

**BEFORE THE FLORIDA PUBLIC SERVICE  
COMMISSION**

**DOCKET NO. 090172-EI  
FLORIDA POWER & LIGHT COMPANY**

**IN RE: FLORIDA POWER & LIGHT COMPANY'S  
PETITION TO DETERMINE NEED FOR  
FLORIDA ENERGYSECURE LINE**

**REBUTTAL TESTIMONY & EXHIBITS  
OF**

**DR. ROSEMARY MORLEY**

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5                   **JULY 2, 2009**

6  
7   **Q.    Please state your name and business address.**

8    A.    My name is Dr. Rosemary Morley. My business address is Florida Power &  
9           Light Company, 700 Universe Boulevard, Juno Beach, Florida 33408.

10 **Q.    Did you previously submit direct testimony in this proceeding?**

11 A.    Yes.

12 **Q.    Are you sponsoring any rebuttal exhibits in this case?**

13 A.    Yes. I am sponsoring the following rebuttal exhibits:

- 14           • RM-22 The University of Florida’s Population Under-Forecast  
15           • RM-23 The University of Florida’s Projection Bands

16 **Q.    What is the purpose of your rebuttal testimony?**

17 A.    The purpose of my rebuttal testimony is to comment on the testimony of Florida  
18           Gas Transmission Company, LLC (“FGT”) witness Michael T. Langston.  
19           Specifically, I will address Mr. Langston’s contention that the adjustments FPL  
20           makes to the University of Florida’s population projections are unreasonable and  
21           that FPL’s population forecast is overstated as a result of the University of  
22           Florida’s March 2009 population projections. I also address the suggestion that

1 FPL's load forecast filed in this case is inconsistent with other publicly filed  
2 forecasts.

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4

#### SUMMARY

5

6 **Q. Please summarize your rebuttal testimony.**

7 A. FPL's long-term population projections, which incorporate adjustments to the  
8 University of Florida's October 2008 projections, are reasonable. The University  
9 of Florida has consistently under-forecasted the state's long-term population  
10 growth. FPL's adjustments are smaller than the University of Florida's average  
11 long-term under-forecasting error. Likewise, FPL's long-term population  
12 projections are within the University of Florida's banded population projections  
13 from its recent March 2009 forecast. Finally, the load forecast filed in this case is  
14 consistent with the load forecast filed in the 2009 Ten Year Site Plan and other  
15 FPL filings.

16

17

#### REBUTTAL OF FGT WITNESS LANGSTON

18

19 **Q. Do you agree with FGT witness Langston's assertion that FPL's population  
20 forecast is unreasonable?**

21 A. No, I do not. FPL's population forecast utilized the most recent population  
22 projections available from the University of Florida at the time the forecast was  
23 developed. Moreover, FPL's population forecast incorporates appropriate

1 adjustments to the University of Florida's population projections. As explained in  
2 my direct testimony, the University of Florida's population projections have  
3 consistently under-forecasted the state's long-term population growth based on a  
4 ten year forecasting horizon. By contrast, the University of Florida's shorter-term  
5 forecasting accuracy has been very good. Accordingly, FPL made no adjustments  
6 to the initial years of the University of Florida's October 2008 projections.

7  
8 Both FPL's population forecast and the University of Florida's October 2008  
9 projections recognize the significantly slower population growth likely to be  
10 experienced for the next few years. However, FPL adjusted the later years of the  
11 University of Florida's October 2008 population projections based on the rebound  
12 in population growth that has historically occurred following recessions.

13 As a result of these adjustments, FPL's population forecast assumes a level of  
14 long-term growth consistent with the state's historical trends.

15 **Q. Why is consistency with the state's historical trends important?**

16 A. The Commission has repeatedly cited consistency with historical trends as a  
17 criterion in approving load forecasts in Need Determination filings. For example,  
18 in Docket No. 040817-EI, Order No. PSC-04-1168-FOF-EI, the Commission  
19 concluded that the utility's forecasts "appear to be a reasonable extension of  
20 historical trends." Similar language was included in Docket No. 080245-EI,  
21 Order No. PSC-08-0591-FOF-EI, and in Docket 080148-EI, Order No. PSC-08-  
22 0518-FOF-EI, among others.

1 **Q. What impact did the adjustments FPL made to the University of Florida's**  
2 **October 2008 projections have on the Company's population projections?**

3 A. There was no impact in the first years of the forecast. Beginning in 2012, FPL  
4 assumes a rate of population growth consistent with past levels of rebound  
5 growth. As a result, by 2018, FPL is forecasting a population of 22.2 million  
6 versus a projection of 21.4 million for the same year in the University of Florida's  
7 October 2008 projections. Thus, FPL's adjustments increased the 2018  
8 population level by about 800,000 or a percentage difference of 3.7%.

9 **Q. How does this adjustment compare with the University of Florida's average**  
10 **long-term forecasting error?**

11 A. FPL's adjustments are well within the University of Florida's average long-term  
12 forecasting error. As shown in Exhibit RM-22, the University of Florida's  
13 population forecast has consistently under-estimated Florida's long-term  
14 population growth based on a ten-year forecasting horizon. Since 1994, the  
15 University of Florida has under-estimated the state's long-term population  
16 growth, on average, by almost 1.3 million residents based on a ten-year  
17 forecasting horizon. By comparison, FPL's adjustments increased the University  
18 of Florida's October 2008 population forecast by about 800,000 in 2018, a ten-  
19 year forecasting horizon. Thus, FPL's adjustments are reasonable in light of the  
20 University of Florida's average long-term forecasting tendency to under-estimate  
21 population growth.

1 **Q. Has the University of Florida subsequently revised its population**  
2 **projections?**

3 A. Yes. As Mr. Langston observes, the University of Florida revised its population  
4 projections in March 2009.

5 **Q. How do the University of Florida's March 2009 population projections**  
6 **compare with October 2008 projections?**

7 A. The University of Florida's most recent projections are even lower than the prior  
8 estimates. The level of population growth for the 2008 to 2010 period is  
9 projected to fall to record levels. The University of Florida notes that its 2008 to  
10 2010 projections reflect the smallest population growth in Florida since the mid-  
11 1940s when large numbers of military personnel relocated out of the state after  
12 World War II ended. Specifically, the University of Florida is projecting no  
13 increase in population in 2009 and only a 74,226 increase in 2010. By contrast,  
14 the October 2008 projections indicated a 75,000 population increase in 2009  
15 followed by a 98,000 increase in 2010. After 2010, the University of Florida's  
16 March 2009 projections show that both the rate and level of population growth  
17 will remain below their historical averages.

18 **Q. Is FPL's long-term population forecast overstated as a result of the**  
19 **University of Florida's March 2009 projections, as Mr. Langston claims?**

20 A. No. While there may be an impact in the short term, FPL's long-term population  
21 forecast, specifically the forecast based on a ten-year forecasting horizon or  
22 longer, is not overstated as a result of the University of Florida's March 2009  
23 projections.

1 **Q. Why is it appropriate here to focus on a long-term forecasting horizon of ten**  
2 **years or more?**

3 A. As described in FPL witness Enjamio's rebuttal testimony, the Florida Energy  
4 Security Line will have a multi-decade service life; therefore, the project should  
5 be assessed using a long-term planning horizon.

6 **Q. Why is FPL's long-term population forecast still reasonable in light of the**  
7 **University of Florida's March 2009 projections?**

8 A. First, the differences between FPL's population forecast and the University of  
9 Florida's March 2009 forecast are still within the University of Florida's average  
10 error over a ten-year forecasting horizon. As shown in Exhibit RM-22, the  
11 difference between FPL's population forecast for 2018 and the University of  
12 Florida's March 2009 forecast for the same year closely approximates the  
13 University of Florida's average error over a ten-year forecasting horizon. The  
14 March 2009 University of Florida projections show a population of about 20.9  
15 million by 2018, 1.3 million lower than FPL's population forecast for the same  
16 year. Since 1993 the University of Florida has on average under-estimated the  
17 state's population by 1.3 million based on a ten-year forecasting horizon, thus  
18 indicating that FPL's population projection remains appropriate given the  
19 University of Florida's past track record.

20  
21 Second, acknowledging the uncertainty associated with population forecasts, the  
22 University of Florida presented three sets of forecasting bands in its March 2009  
23 projections; a medium case, a high case, and a low case. The University of

1 Florida recognizes that the low and high case projections “provide reasonable  
2 alternative scenarios.” FPL’s population forecast is well within the forecasting  
3 bands incorporated in the University of Florida’s March 2009 projections.

4 **Q. How does FPL’s population forecast compare with the University of  
5 Florida’s March 2009 projections?**

6 A. As shown on Exhibit RM-23, FPL’s population forecast falls within the  
7 University of Florida’s high, medium, and low case projections from its March  
8 2009 forecast. Specifically, FPL’s population forecast is consistently between the  
9 medium and high band projections, a relationship that is maintained throughout  
10 the forecasting horizon provided by the University of Florida.

11 **Q. Why is the fact that FPL’s population forecast falls within the University of  
12 Florida’s forecasting bands significant?**

13 A. First, FPL’s population forecast falls within the reasonable range of expected  
14 population growth indicated by the University of Florida’s population bands.  
15 Second, the University of Florida’s tendency to under-estimate long-run  
16 population growth suggests that it may be prudent to consider its high case  
17 projections when reviewing forecasts over a ten-year horizon or longer. Thus, the  
18 fact that FPL’s population forecast falls between the medium and high case  
19 projections further supports the reasonableness of the forecast. It is important to  
20 keep in mind that the University of Florida’s high case projections do not  
21 represent an upper limit of the state’s population growth. Rather, the high case  
22 projections, to a large extent, represent an extension of the state’s historical  
23 growth rates. For example, the high case projections assume that net migration



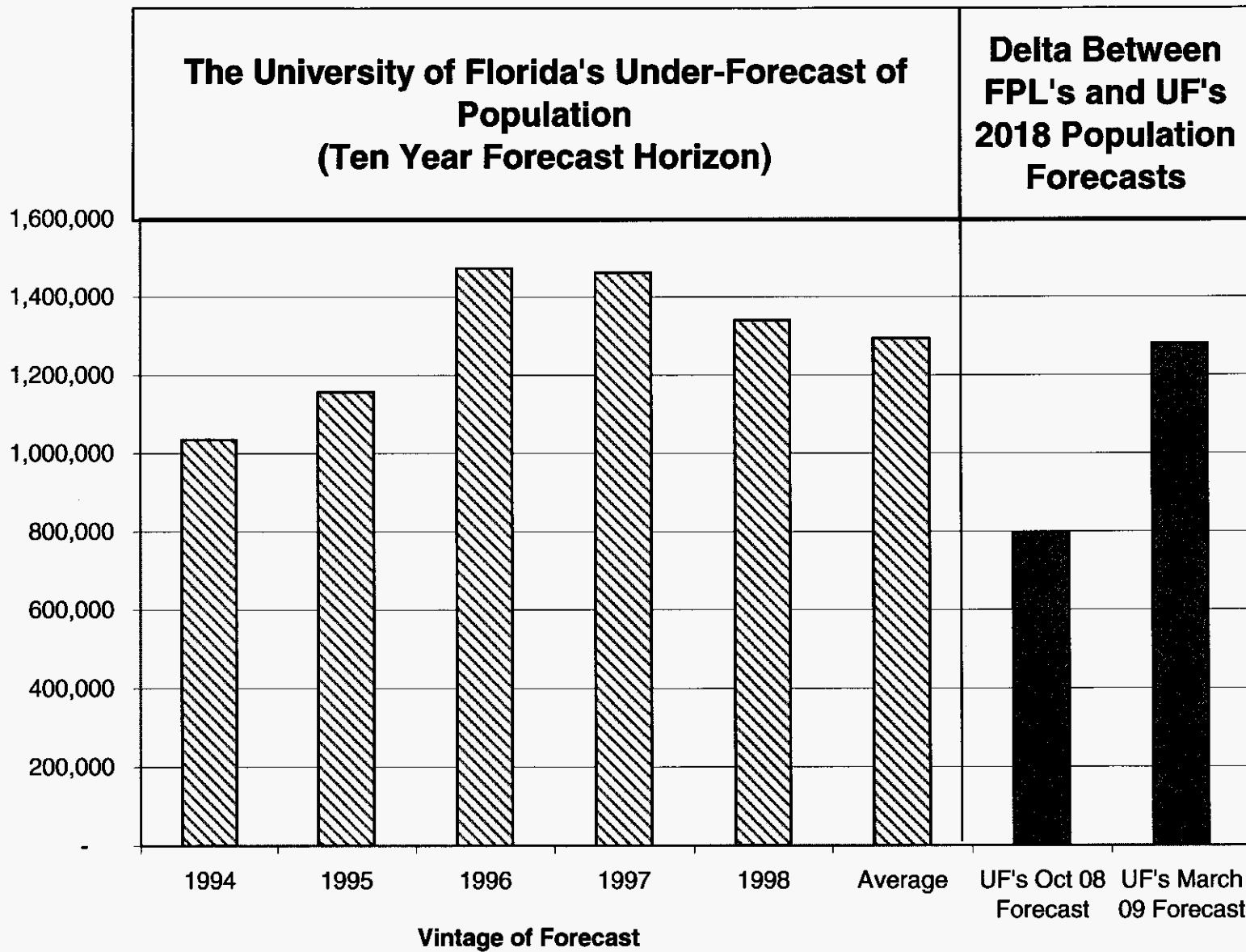
1 will average 270,000 to 290,000 over the forecasting horizon. By comparison, net  
2 migration actually averaged between 260,000 and 280,000 in the 1970s, 1980s  
3 and 1990s, periods when the absolute level of the Florida and U.S. population  
4 were considerably lower

5 **Q. Is FPL's load forecast in this filing consistent with the 2009 Ten-Year Site**  
6 **Plan?**

7 A. Yes. FPL's load forecast in this filing is consistent with the 2009 Ten-Year Site  
8 Plan and other publicly available filings, including FPL's petition for a rate  
9 increase, Docket No. 080677-EI and FPL's petition for approval of numeric  
10 conservation goals, Docket No. 080407-EG.

11 **Q. Does this conclude your rebuttal testimony?**

12 A. Yes.



# The University of Florida's Projection Bands

