.

14 Q. Well, let me just explore that, that for a 15 minute. Generally in terms of forecasting, you would 16 agree, all things being equal, that it's harder to 17 forecast something at a point further in time as 18 compared to a point closer in time; correct?

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A. Yes, I would agree.

20 **Q.** Okay. And with respect to the updating of the 21 forecast, I think you talked about the University of 22 Florida with respect to the population. Is it your 23 understanding that they revised their population with 24 some frequency in 2008, given the sort of dramatic 25 changes in population?

1	A. Yes, I think they did. And I think what
2	happened is they had progressively lower population
3	projections, and I think that's been confirmed recently
4	by their estimate of the actual level of population.
5	So, as you mentioned, there's always a risk going out
6	into the future. And, you know, given what we've seen
7	in population, the risk, the forecast, the sales
8	forecast is certainly that it's too high going, going
9	out into, let's say, 2011.
10	<b>Q.</b> Yeah. You've been with Florida Power & Light
11	since 1983, I believe; is that right?
12	<b>A.</b> Yes. Thank you for pointing that out.
13	<b>Q</b> . Sorry. But just out of curiosity, are you a
14	native Floridian?
15	A. I'm not.
16	<b>Q.</b> Okay. This I think is somewhat of an unusual
17	time in our state's history in that for the first time
18	it appears that there's a net migration out of the
19	state, would you agree with that, of people?
20	A. Yes.
21	<b>Q.</b> And I think that point is somewhat reflected,
22	is it not, in your, in your chart up there, the annual
23	energy use per customer? If I'm interpreting it
24	correctly, it shows that it was higher I guess in '04,
25	'05, and then it falls off, and then it's kind of

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stagnant as you go forward in 2010, 2011; is that generally fair?

Yes. But if I could make a correction. I Α. 3 think you were talking about population, so I think the 4 5 chart you would like to look at is the one next to that. And I would also like to point out that that chart is 6 based on the population forecast from the University of 7 Florida as of October 2008. So that forecast actually 8 9 shows small but positive customer growth. The most 10 recent information from the University of Florida would 11 indicate that there is a risk that that's actually too 12 optimistic. 13 Q. Okay. 14 MR. ROSS: Mr. Chairman, could we just clarify 15 for the record that what Dr. Morley is referring to is 16 her Exhibit RM-5, please? 17 CHAIRMAN CARTER: That's fine. 18 You may proceed, Mr. Moyle. 19 MR. MOYLE: Okay. 2.0 BY MR. MOYLE: 21 0. And I guess with respect to my description I 22 was referring to the chart entitled Annual Energy Use 23 Per Customer. 24 CHAIRMAN CARTER: Which is RM-9. 25

1	BY MR. MOYLE:
2	<b>Q</b> . RM-9. It's a big blowup. But I characterize
3	the data shown on that chart as having a peak in '05 and
4	then falling off and then in the test years remaining
5	rather stagnant. Is that a fair characterization?
6	A. Yes.
7	<b>Q.</b> Now I you mentioned the University of
8	Florida data. Data is important for the purposes of
9	making forecasts; correct?
10	A. Yes.
11	<b>Q.</b> Okay. And all your testimony that you filed,
12	the vintage data that you used is 2008 data, third or
13	fourth quarter 2008; is that right?
14	A. Yes. That's correct. And, again, the best
15	measure of how well a forecast is doing is how accurate
16	it is. And our forecast is very accurate.
17	<b>Q.</b> Okay. I noted did you use any information
18	from the Office of Economic and Demographic Research,
19	the Florida legislative entity?
20	<b>A.</b> Yes. The population forecast that's shown in
21	that website is identical to the population forecast
22	that we use. And to clarify, the October 2008
23	population forecast.
24	<b>Q.</b> I was a little surprised. Just confirm for me
25	that you did not use the most recent data from the
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1	Office of Economic and Demographic Research when you
2	prepared your testimony. If you would refer to Exhibit
3	411 that was provided to you by counsel for the South
4	Florida Hospital Association, the second page, it talks,
5	it lists previous conference results and it has a
6	February 2008 entry there. Do you see that?
7	A. I think I'm going to need some time to
8	<b>Q.</b> Okay.
9	<b>A.</b> Could you repeat the exhibit number or the FPL
10	document number?
11	<b>Q.</b> Sure. It's the, it's the Exhibit Number 411
12	entitled Demographic Estimating Report 10/17/08. And I
13	was referring you to the first page where it's entitled
14	Office of Economic and Demographic Research, the Florida
15	Legislature.
16	A. Mr. Moyle, I didn't number my exhibits. I
17	have blank lines.
18	Q. Oh, I'm sorry.
19	MR. ROSS: I think this is, this is 411,
20	Mr. Moyle.
21	CHAIRMAN CARTER: Yeah. You may approach.
22	MR. MOYLE: Yes, counsel, 411.
23	Let me see if I can find it for you.
24	CHAIRMAN CARTER: Mr. Moyle?
25	MR. MOYLE: Yes, sir.
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1 CHAIRMAN CARTER: I think it may be a good 2 time to take a stretch break. Okay? Are you all right 3 with that? 4 MR. MOYLE: Yes, sir. That's perfectly fine. 5 CHAIRMAN CARTER: Okay. Commissioners, we're going to take a stretch break. We'll be back at --6 7 I'm -- uh-oh. My clock here is not synchronized with 8 the one there. Fifteen after. 9 (Recess taken.) We're back on the record. 10 11 Mr. Moyle, you're recognized, sir. 12 MR. MOYLE: Thank you, Mr. Chairman. 13 BY MR. MOYLE: Before, before we took a break, we were having 14Q. a brief conversation about data and the Office of 15 Economic and Demographic Research. Am I correct in 16 17 assuming that you're aware of the Office of Economic and 18 Demographic Research and aware that they meet on a regular basis to consider information as it relates to 19 20 Florida's economy? 21 Α. Yes. 22 Okay. And the document I was trying to ask Q. 23 you a few questions about was marked as 411 by South 24 Florida Hospital, and it's the second page, FP&L 111337. 25 Are you there?

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A. Yes.

**Q.** You would agree that the office meets, it appears, on a twice-a-year basis, once in October and once in February; correct?

A. I'm not -- I know they meet multiple times a year. I'm not sure of the exact schedule.

Q. Do you see the section down there where it says previous conference results and it goes on and lists July and then February and then October, and then February, October, it goes on all these, all these years? It looked to me like they were meeting pretty regularly in, in February. Would you agree with that?

A. Yes. It looks like before 2008 they were
meeting in October and February, and then 2008 they also
added in July.

16 Q. All right. And the information you used was 17 from the October 2008 economic and data research; is 18 that right? 2008 is the data you used?

A. Yes. That's correct. And since that time,
based on the University of Florida's revised population,
they have, they have met subsequent to that time, pardon
me, and that new population forecast is addressed in my
rebuttal testimony.

**Q.** Okay.

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A. And I show in my rebuttal testimony that if we

went with the revised newer population forecast, it 1 would result in a, I believe it's a 1.5 percent 2 reduction in our 2011 energy for load forecast. 3 Yeah. I guess the thing I just wanted to Ο. 4 confirm is that there was information, there was a 5 meeting in February 2009 of this organization, was there 6 not? 7 Yes. I believe it was like February 28th. 8 Α. Okay. And those meetings are open public 9 Q. meetings; correct? 10 Yes, that's my understanding. 11 Α. Yeah. And you filed your testimony in this 12 Q. case on March 18th, 2009, after the February meeting; 13 correct? 14 15 Α. Yes. Okay. And you didn't make any effort to try 16 Q. to get the latest and most updated data from the Office 17 of Economic and Demographic Research? 18 MR. ROSS: Objection. Mischaracterizes the 19 20 testimony. 21 CHAIRMAN CARTER: Rephrase. 22 BY MR. MOYLE: 23 The -- your prefiled testimony, it doesn't Q. 24 contain any information or conclusions that came out of 25 the February 2009 meeting of the economic and FLORIDA PUBLIC SERVICE COMMISSION

demographic research organization, does it? 1 No. As I said, my direct does not. But it is 2 Α. certainly addressed in my rebuttal, where I show that 3 the newer population forecast creates the risks that are 4 5 forecast for 2011 is actually too high by the amount of about 1.5 percent. 6 Okay. And you, you would, you would agree 7 Q. 8 that your, your testimony, your prefiled direct testimony was filed after the February 2009 meeting; 9 10 correct? 11 Α. Yes. Okay. And isn't it in your judgment important 12 0. to have timely data underlying forecasts? 13 I think it depends. I think there's a lot of 14 Α. 15 data that goes into the forecast, and I think that it 16 depends on how well the forecast is, is doing. It 17 depends on a number of other issues. Our forecast is 18 doing very well. We certainly recognize that the new population forecast creates a risk, and that's why we 19 20 addressed it in, or I addressed it in my rebuttal 21 testimony. 22 Okay. And the point I want to discuss with 0. 23 you is the timely data point. You would agree that 24 timely data is important and should be carefully 25 considered, correct, in making a forecast?

I would agree that we certainly have reviewed 1 Α. the more recent population forecast. 2 Could I refer you and just ask you to read 0. 3 into the record your testimony on Page 6, Line 5, that 4 starts, "As a result"? 5 MR. ROSS: Mr. Chairman, I object. The 6 7 testimony is already in the record. MR. MOYLE: I have a right to have it 8 9 published, Mr. Chairman. CHAIRMAN CARTER: You may proceed. 10 BY MR. MOYLE: 11 12 Would you please read that sentence into the **Q**. 13 record? "As a result, the most relevant and timely 14 Α. data should be carefully examined, " and that's exactly 15 what we did in creating our forecast. 16 Now your direct testimony that you filed, 17 Q. you're asking the Commission to make judgments about 18 rates in 2010 and 2011; correct? 19 MR. ROSS: Objection. Objection. I don't 20 21 think this witness is asking the Commission to make 22 judgments about rates. She's a forecast expert. 23 CHAIRMAN CARTER: Mr. Moyle. MR. MOYLE: Well, I mean, I think her 24 forecasts are a key building block and component part of 25

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the ultimate request. That's why the testimony is here. 1 It's forecasts about what they see the future looking 2 like and warranting a request for monies, for rates, 3 4 so --MR. ROSS: That's a different question. 5 MR. MOYLE: I can rephrase, if, if we need to. 6 7 CHAIRMAN CARTER: Okay. Let's do that. You 8 may proceed. 9 BY MR. MOYLE: Ms. Morley, do you have an understanding that 10 Q. your testimony is being filed to support FPL's request 11 12 for rates? 13 Α. Yes. Okay. And is it your understanding that FP&L 14 Q. 15 is seeking rates for not only the year 2010 but the year 16 2011? 17 Α. Yes. Okay. So it follows then that your testimony 18 Q. is used and you're asking this Commission to rely on it 19 20 for rates in 2011, correct, for rates that they're being 21 asked to set for 2011? Yes. We have -- I am supporting the sales 22 Α. forecast for 2011. 23 And you would also agree that in your direct 24 Q. 25 testimony the data that you're asking them to rely on is FLORIDA PUBLIC SERVICE COMMISSION

2008 data, and they're being asked to rely on it to set 1 rates in 2011, three years into the future; is that 2 3 correct? No, I don't agree. I think that we continue Α. 4 to monitor what's happening with population. It's an 5 issue addressed in my rebuttal testimony. We also 6 continue to monitor what's actually happening with 7 customers and sales. 8 9 Q. So you're, you're not suggesting that, that your direct testimony is being offered to give them data 10 with respect to rates to be set in 2011? Is that -- am 11 12 I -- is that correct? 13 Α. I think that it's the sales forecast that's 14 being used to support that. 15 Q. And we already established that you were with 16 the company in 1983. I quess their last rate case was shortly after you arrived; is that right? 17 18 A. Yes. 19 Q. Okay. FPL at that time, they didn't project 20 recovery two years into the future when they were in 21 asking for a rate increase, did they? 22 Α. To be honest, Mr. Moyle, I don't remember. 23 Okay. Do you know with respect to '95 when Q. 24 the rate case was filed, did they come in asking for 25 rates related to data that was two years in the future

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in that case?

A. No. I don't know one way or the other.

**Q.** Okay. You would agree that for 2011 that you would have more timely data for 2011 if you did your forecast in 2010; correct?

Yes, I think that's true. And, again, as you 6 Α. mentioned earlier, there's always a risk with the 7 forecast as you go out into the future. And the fact is 8 in this case the risk to 2011 is that we have overstated 9 10 customer growth, and that's evidenced by the fact, as 11 you have pointed out, Mr. Moyle, that the university has 12 subsequently revised its population forecast downwards. And it's also evident by the fact that the University of 13 14 Florida has now come up with an estimate, not a 15 projection, but an estimate of the actual population in 16 Florida as of April of this year, which shows a decline 17 of 58,000.

18 Q. Thank you for that. And I guess the, sort of 19 the big picture policy question that I have that I'd 20 like to address to you is your chart there, the annual 21 energy use per customer, nine, you know, it shows the 22 energy at 26,000 kWh back in '04, '05. I presume, I 23 presume FPL had sufficient physical assets to serve 24 that, that load, did they not?

MR. ROSS: Objection. This is again the wrong

witness to be asking that type of question. 1 MR. MOYLE: If she knows, I think it's a fair 2 3 question. THE WITNESS: I was going to say I'm not an 4 expert in that area, so I don't know. 5 BY MR. MOYLE: 6 Okay. You don't, you don't know? 7 Q. Other people in the company rely on your, your 8 9 projections; correct? 10 Α. Yes. 11 Okay. And included is people that are putting Q. 12 power plants on, on the ground, they rely on your 13 projections to figure out what the need would be; 14 correct? 15 A. Yes. 16 And I guess, would you not agree with me that Q. 17 based on that, that chart that it looks like, like FP&L 18 may not need a lot more in terms of capital outlay, new 19 power plants, given the decline in population, 20 particularly when you consider the tough economic times? 21 MR. ROSS: Mr. Chairman, I think we're pretty 22 far outside the scope of the direct testimony of this 23 witness. 24 CHAIRMAN CARTER: Mr. Moyle. 25 MR. MOYLE: I just asked her if she would FLORIDA PUBLIC SERVICE COMMISSION
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1	agree with that assessment. I think she can say yes or
2	no. I mean, it's based, it's premised on her chart.
3	CHAIRMAN CARTER: That's a close one.
4	Ms. Brubaker.
5	MS. BRUBAKER: I think the witness has
6	indicated in previous questions that this may be outside
7	the scope of her expertise. However, if Mr. Moyle is
8	asking for a, what we've been calling a high level
9	question, if she has an opinion, I think she should be
10	free to express it. Otherwise, I would suggest we move
11	on.
12	CHAIRMAN CARTER: Mr. Moyle.
13	BY MR. MOYLE:
14	<b>Q.</b> With that, with that refinement, high level,
15	could you answer my question, please?
16	<b>A.</b> Mr. Moyle, I'm not a resource planner. I am
17	not qualified to comment on our resource plan.
18	<b>Q.</b> Has, has FP&L, do you know, done any studies
19	or analysis as to what impact the requested rate
20	increase, if it were granted in full, would have on the
21	economic recovery of businesses and consumers in FP&L's
22	service area?
23	A. No.
24	Q. And I am correct that Florida Power & Light
25	serves approximately 50 percent of Florida's population;
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1	is that right?
2	A. Yes, it is.
3	<b>Q.</b> Now I want to ask you just a couple of
4	questions about real household dísposable income
5	projections. You testified in your direct that real
6	household disposable income for 2009 was going to go
7	negative by 2.3 percent, isn't, isn't that right, Page
8	18, Line 4, I believe?
9	A. Could you repeat the question?
10	<b>Q</b> . Sure. Page 18, Line 4, it's your testimony
11	that the household disposable income in 2009 is going to
12	decline 2.3 percent; correct?
13	A. Yes.
14	<b>Q.</b> And then in 2010 it's having, you're having
15	another decline of .6 percent?
16	A. That's correct.
17	<b>Q.</b> Okay. And in response to a question from the
18	counsel for South Florida Hospital, I thought you said
19	that those numbers were getting bleaker rather than
20	better on more recent information; is that correct? Did
21	I hear that correctly?
22	<b>A.</b> I believe what I said is the assumption in our
23	sales forecast was that this recession was going to be
24	not quite as severe as the mid '70s recession. And the
25	data shows that that actually might be a little bit too
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optimistic because we've had bigger declines in 1 employment during this recession than the mid '70s. 2 Okav. And if, if the Commission were to grant 3 0. FPL's request, is it your understanding that the 4 increase in a residential bill would go up approximately 5 6 25 percent? MR. ROSS: Objection. Again, it's the wrong 7 witness for this. She's a load forecast witness. 8 9 CHAIRMAN CARTER: Mr. Moyle. MR. MOYLE: I mean, I'm asking her if that's 10 11 her understanding. I think that it's a fair question. 12 She's offered to support the rate increase. I mean, 13 maybe she doesn't have an understanding as to the 14 magnitude of the request on residential bills. 15 CHAIRMAN CARTER: If she knows. I'll allow. 16 You may proceed. 17 THE WITNESS: Mr. Moyle, I'm not testifying on 18 the residential bill. I haven't done any analysis. I 19 cannot answer your question. 20 BY MR. MOYLE: 21 Okay. Do you have any sense in terms of order Q. 22 of magnitude as to what the rate increase may have on a 23 typical residential bill if it's approved in terms of 24 the base rates? 25 MR. ROSS: Mr. Chairman, same, same objection. FLORIDA PUBLIC SERVICE COMMISSION

CHAIRMAN CARTER: I think it's been asked and 1 2 answered, Mr. Moyle. BY MR. MOYLE: 3 You would agree that if there is an increase 4 Q. in base rates on, on homeowners, that based on your 5 projected household disposable income that consumers 6 would have less money to pay their electric bill, 7 correct, in 2009 and 2010? 8 MR. ROSS: Mr. Chairman, we're very far afield 9 of this witness's direct testimony. 10 CHAIRMAN CARTER: She's, on a couple of 11 occasions, Mr. Moyle, she said that she was not familiar 12 with the impact on the rates to the individual 13 ratepayers. I think you can rephrase and --14 MR. MOYLE: All right. Let me, let me 15 16 rephrase. 17 BY MR. MOYLE: 18 Q. Just specifically, I mean, it's your testimony 19 that people are going to have 6 percent less money, and 20 I'm just asking you to confirm that if a rate increase 21 is, is put in place, that based on your information, all 22 other things being equal, it would be harder on 23 households to pay that given the projected decline in real household disposable income; is that correct? 24 MR. ROSS: Objection. That also assumes facts 25

not in evidence. The record evidence is that bills will 1 qo down, not up. 2 CHAIRMAN CARTER: Mr. Moyle. 3 MR. MOYLE: With respect to, with respect to 4 base rates, I'm asking her with respect to base rates, 5 not the, you know, the fuel, the fuel thing. 6 CHAIRMAN CARTER: Ms. Brubaker. 7 MS. BRUBAKER: Again, Mr. Chairman, I find 8 myself with an answer to a similar one I just gave you. 9 It does seem to be a bit beyond the scope of the 10 witness's testimony. To the extent that it's asking for 11 12 a very generalized understanding of the impact on, of 13 rates, if the witness has an answer, she may give it. 14 But it does seem that we're a bit beyond the scope. 15 CHAIRMAN CARTER: Just rephrase, Mr. Moyle. 16 MR. MOYLE: Sure. 17 BY MR. MOYLE: 18 It's my last question in this regard. I think Q. 19 we've established that economic conditions are something 20 that can be considered, and I'm simply asking you to 21 confirm that, given your research and your forecasts, 22 that Floridians will have less disposable income in 2010 23 to pay electric bills, groceries, anything that they may 24 buy, your information suggests that they'll have less 25 disposable income in 2010; is that correct?

Yes. We're forecasting a 0.6 percent decline. Α. 1 I think in your previous question you said 6 percent. 2 We are forecasting a decline in real household 3 disposable income, and that's one of the reasons we have 4 the sales forecast that we do. 5 Okay. Do you have any knowledge or could you 6 Q. agree that customer acceptance of rates is a factor the 7 PSC should consider in this case? 8 MR. ROSS: Same objection, Mr. Chairman. 9 These are questions that were asked at length of Witness 10 11 Olivera. CHAIRMAN CARTER: I think you can rephrase it. 12 13 You can rephrase it. BY MR. MOYLE: 14 Do you understand, have an understanding that 15Q. the customers' acceptance of rates of FPL is a factor 16 that the PSC should consider in this case? 17 Mr. Moyle, I'm testifying on the sales 18 Α. forecast. I have no opinion of -- you're outside of my 19 20 area. Okay. Let me ask you just a couple more 21 Q. questions. I want to refer you to exhibit -- and you 22 didn't number them. I can help you find it, if you need 23 it, but it's the economic indicators exhibit, 405, that 24 was provided to you by South Florida. And the page I'm 25

going to refer you to is 111435, FPL number in the 1 right-hand corner. Tell me when you're there. 2 I've reached the end of a package that ends at Α. 3 111432, so I'm presuming I'm not there. 4 CHAIRMAN CARTER: They're not in order. The 5 pages are not in sequential order. 6 MR. MOYLE: Can I help her? 7 If 1 CHAIRMAN CARTER: Yes, you may approach. 8 can help you, Mr. Moyle, if I can help you, it's right 9 after the -- well --10 MR. WISEMAN: If I could help, it's -- the 11 document was arranged by, in order of by month. So that 12 page is relevant to the November 2008 report. It's the 13 14 third, third page of that report. 15 MR. MOYLE: Thank you. 16 CHAIRMAN CARTER: Thank you, Mr. Wiseman. 17 BY MR. MOYLE: This chart, I guess, shows the length of 18 Q. 19 recessions since World War II. Is that your 20 understanding? 21 Α. Yes. Okay. And I think you just indicated that the 22 Q. 23 projected economic condition in Florida is not, not 24 improving as quickly as some had forecast; correct? 25 I think what I just talked about is the fact Α. FLORIDA PUBLIC SERVICE COMMISSION

that we are forecasting a decline in real household 1 disposable income this year and an additional 2 0.1 percent -- 0.6 percent decline in 2010. 3 Okay. You would, you would agree that the 4 0. 5 current recession that we're in, if you measure it from 6 December 2007, as your chart appears to do, to measure 7 it, you know, is the most prolonged recession that has 8 been experienced since World War II; is that correct? 9 Α. Yes. 10 Would you also agree it's been the most Q. 11 prolonged recession since the Great Depression? 12 I think that's true. I don't have that Α. 13 specific data, so I'm reluctant to give you a definitive 14 answer. But I think we're all in agreement that we're 15 in a severe recession. 16 Q. And then you had made a point I think with 17 respect to your customer classes and their projected 18 growth. The industrial class is the slowest growth 19 sector that you project; isn't that right? 20 Α. Yes. It's the slowest of residential, 21 commercial, industrial. We also have some other 22 categories. So I --23 And --Q. 24 Α. -- I can't say it's the slowest without --25 Q. And you would agree that industrial customers, FLORIDA PUBLIC SERVICE COMMISSION

typically it takes them a bit longer to recover through the tough economic times we're in as compared to some others?
A. I don't know if I could say that, because I think the recession has affected all businesses and all customers. And I think that's evidence that we've seen

a decline in our sales, not just in industrial but in residential as well.

9 MR. MOYLE: If I could just have one brief 10 moment, Mr. Chairman.

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11 CHAIRMAN CARTER: Yes, sir. Take your time.
12 BY MR. MOYLE:

Q. Given these uncertain economic times and the change that the State of Florida is experiencing, wouldn't you agree that it would be more prudent for this Commission to defer a decision on rates in 2011 until it can have more data that is more accurate with respect to being at a closer point in time to 2011?

A. I'm going to ask you to repeat that. Iapologize.

Q. Okay. It wasn't very artfully crafted.
Essentially I'm suggesting that wouldn't it make more
sense from the standpoint of rates and impacts on
Floridians that rather than trying to look into the
future, way over the horizon into 2011, that, given all

of the changes in population experiencing, that's being experienced in our state, that that decision not be made in this case but be deferred until a point in time where

more recent data is available to the Commission to make

that decision? Would you agree with that?

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Well, I think there's obviously at least two Α. 6 parts to your question. I think part of it you were 7 asking about, I think, the rate impact and the decision 8 of the Commission, and I'm here to talk about the sales 9 forecast. And as you -- I'm not sure these are really 10 called uncertain times at the moment. I think we're all 11 pretty much in agreement that we're in a very severe 12 recession. I don't think that's subject to uncertainty 13 at this point. I think, as you have pointed out, 14there's always (phonetic) with a forecast. But the fact 15 is there's probably no component of the forecast that 16 has a more direct impact on sales than population of 17 customer. And, if anything, the recent information, the 18 recent data, as you call it, shows that to the extent 19 these are risks to our 2011 forecast, it's that our 20 21 forecast is too high.

Q. Okay. But we would agree that there are a lot
of independent, independent variables that go into these
forecasts; correct?

A. Yes, there are. But there is not anything

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1 that has a more direct impact on our sales than customer 2 growth, because that's a one-for-one relationship. MR. MOYLE: Well, hopefully the economy will 3 recover and we won't have any hurricanes and we'll have 4 people coming back to Florida. Thank you. I have 5 nothing, nothing further. 6 CHAIRMAN CARTER: Thank you, Mr. Wright (sic). 7 Ms. Bradley. 8 9 MS. BRADLEY: Thank you, Mr. Chairman. CROSS EXAMINATION 10 BY MS. BRADLEY: 11 Dr. Morley, I'm Cecilia Bradley with the 12 Q. 13 Attorney General's Office, and I just have a few 14 questions for you. 15 Would you agree that actual data is more 16 reliable than projections? 17 Could I ask you, more reliable for what Α. 18 purpose? 19 Q. For looking at whatever you're considering and 20 analyzing. 21 Well, I guess if we always had actuals, I Α. 22 wouldn't have a job as a forecaster. So I'm not sure. 23 (Laughter.) 24 Would you not agree though that actual data, Q. if you have actual data about something, that it's more 25 FLORIDA PUBLIC SERVICE COMMISSION

reliable than projections when you're having to make 1 conclusions based on different factors? 2 I can't say that. It's such a broad Α. 3 statement. If you could -- I can't agree with that. 4 I guess I shouldn't ask somebody that does ٥. 5 projections about the reliability of actual data. I 6 guess that's just common sense. 7 MR. ROSS: Objection. That remark should be 8 9 stricken. 10 BY MS. BRADLEY: 11 Q. Dr. Morley, did you go to the customer 12 hearings? No, I did not. 13 Α. 14 Did you do anything to find out about the Q. 15 customers' testimony? 16 Α. No. 17 You didn't have any briefings or read any Q. 18 transcripts or discuss with any staff what had been said? 19 20 Α. No. 21 MR. ROSS: Objection. Again, we're, like with 22 the previous cross-examination, we're really outside the 23 scope of this witness's testimony. 24 CHAIRMAN CARTER: She said no. Move on, 25 Ms. Bradley. FLORIDA PUBLIC SERVICE COMMISSION

MS. BRADLEY: Thank you, sir. 1 2 BY MS. BRADLEY: 3 Are you aware that you had a number of 0. 4 customers that came to the public service hearings and testified that if this increase is granted, that they 5 will have to move out of state to live with family or 6 7 some place where electricity is cheaper? 8 MR. ROSS: Same objection. 9 CHAIRMAN CARTER: Ms. Bradley, to the 10 objection. 11 MS. BRADLEY: Well, Your Honor, Mr. Chairman, 12 this witness has testified about consumer growth, customers, their usage, and I'm just asking her about 13 14 some of these questions. 15 CHAIRMAN CARTER: Okay. Ms. Brubaker. 16 MS. BRUBAKER: I think to the extent the 17 questions go to the sources which the witness relied 18 upon in preparing her projections, that to me seems like 19 an appropriate line of questioning. I think the witness 20 has stated that she is not familiar with what was 21 testified at the customer service hearings, and to me it 22 seems like further questionings in that line are not 23 likely to yield fruit. 24 MS. BRADLEY: Let me rephrase it, Mr. 25 Chairman. Maybe that will resolve the issue.

CHAIRMAN CARTER: Okay. Thank you. 1 BY MS. BRADLEY: 2 Subject to check, will you accept that there 3 Q. were customers that came to the hearings and testified 4 that they, if the rate increase goes through, that they 5 can't afford to pay those prices and will have to move 6 out of state to live with family or move someplace else 7 where electricity is cheaper? 8 9 Α. I cannot accept that because I was not at No. the service hearings. I did not have briefings on the 10 11 service hearings. 12 I said subject to check. Q. 13 Α. No, I can't. I wasn't at the service 14 hearings. 15 MR. ROSS: Mr. Chairman, this is, that's not 16 an objective fact that can be -- that's the typical 17 subject that's -- something that can be subject to 18 check. There were also customers that showed up at the 19 service hearings that, that spoke in favor of FPL. So 20 it's really an inappropriate line of questioning. 21 CHAIRMAN CARTER: Ms. Bradley, to the 22 objection. 23 MS. BRADLEY: I really have no idea what 24 somebody coming in and speaking in favor of Florida 25 Power & Light had to do with my last question. I guess FLORIDA PUBLIC SERVICE COMMISSION

that was just a throw-in type thing. 1 CHAIRMAN CARTER: Okay. 2 MS. BRADLEY: Let me, let me rephrase it one 3 more time. 4 CHAIRMAN CARTER: Hang on a second. Speak to 5 6 the objection, please. MS. BRADLEY: Well, I was going to rephrase 7 8 it, try something else. CHAIRMAN CARTER: Okay. Let's try that then. 9 MS. BRADLEY: Okay. 10 11 BY MS. BRADLEY: The fact that there were a number of people 12 ο. 13 that came to the hearing and spoke of having to move out of state because if the increase goes through, is that 14 15 consistent with the data that you were looking at? I was not at the service hearings. Our source 16 Α. 17 for the population forecast is the University of 18 Florida. That's what we rely on. 19 0. Was this consistent with the data that you 20 relied on? 21 No. The University of Florida forecast didn't Α. 22 say those -- I mean, it had the population forecast. It 23 didn't talk about FPL. 24 Did you think about going back and make any **Q**. 25 recalculations if you know that there are a number of FLORIDA PUBLIC SERVICE COMMISSION

customers that have said they'll have to move or that they can no longer afford your services if the rate increase goes through?

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A. No, we did not. Because in doing the customer forecast, again, as I said, we rely on the University of Florida forecast. We don't rely on somebody saying something. That's not our basis for the customer forecast. Our basis is the population forecast from the University of Florida.

10 Q. And you don't think people testifying under11 oath is more reliable than your projections?

12 MR. ROSS: Mr. Chairman, I mean, I don't even 13 know how the witness can answer questions like this. 14 She's a, she's a forecasting witness and the counsel is 15 asking her about customer comments. I mean, there's 16 just a complete disconnect here.

17 CHAIRMAN CARTER: Ms. Bradley, to the
18 objection.

MS. BRADLEY: Well, all this evidence is already in the record. And I think someone that's an economist and is trained in economy can certainly speak to whether or not actual testimony, actual data is more reliable than projections or should be looked at.

CHAIRMAN CARTER: But I think your question relates to the comments of people at the hearings. Who

is the best witness on, on customer service? 1 MR. ROSS: That would be Witness Marlene 2 3 Santos. CHAIRMAN CARTER: Ms. Brubaker, to the 4 5 objection. 6 MS. BRUBAKER: It seems to me that perhaps these questions would be better directed to Ms. Santos. 7 To the extent the questions go to how, again, Ms. Morley 8 populated her data, performed her projections, it seems 9 appropriate. But I think it's been asked and answered 10 that she did not attend the service hearings and has not 11 accounted for comments made at those service hearings in 12 13 her projections. 14 CHAIRMAN CARTER: Okay. I'm going to sustain 15 the objection. Ms. Santos may be the best one to talk 16 to about that, Ms. Bradley, in the context of the 17 customer service hearings. 18 MS. BRADLEY: I apologize. I didn't realize 19 Ms. Santos was aware of load projection and that type of 20 population growth and things. 21 CHAIRMAN CARTER: Your question related to 22 people showing up at the hearings though, and I think 23 that's where Ms. Morley, Dr. Morley, excuse me, Dr. 24 Morley was saying she had no knowledge and she did not 25 base her research on that. That's the way I heard it.

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## BY MS. BRADLEY:

Q. So let me confirm with you, Dr. Santos -- I'm sorry -- Dr. Morley, you don't let, you don't look at any real data to adjust your projections.

A. No, that's absolutely not correct. We do look at real data. We look at what's actually happening with our customers, we look at actual economic data, we look at a lot of actual data.

9 Q. Then why didn't you consider the actual data
10 from the customer hearings?

11 Because that's really not data appropriate for Α. 12 a sales forecast. You talk about actual data. I think 13 the only way asking somebody or somebody saying they're 14 going to move out of town would be relevant is if 15 somebody did a survey of all, you know, 4 million of our 16 customers and found that out. That would probably be 17 very relevant. I think beyond that, the comments you're 18 talking about at a service hearing are not relevant or 19 appropriate for incorporating in a sales forecast.

Q. Would you agree as an economist that,
generally speaking, when the cost of goods and services
increases, there's going to be fewer sales?

A. Yes. And that's why we incorporate the real price of electricity into our sales forecast.

Q. Would you conversely agree then that a

decrease in the cost of goods and services means more 1 people will, there will be more sales? 2 If I could clarify. You say the cost of goods 3 Α. and services. There's the nominal price of electricity 4 and then there's the overall, overall cost of goods and 5 services, which would be more like a rate of inflation. 6 So could you clarify which one you're referring to? 7 Well, let's speak generally first. Generally, 8 0. do you, when cost of goods and services decrease, aren't 9 10 there more sales? Are you asking me when the overall rate of 11 Α. 12 inflation increases, do we have an increase in FPL's 13 electric sales? 14 Q. No, ma'am. My question was, generally 15 speaking, if the cost of goods and services go down, 16 isn't there usually more sales? 17 Ά. I think that depends on the goods and 18 services. If you're talking about, you know, people 19 buying more because the rate of inflation is high, I 20 don't think that's correct. 21 MS. BRADLEY: I don't think that was answered, 22 but I'll move on to something else because she's not 23 going to answer it. 24 CHAIRMAN CARTER: She's an economist. You 25 know how they talk.

MS. BRADLEY: Unfortunately. 1 CHAIRMAN CARTER: I remember taking those 2 classes. When they started talking about the marginal 3 propensity to consume, I'm like, "Why am I in this 4 class?" 5 MS. BRADLEY: I understand. 6 THE WITNESS: Could I object to those 7 8 comments? (Laughter.) 9 MR. WRIGHT: Join in the objection. 10 CHAIRMAN CARTER: Nothing to any personal --11 12 present company excluded. (Laughter.) 13 MS. BRADLEY: Let me see if I have anything 14 else that she might be willing to answer. 15 MR. ROSS: Mr. Chairman, that type of comment 16 is really inappropriate. I move to strike it. 17 BY MS. BRADLEY: 18 Let me ask you specifically, are you aware as 19 Q. an economist that if the cost of your electricity goes 20 down, that generally speaking there's more usage? 21 22 Α. Yes. MS. BRADLEY: Thank you. 23 CHAIRMAN CARTER: Thank you, Ms. Bradley. 24 Mr. Stewart, is -- are you on? 25 FLORIDA PUBLIC SERVICE COMMISSION

MR. STEWART: No questions. Thank you. 1 Okay. CHAIRMAN CARTER: 2 Mr. Wright. 3 MR. WRIGHT: Thank you, Mr. Chairman. 4 CROSS EXAMINATION 5 BY MR. WRIGHT: 6 Good morning, Dr. Morley. 7 0. Good morning. 8 Α. I have, I have a few lines of questioning of 9 Q. my own. Fortunately for all of us, Mr. Moyle asked 10 several, so I've been able to X them off my list. But I 11 do have some follow-ups from, to some previous responses 12 and exhibits. 13 In responding to questions, I believe, by 14 Mr. Wiseman, you spoke of the mid '70s recession as 15 being the most severe before now? 16The most severe in recent decades. 17 Α. Okay. And my question for you, I've got a 18 0. question for you that I just want to nail down when that 19 I'm looking at the page Mr. Moyle showed you from 20 was. Exhibit Number 405. It was Bates stamped 111435. 21 22 Α. I'm there. Okay. Good. And that appears to show that 23 ο. the, that -- the only recession I see in there in the 24 mid '70s began in November of '73 and continued through 25 FLORIDA PUBLIC SERVICE COMMISSION

1 March of '75. Is that consistent with what you were 2 saying earlier? 3 Yes. And that's the official definition or Α. length of the recession nationally. What we looked at 4 5 is what was actually happening in Florida during that 6 time. And as I think I may have mentioned previously, 7 during that recession real household disposable income 8 in Florida actually declined for a year after the official end of the recession was declared. 9 10 0. So using months and years, could you tell us 11 to the best of your knowledge what the time period of 12 the recession, that recession as it was experienced in 13 Florida was? 14 I believe that it was about 11 quarters of Α. 15 declines in real household disposable income. 16 Would that translate into something like ο. 17 roughly the third quarter of '73 through the first or 18 second quarter of '76 then? 19 Α. I'd probably prefer to refer to my notes. 20 Q. Yeah. Yeah. Thank you. 21 Α. I believe I can answer your question now, Mr. 22 Wright. 23 In the mid '70s, real household disposable 24 income in Florida began declining on a year-to-year basis in the first quarter of 1974 and continued 25 FLORIDA PUBLIC SERVICE COMMISSION

1 declining until the fourth quarter of 1976. 2 Q. Thank you. Also, a couple of follow-on 3 questions to some questions that were posed to you by Mr. Wiseman relative to Exhibit 411. If I could ask you 4 5 to look first at --6 CHAIRMAN CARTER: Mr. Wright, you may have to 7 show her which one. She did not number hers. You may 8 have to show her which one. 9 **THE WITNESS:** Yeah. I'm going to learn my 10 lesson next time, but --11 CHAIRMAN CARTER: That's okay. You don't have 12 to. 13 BY MR. WRIGHT: 14 Ο. It's the rather thick one titled Demographic 15 Estimating Report 10/17/08. 16 I have that document. Α. 17 Thank you. If I could ask you first to flip Q. 18 maybe a third of the way in to what I have as Bate stamp 19 page FPL 111349. Are you there? 20 Α. I am. 21 Thank you. These are not trick questions. Q. They're just, they're just clarifying questions. 22 23 When I look at the data presented there, it 24 appears to me that it shows the Florida resident 25 population starting to increase on a quarter-to-quarter

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basis from the fourth quarter of 2009 to the first quarter of 2010, and then continuing to increase as shown on the graph 'til around the second quarter of 2012. Is that how you interpret that graph?

A. I'll take your word for the specific quarters. This is a population forecast we relied on in our customer forecast, and I think the pattern in our customer forecast confirms what you're saying where we're actually forecasting a slight increase in customer growth next year and then an additional increase in 2011.

12 Q. Well, I, actually I need to ask you to look at 13 the graph rather than taking my word for it. And just so I'm clear about where I'm going with this, I believe 1415 that, that Mr. Wiseman asked you the question, would you 16 agree that the population increase starts in 2011, to which you said yes. When I look at the data, it appears 17 18 to me that it starts to increase at the beginning of 19 2010, at least according to these projections upon which 20 you relied.

And so if I could just ask you, is that true? Isn't it true that the population starts to increase on a quarter-to-quarter basis beginning with the increase from the fourth quarter of 2009 to the first quarter of 2010?

If I, to answer the first part of your 1 Α. question, if I implied that population growth was not 2 increasing until 2011 when I was talking to Mr. Wiseman 3 earlier, I believe my point was that there is not a more 4 significant rebound in population growth until we get to 5 2011. As I think I said in my opening summary, we are 6 7 forecasting an increase in population growth in 2010, 8 although it's a very small increase. 9 MR. WRIGHT: Mr. Chairman, just so we're all clear, I did not mean to imply that there was anything 10 inaccurate or incorrect with Dr. Morley's answer. 11 It's just a question of interpreting the data that I'm trying 12 13 to get clear on. 14 So -- and I apologize for the tedium of this, 15 but I'm going to give you the, the sorry excuse that I 16 used to be an economist too. 17 CHAIRMAN CARTER: See what I mean? 18 BY MR. WRIGHT: 19

19 Q. Do I interpret this graph correctly as 20 indicating that the Florida resident population growth 21 according to these forecasts was projected to be 22 something in the range of maybe 18 or 19,000 in the 23 fourth quarter of 2009?

A. And I'm having a little trouble, as graphs
sometimes do, lining up the axis with the figure. And

not to be troublesome, but you said 18,000, and I think 1 2 that's a greater degree of precision than I can derive 3 from this chart. Well, somewhere between 16 and 24,000. **Q**. Those 4 5 are the numbered lines on the, on the vertical axis. So you said somewhere between 16 and 24,000. 6 Α. 7 And the dates, and the again? Population increase in the fourth quarter of 8 Ο. 2009. 9 10 Α. Okay. And I'm, I'm not trying to be 11 troublesome, but you know how -- I don't, I don't take the population data from a chart. I get an actual 12 13 annual number. And I'm not trying to be troublesome, 14 but I want to be exactly accurate. And, you know, as 15 axis, the graphs sometimes are, I'm not sure if the figure, let's say, for the first quarter of 2009, is 16 17 that the first quarter or is that centering somehow? 18 1'm --19 **Q**. Let me try it this way. And I, like you, I am not trying to be troublesome. I'm really just trying to 20 21 get clarity here. 22 Will you agree that the population growth in 23 the first guarter of 2010 is greater than the population 24 growth in the fourth quarter of 2009? 25 I'm sorry. The only thing I'm not clear of is Α. FLORIDA PUBLIC SERVICE COMMISSION

this chart is where the axes are centered. I would certainly agree that the population growth for the year 2010 as a whole is greater than it is for 2009.

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Q. And would you also agree that, regardless of how you assign the centering, the growth rate as shown on this chart in net Florida resident population is pretty steep in 2010 as opposed to being pretty flat in 2009?

A. I think that's a relative comparison. And I
think, as this chart has a fairly short time horizon, I
think that the population growth forecasted for 2010 is,
is not high if you look at a longer period. It's
certainly higher than 2009. So I guess I'm not clear
what you mean by "steep."

15 Q. Well, I was using it in the lay term in that 16 when I look at this graph, it looks steep to me relative 17 to the part of the curve that, that appears to start in 18 2008 and run 'til nearly the end of 2009.

19MR. ROSS: Objection. Is there a question20there?

21 MR. WRIGHT: My remark, Mr. Chairman, was 22 simply clarifying my intent in using the word "steep" as 23 to the previously pending question.

CHAIRMAN CARTER: I think we'll let the
 accountants continue. You may proceed.

BY MR. WRIGHT: 1 Maybe I can help us both out if we turn back a 2 ο. couple of pages to 111342 and 111343. 3 Could you give me those numbers again? Α. 4 Sure. They're the FPL Bates stamp page Q. 5 numbers 111342 and 111343. 6 Okay. I'm there. 7 Α. Okay. These are small numbers, and I confess 8 **Q**. 9 I am having a little bit of difficulty reading them. But it looks to me like if we, if you look at -- do you 10 11 think you have the original source document? I'm set. 12 Α. 13 Q. Yeah. It's not my exhibit, but it's the best 14 evidence we have at hand. It looks to me like the, on 15 111342, the far right-hand columns are, the two 16 right-hand columns on the far right are the columns for 17 2009 guarter 3 and 2009 guarter 4. Is that -- am I 18 doing okay with that? 19 Α. You are. 20 Q. All right. And the second row of that sheet 21 shows the demographic estimating conference estimates of 22 population for the October 2008 conference; correct? 23 Α. Yes. 24 Q. Okay. So if we wanted to nail down the, the 25 numbers that I was trying to talk to you about with FLORIDA PUBLIC SERVICE COMMISSION

respect to the graph, we could simply look at the 1 quarter-to-quarter change in that second row and do a 2 calculation that shows what those changes are. Is that 3 a fair interpretation of this table? 4 Yes. The only thing I'm not sure of is, is Α. 5 this, are these quarter to quarter or are they zero over 6 7 year? But I would say --I think, I think the numbers are the 8 Q. population -- well, let me -- I'll put it this way. 9 Ιt 10 would be my interpretation that the numbers shown, for 11 example, in 2009 quarter 3 appears to be 18,909.1 or .4. 12 It's .4. Α. 13 Thank you. And I assume that's in thousands. Q. 14 So that appears to me to show the Florida population 15 estimated in this report for 2009 quarter 3 is 18,909,400; right? 16 17 Α. Yes. 18 Q. Okay. And what I was trying to get you to 19 agree to, and I promise it's not a trick guestion, is if 20 I just take the differences then from quarter to 21 quarter, say the population number shown for 2009 22 quarter 3 minus the population shown for 2009 quarter 2, 23 that's going to tell me the change from the quarter to 24 quarter; right? 25 Α. Yes. FLORIDA PUBLIC SERVICE COMMISSION

Q. Okey-doke. 1 CHAIRMAN CARTER: She's got a calculator. 2 You're not going to ask her to do any computations? No. 3 I'm just messing with you, sir. Sorry, Mr. Wright. 4 MR. WRIGHT: No, Mr. Chairman. The data show 5 what they show and I will deal with it accordingly. 6 That's, that's all I was trying to do. Thank you. 7 CHAIRMAN CARTER: Thank you, sir. 8 BY MR. WRIGHT: 9 I'm going to ask you a few predicate questions 10 Q. about some things that you know and then ask you about 11 12 your modeling and the degree to which they do or do not 13 incorporate those variables. 14 First, do you know what Florida's unemployment 15 rate is currently? 16 Α. Yes. 17 We'd agree that it's right about 10.7 percent? 0. 18 Α. Yes. 19 Do you keep up with Florida's foreclosure Q. 20 rate? 21 Α. Yes. 22 Q. Thank you. 23 Or we do track it. I don't know the number of Α. 24 foreclosures off the top of my head. 25 Q. Sure. That's okay. You'll agree without FLORIDA PUBLIC SERVICE COMMISSION

going into a numeric value that it's pretty high? 1 Α. Yes. 2 In relative, at least in relative terms. Q. 3 Α. Yes. 4 Would it be your understanding it's the 5 Q. highest in the country? 6 I'm sorry. I didn't get that last part. 7 Α. I apologize. Would you agree that it's your 8 0. understanding that Florida's foreclosure rate is the 9 highest in the country? 10 I've seen different estimates. I've seen 11 Α. California, Nevada, Arizona also high. So it may depend 12 13 on the source and the timing. But it's certainly high. 14 Q. At, would you agree it's at or near the top? 15 Yes. Ά. 16 Q. Or bottom, as we might look at it. 17 Now my question is to what extent, if at all, 18 do your modeling efforts consider Florida's unemployment 19 rate in forecasting sales? 20 We look at real household disposable income. Α. 21 We've done a lot of modeling. We find that has a better 22 fit. Of course there's a strong connection between 23 employment and real household disposable income. But 24 real household disposable income, not unemployment, is 25 the specific variable we use.

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If I wanted to ask you the same question Q. 1 regarding foreclosures, would your answer be the same? 2 Yes. We do not have a variable for Α. 3 foreclosures in the model, but it is certainly something 4 that we look at. We believe that the variables we have 5 specifically in the model are appropriate and in fact 6 are doing a very good job of forecasting sales. 7 Now as I understand FPL's witnesses, Mr. 8 Ο. 9 Chairman, Dr. Morley sponsors the forecasts and overall -- well, I'll stop there. 10 Overall are you responsible for the company's 11 12 modeling efforts, Dr. Morley? 13 Α. No, I wouldn't say that because there's a lot 14 of modeling at FPL. So my job is not that big. 15 Q. Okay. Well, I'll bet that you have read 16 Mr. or Dr. Hanser's testimony; is that true? 17 Α. Yes. 18 And I will further bet that you would be Q. 19 familiar with his Exhibit PQH-2, which is titled FPL's 20 Monthly NEL and Total Customer Model Descriptions. 21 Would I win that bet? 22 I certainly have read his testimony. I'm not Α. 23 here to testify for him, so I think that question might 24 be better directed to Mr. Hanser. 25 Q. Well, I understand you to be sponsoring the FLORIDA PUBLIC SERVICE COMMISSION

1	forecasts. That's true; correct?
2	A. Yes.
3	Q. And the way I understood I don't know if
4	it's Mr. or Dr. Hanser. Mister he's an ABD like me.
5	I understood his testimony basically to say that your
6	models are reasonable. Is that a pretty fair
7	characterization?
8	A. Yes. That's my understanding of his
9	testimony.
10	${f Q}$ . Okay. Let me ask you this. Are the models
11	shown in Exhibit PQH-2 for total customers and monthly
12	net energy for load the models that you use to prepare
13	your MWh sales for forecasts?
14	<b>A.</b> Yes, that's my understanding. Of course I did
15	not prepare that exhibit.
16	<b>Q</b> . Okay. Could I, could I ask you to look at, at
17	Exhibit PQH-2?
18	A. I'm looking at it.
19	${f Q}$ . All right. Are those the models that you used
20	that your forecasts are based on?
21	A. Yes.
22	<b>Q.</b> Good. Now the way, the way I see that model,
23	I see that the, I think it's the NEL model includes a
24	variable for the real price of electricity; is that
25	accurate?
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Α. That's correct. 1 And as a former economist to a current 2 Ο. economist, I think it's correct that we would call the 3 real price term an independent variable in that model; 4 is that accurate? 5 That's correct. And I'm going to ask the Α. 6 bench if I could take a quick break. I don't have 7 8 Mr. Olivera's endurance. I need to make a brief stop. MR. ROSS: That was very diplomatically 9 10 stated. 11 CHAIRMAN CARTER: Yeah. Let's do this. I was 12 just beginning -- of course, it all looks Greek to me. 13 Let's do this. Let's take, let's take ten. We'll be back at -- is that 25 of? 25 of. 14 15 (Recess taken.) 16 We're back on the record. I didn't give you 17 guys the 30-second warning today. Just kidding. 18 Mr. Wright. 19 MR. WRIGHT: Thank you, Mr. Chairman. 20 BY MR. WRIGHT: 21 Dr. Morley, I had asked that you take a look Q. 22 at the models shown in Exhibit PQH-2, and you answered 23 my previous question by telling us, I think, that those 24 are the models you used; correct? 25 Α. Yes. FLORIDA PUBLIC SERVICE COMMISSION

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1	CHAIRMAN CARTER: Would you turn your
2	microphone on, Dr. Morley?
3	THE WITNESS: Yes.
4	CHAIRMAN CARTER: Okay.
5	BY MR. WRIGHT:
6	${f Q}$ . Thank you. I want to ask you a couple of
7	questions about the real price variable that's shown
8	under the monthly NEL model. Is that, is that a what
9	is that price variable? And I know that's somewhat of a
10	vague question, so let me explain it. Is that like a
11	total average company cost per kilowatt hour, is it the
12	residential rate, is it, is it base rate only, is it
13	total cost including all the clauses? If you could kind
14	of speak to that. And if your attorney wants to object,
15	I'll break it all down, but I think you know what I'm
16	asking.
17	MR. ROSS: Yeah. I would request that
18	Mr. Wright break the question down, please.
19	BY MR. WRIGHT:
20	<b>Q</b> . Okay. Try it this way. What is, what is the
21	value that FPL uses for the real price of electricity in
22	that model?
23	<b>A.</b> What the real price of electricity is based
24	on, it's based on the monthly nominal price of
25	electricity that is an overall price of electricity for
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all kilowatt hours. We take that, we divide it by the 1 CPI, and then it's computed on a rolling 12-month basis. 2 And when you said for all kilowatt hours, you 3 Q. did mean all of FPL's kilowatt hour sales? 4 5 Α. Yes. Thank you. And would I -- the coefficient 6 Q. shown there is Alpha 1. That, that coefficient's value 7 8 is negative, is it not? 9 Α. Yes, Okay. And I want to -- just so I'm clear, you 10 Q. 11 said it's the total price. And by that you meant that 12 includes the base rate and all of the clauses; is that 13 correct so far? 14 Α. Yes. 15Q. Does it include gross receipts tax? 16 Α. I'm not sure. 17 Q. Okay. Do you know whether it includes 18 franchise fees and other applicable taxes? 19 Α. I don't believe it is, but that question might 20 be better addressed to Mr. Barrett. 21 Q. Mr.? 22 A. Barrett. 23 Thank you. I'm going to come back Q. Barrett. 24 to that. But since we went on to that question, I want 25 to ask you a couple of questions. I promise we are FLORIDA PUBLIC SERVICE COMMISSION
going to come back briefly to, to the model. But if I 1 could ask you to look at your Exhibit RM-11, and I'd 2 like to ask you to look at Page 2 of 4, if you would. 3 I'm there. Α. 4 Thank you. Do I understand correctly, that 5 Ο. table correctly to show that FPL's total jurisdictional 6 sales for calendar year 2009 is 101,077,000 -- sorry. 7 It's going to be, well, it's going to be megawatt hours. 8 101,077,590 megawatt hours. 9 10 Α. That's correct. Okay. And that's the same as 101,077,590,000 11 Ο. 12 kilowatt hours; right? 13 Α. Yes. 14 Okay. And in computing the real price value Q. 15 that we were just discussing, it would be the monthly 16 equivalents of those that you would use. 17 I think in terms of the computation of the Α. 18nominal price, I think that might be better addressed to 19 Mr. Barrett. 20 Q. Well, don't you have to calculate the nominal 21 price before you calculate the real price? 22 Α. Yes. And I get the nominal price from 23 finance, which is under Mr. Barrett. 24 Q. Okay. So just to make sure that I, that I do 25 ask the right witness my question, the company has filed FLORIDA PUBLIC SERVICE COMMISSION

some, some MFRs that I'm sure nobody is surprised to 1 know show total jurisdictional revenue from sales. The 2 one I'm looking at happens to be Schedule C-1 of the 3 company's MFRs. If I wanted to know the answer to the 4 question, is that the number that's divided by the 5 sales, would Mr. Barrett be the person to ask? 6 Yes. I think he can tell you about that. Ιf 7 Α. I could offer this, is in order to come up with a sales 8 forecast we needed a price forecast. So there was an 9 initial estimate of kilowatt hours used to come up with 10 11 a nominal price forecast, and then that nominal price 12 forecast is used in coming up with the real price of 13 electricity forecast. 14 Q. I'm just not sure that I completely followed 15 that. Would you just repeat that explanation to make 16 sure I've got it right? 17 Α. Certainly. 18 Q. Thank you. 19 Is in order to come up with our sales Α. 20 forecast, we need an estimate of the real price of 21 electricity, taking aside the issues of this, you know, 22 deflated for the CPI. In order to get that number, we 23 need an estimate of the nominal price of electricity. 24 And in order to come up with an estimate of the nominal 25 price of electricity, an estimate or forecast,

preliminary forecast of sales is required. 1 And what price variable do you use in coming 2 0. up with that preliminary forecast of sales? 3 It would have been whatever the most recent Α. 4 estimate is. 5 Okay. And then from there you generate 6 Q. predicted sales and then you loop back and roll the 7 price back in and then -- no. From there you come up 8 with an estimate of sales; correct? 9 10Α. Where's there? I'm sorry. 11 Q. I meant from the point where you had 12 calculated -- I thought you calculated, you calculate 13 sales based on the real price from the most recent 14 available forecast. 15 A. Yes. 16 Q. Okay. And that gives you a sales forecast 17 that you then multiply by -- no. I guess at that point 18 you'd be dividing projected revenues -- you multiplied 19 that by rates to get projected revenues; is that 20 accurate? 21 I don't know if we multiply it by rates, but I Α. 22 believe what you're saying what the issue is is in order 23 to come up with a nominal price forecast we have to have 24 a preliminary estimate of our sales forecast and that is 25 the way it's done.

Q. Okay. 1 And after we get that nominal price forecast, Α. 2 we work it back into the model and come up with the 3 final sales forecast. 4 Is it the step before that that you take the 5 Q. nominal price and deflate it using the CPI and then put 6 that into your sales forecast model to get your final 7 sales forecast results? 8 In any projection of sales we would have an 9 Α. 10 estimate of the real price of electricity. I understand that as a general statement, but 11 Ο. 12 was the answer to my question yes? 13 I'm not sure it was yes, because I thought you Α. 14 might have been saying that we don't have an estimate of 15 the real price of electricity until we do the final 16 forecast. I apologize if I misunderstood. Well, and I apologize for the, whatever it is, 17 Q. confusion or tedium associated with this. 18 You've got a forecast of sales, you've got a 19 20 forecast of the nominal price of electricity. You then 21 go back and recompute -- is it true that you then go 22 back and recompute a real price of electricity and roll that number into your final sales forecast? 23 24 Α. Yes. 25 Great. Would I be correct that the Q.

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1	coefficient Alpha 4, which is applied to the Florida
2	income variable, is also negative?
3	A. No.
4	<b>Q.</b> No. I wouldn't
5	<b>A.</b> The income has a positive effect.
6	<b>Q.</b> I said it thank you for correcting it. It
7	would be positive. And that's real disposable income?
8	<b>A.</b> It's, yes, it's real household disposable
9	income.
10	<b>Q.</b> Thank you. I want to pursue a couple of
11	questions about price and consumption. In your
12	deposition I believe you told Mr. Moyle in response to a
13	question that, that the residential, the elasticity of
14	demand for residential electricity consumption is about
15	33 percent was the phraseology that, that the deposition
16	transcript says. Does that sound familiar?
17	A. Yes. I believe there was an errata on the
18	deposition. It should have been around 30 percent.
19	${f Q}$ . Okay. Would I be correct that that would mean
20	that for a 1 percent increase in the price of
21	electricity, there would be, using your corrected value,
22	there would be roughly a three-tenths of 1 percent
23	decrease in the quantity of electricity demanded?
24	<b>A.</b> Yes. That's of course a change in the real
25	price of electricity deflated by the CPI, and it's
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1	computed on a rolling 12-month basis.
2	Q. You've been present for most of the hearing so
3	far, have you not?
4	A. Yes.
5	Q. So have I. Subject to whatever check you want
6	to do, would did you hear Mr. Olivera testify
7	yesterday that the company is not guaranteeing that fuel
8	costs will decline in January?
9	A. I was certainly listening to Mr. Olivera. I
10	don't know if I remember that specific statement.
11	Q. Well, let me ask you. I'm sure you have seen
12	a lot of, because I have too, Exhibit AJO-2, which is
13	the graph that looks like this. It was up on the easel
14	board for a long time during Mr. Olivera's testimony.
15	Are you familiar with this exhibit?
16	<b>A.</b> My vision is such that, yes, I recognize those
17	bars. I have otherwise not I'm otherwise not
18	familiar with that exhibit.
19	<b>Q.</b> Okay. Will you agree that if the Commission
20	approves the rate increase requested by FPL, this data
21	shows that FPL's rates would be roughly \$12.40 higher
22	than they would be if the Commission granted no rate
23	increase?
24	MR. ROSS: Objection, Mr. Chairman. Again,
25	it's the wrong witness to be asking rate questions of.
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1	And as Mr. Wright acknowledged in his question, this
2	issue was explored with Witness Olivera.
3	CHAIRMAN CARTER: Let's see. He's showing it
4	to her. Let's see if she's familiar with it and then
5	she can answer.
6	MR. WRIGHT: Mr. Chairman, just so we're
7	clear. This is a predicate question to establish
8	what the difference in rate impact on a
9	thousand-kilowatt-hour residential customer would be.
10	I'm going to loop it back to the discussion I was just
11	having with the witness regarding the elasticity of
12	demand for electricity.
13	CHAIRMAN CARTER: You may proceed.
14	MR. WRIGHT: Thank you.
14 15	MR. WRIGHT: Thank you. BY MR. WRIGHT:
14 15 16	MR. WRIGHT: Thank you. BY MR. WRIGHT: Q. Okay. I know that you're facile with
14 15 16 17	<pre>MR. WRIGHT: Thank you. BY MR. WRIGHT: Q. Okay. I know that you're facile with mathematics and I'm sure you can do the arithmetic and</pre>
14 15 16 17 18	<pre>MR. WRIGHT: Thank you. BY MR. WRIGHT: Q. Okay. I know that you're facile with mathematics and I'm sure you can do the arithmetic and confirm the \$12.40 number I came up with.</pre>
14 15 16 17 18 19	<pre>MR. WRIGHT: Thank you. BY MR. WRIGHT: Q. Okay. I know that you're facile with mathematics and I'm sure you can do the arithmetic and confirm the \$12.40 number I came up with. A. Yes, you're correct, I have a calculator. I</pre>
14 15 16 17 18 19 20	<ul> <li>MR. WRIGHT: Thank you.</li> <li>BY MR. WRIGHT:</li> <li>Q. Okay. I know that you're facile with mathematics and I'm sure you can do the arithmetic and confirm the \$12.40 number I came up with.</li> <li>A. Yes, you're correct, I have a calculator. I have never seen this exhibit close up until just now.</li> </ul>
14 15 16 17 18 19 20 21	<ul> <li>MR. WRIGHT: Thank you.</li> <li>BY MR. WRIGHT:</li> <li>Q. Okay. I know that you're facile with mathematics and I'm sure you can do the arithmetic and confirm the \$12.40 number I came up with.</li> <li>A. Yes, you're correct, I have a calculator. I have never seen this exhibit close up until just now. So I'm, I'm not familiar with this exhibit.</li> </ul>
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1	A. I will calculate that. And what was the
2	figure you gave?
3	<b>Q.</b> I got 12.40.
4	A. Yes. If I take the difference between
5	January 2010 and January 2009, I arrive at that figure.
6	<b>Q.</b> Okay.
7	A. For base.
8	<b>Q.</b> For base. You will, I'm sure you will also
9	agree that in rough terms FPL's rates are currently
10	around \$100 per thousand kilowatt hour residential bill;
11	correct?
12	A. Yes. That's what this exhibit shows.
13	<b>Q.</b> Okay. \$12.40 is right around 12 percent of
14	\$100, isn't it?
15	A. Yes.
16	<b>Q.</b> From your prior answer regarding the
17	elasticity of demand, doesn't it follow that if the
18	rates are about 12 percent higher than they would
19	otherwise be, that consumption would be about
20	3.6 percent lower than it would otherwise be?
21	<b>A.</b> Not entirely. And the reason I mention that
22	is there are, the real price of electricity isn't just
23	made up of the nominal price. It's a rolling 12-month
24	average and it's also deflated by the CPI, so I
25	<b>Q.</b> Is it going to be pretty close to that value,
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Dr. Morley? 1 Not necessarily, because especially the Α. 2 rolling 12-month part, it would really take 12 months to 3 fully see the impact on usage. 4 Could you put a band around -- if there were 5 ο. no inflation, my calculation would be right; correct? 6 Your calculation would be correct for the end 7 Α. of the year. It would not be correct for the year as a 8 whole because we look at it on a rolling 12-month basis, 9 10 the price of electricity. The assumption I asked you to make in 11 0. 12 answering the question though is if there were no 13 inflation, my calculation would be correct; correct? 14 Yes? Yes. And the caveat I wanted to add to that 15 Α. is we look at the real price of electricity on a rolling 16 17 12-month basis. So we would not get the impact you're 18 talking about until 12 months hence, not the current 19 month, or the average for the year. 20 Just to be real clear, if there were no Ο. 21 inflation during those rolling 12 months, would my 22 calculation be correct? Because we also roll the nominal price. 23 Α. No. 24 So, again, you wouldn't get that effect until the end of 25 the year, the December of the year. FLORIDA PUBLIC SERVICE COMMISSION

1 Q. Okay. So your calculation wouldn't be appropriate 2 Α. for the average for the year. 3 You say it would or would not? 4 Ο. Would not. Would not, because --5 Α. It would be appropriate for the end of the 6 Q. 7 year? 8 Α. Yes. 9 Q. Okay. Would it be close for the average for 10 the year? Not necessarily. 11 Α. How far off could it be? 12 Q. 13 I think roughly half. You've got rolling 12 Α. months, average for the year, about half. 14 Okay. Well, okay. We are talking about, 15 Q. let's talk about consumption in 2010. Good. You're the 16 17 forecaster. 18 MR. ROSS: Is there a question? 19 MR. WRIGHT: I'm getting to it. 20 BY MR. WRIGHT: If, if FPL's retail price for a 21 Q. 22 thousand-kilowatt-hour customer was 12 percent lower for 23 all of 2010 than under an assumed alternate scenario, 24 what would be the approximate increase in sales that 25 your model, incorporating the elasticity of demand that

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you have testified to, would indicate? 1 2 Α. And it's 12 percent lower or higher? 12 percent lower. 3 0. It would have no effect on the model I'm 4 Α. 5 looking at because this is the net energy for load model. 6 7 That wasn't the question. I asked for Q. 8 residential consumption. You're right. On residential 9 consumption what would the impact be? 10 You know, all things being equal -- you said Α. 11 12 percent? 12 0. Yes. 13 Α. I'm sorry. 14 I did say 12 percent. Q. 15 Α. Okay. All things being equal, it would have 16 an impact of increasing residential sales. Of course we 17 know that in reality all things are never equal and 18 there are, you know, other risks to the forecast 19 particularly in terms of lower population growth that 20 would offset that. 21 Thank you for the qualification. But if you Q. 22 could answer the question, other things being equal, 23 what would the impact be? 24 Α. You know, I'm not sure that I can quantify 25 that because there are other components to the real FLORIDA PUBLIC SERVICE COMMISSION

price of electricity including what's happening with 1 inflation. And as we've talked about, there are many 2 components to the model, including population tends to 3 have a much more direct impact on sales than the price 4 5 of electricity. 6 Well, as we are wont to do, we were speaking Q. about other things being equal. I, you know, I 7 appreciate your qualification that other things aren't 8 equal, and we know that. But if other things were 9 equal, what would the value be? 10 I don't know because I would have to refer 11 Α. 12 back to the price of electricity forecast that went into 13 the model that was developed, I believe, in November 2008 and compare that estimate of base rates 14 with what, or total rates with what we're showing here. 15 Other things equal, you would agree that 16 0. residential consumption would be greater if the price 17 were 12 percent lower? 18 19 Α. Yes. And notwithstanding the fact that you're the 20 <u>Q</u>.

20 **Q.** And notwithstanding the fact that you're the 21 company's modeling witness, you can't tell us by how 22 much; is that true?

A. No. I can't tell you how much without
considering all the various components of the model.
MR. ROSS: Mr. Chairman, I hate to interrupt.

1 But we have a concern based on the questions that are 2 being asked that the exhibit that was put in front of 3 Dr. Morley, which is Mr. Olivera's Exhibit AJO-2, which has been admitted as 39, may not be the right version. 4 5 I suspect that Mr. Wright may have used the version that was in the testimony. However, the company filed an 6 7 errata prior to the hearing, and the correct version was entered in as Exhibit 39. 8 9 So I would just like to inquire, make sure we have the right version in front of her. 10 11 CHAIRMAN CARTER: You know, you guys get squirrely around lunchtime, so let's go ahead on and you 12 13 guys can look over your notes and we'll go ahead on and take our lunch break now and come back. 14 15 MR. WRIGHT: Thank you, Mr. Chairman. 16 (Recess taken.) (Transcript continues in sequence with Volume 17 10.) 18 19 20 21 22 23 24 25 FLORIDA PUBLIC SERVICE COMMISSION

1 STATE OF FLORIDA ) CERTIFICATE OF REPORTER : 2 COUNTY OF LEON ) 3 4 I, LINDA BOLES, RPR, CRR, Official Commission Reporter, do hereby certify that the foregoing 5 proceeding was heard at the time and place herein stated. 6 IT IS FURTHER CERTIFIED that I 7 stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; 8 and that this transcript constitutes a true transcription of my notes of said proceedings. 9 I FURTHER CERTIFY that I am not a relative, 10 employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' 11 attorneys or counsel connected with the action, nor am I financially interested in the action. DATED THIS 15t day of September 12 2009. 13 14 15 LIND BOLES, RPR, CRR 16 FPSC Official Commission Reporter (850) 413-6734 17 18 19 20 21 22 23 24 25 FLORIDA PUBLIC SERVICE COMMISSION