

**BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION**

ORIGINAL

**DOCKET NO. 070098-EI
FLORIDA POWER & LIGHT COMPANY**

**IN RE: FLORIDA POWER & LIGHT COMPANY'S
PETITION TO DETERMINE NEED FOR
FPL GLADES POWER PARK UNITS 1 AND 2
ELECTRICAL POWER PLANT**

REBUTTAL TESTIMONY & EXHIBIT OF:

C. DENNIS BRANDT

DOCUMENT NUMBER - DATE

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FLORIDA POWER & LIGHT COMPANY

REBUTTAL TESTIMONY OF C. DENNIS BRANDT

DOCKET NO. 070098-EI

MARCH 30, 2007

Q. Please state your name and business address.

A. My name is C. Dennis Brandt, and my business address is 9250 West Flagler Street, Miami, Florida 33174.

Q. By whom are you employed and what is your position?

A. I am employed by Florida Power & Light Company (FPL) as Director of Product Management and Operations.

Q. Have you previously testified in this docket?

A. Yes, I have.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to counter the argument that more demand-side management (DSM) is reasonably achievable by FPL that could defer the need for the proposed FPL Glades Power Park (FGPP), as asserted by Mr. John J. Plunkett testifying on behalf of the Sierra Club, Inc., Save Our Creeks, the Florida Wildlife Federation, the Environmental Confederation of Southwest Florida and Ellen Peterson. I explain how FPL has developed and implemented an aggressive, reasonable and comprehensive set of DSM programs. Despite FPL's substantial conservation efforts, which

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1 are acknowledged by Mr. Plunkett, there is not sufficient cost-effective,
2 reasonably achievable DSM potential on FPL's system to reduce peak load
3 sufficiently to defer the need for the FGPP units. I address Mr. Plunkett's use
4 of inappropriate metrics for measuring DSM effectiveness and his incorrect
5 conclusions related to benchmarking FPL's DSM programs to those of other
6 states. I also show that Mr. Plunkett's testimony contains a number of errors
7 indicating his lack of familiarity with conservation activities in Florida and in
8 particular with FPL's DSM programs. Thus, I will address numerous mistakes
9 contained in Mr. Plunkett's testimony pertaining to FPL's DSM
10 accomplishments, programs, future plans and their relationship to FPL's need
11 for the FGPP units.

12 **Q. Are you sponsoring any exhibits to your rebuttal testimony?**

13 A. Yes. I am sponsoring an exhibit consisting of the following documents, which
14 is attached to my rebuttal testimony:

- 15 • Document No. DB-3 Dollar per kW Comparison for FPL and PG&E
- 16 • Document No. DB-4 Prior Exhibits of John J. Plunkett

17 **Q. Please describe how your rebuttal testimony is organized.**

18 A. I have organized my testimony into four sections based on the major
19 assertions of Mr. Plunkett's testimony:

- 20 • Section I - FPL's Planned DSM Savings
- 21 • Section II – Energy-Efficiency Portfolios in Other Jurisdictions
- 22 • Section III - The Effect of Additional FPL Energy-Efficiency on the Need
23 for the Glades Units

- 1 • Section IV – Summary and Conclusion

2

3 **I. FPL’S PLANNED DSM SAVINGS**

4

5 **Q. Mr. Plunkett references on page 7, lines 8-10, the American Council for**
6 **an Energy-Efficient Economy (ACEEE) Florida report. Are you familiar**
7 **with the report to which he is referring?**

8 A. Yes, I am.

9 **Q. What did Mr. Plunkett conclude from the ACEEE Florida report?**

10 A. Mr. Plunkett states, “In fact, the Company’s planned DSM savings add up to
11 more than FP&L’s share of statewide efficiency potential recently estimated
12 by the American Council for an Energy-Efficient Economy.”

13 **Q. Do you agree with Mr. Plunkett’s findings regarding the ACEEE report?**

14 A. Taken at face value, Mr. Plunkett’s findings indicate that FPL has done a
15 more than credible job of identifying the potential for additional cost-effective
16 DSM for the time period in question for this determination of need. However,
17 the statewide efficiency potential in the ACEEE report is overstated.

18

19 When the ACEEE report was released in February 2007, FPL reviewed the
20 report and the underlying assumptions presented. FPL’s review was
21 hampered by the lack of supporting detail and assumptions in the report. To
22 help in understanding the report, FPL and the other Florida investor-owned
23 utilities (IOUs), met with the project leader from ACEEE who helped develop

1 the report. During that meeting, concerns over the report were reviewed with
2 the ACEEE project leader. He said that ACEEE planned to issue a revised
3 report to correct overstated potential in several areas and he agreed to review
4 and consider all feedback from the IOUs in revising the report. This feedback
5 was provided on March 14, 2007 and, as of this date, I am not aware of the
6 corrected report being issued.

7 **Q. What type of feedback did FPL provide ACEEE regarding its study?**

8 A. Besides expressing concerns over proposed polices and the misrepresentation
9 of DSM accomplishments to-date for the state of Florida, FPL had concerns
10 about the accuracy of energy savings portrayed for DSM measures, as well as
11 the assumed market penetration for these measures. For example, FPL's
12 concerns for the residential segment included:

- 13
- 14 • The ACEEE Florida report claims that replacing a heating, ventilating and
15 air-conditioning (HVAC) unit that has a seasonal energy efficiency ratio
16 (SEER) of 13 with a SEER 15 unit will save 2,785 kilowatt hours (kWh)
17 per year for a resident of Florida. FPL's estimates, based on extensive
18 monitoring and evaluation done of FPL customers who participate in its
19 existing residential HVAC program, is a savings range of only 563 kWh
20 per year to 692 kWh per year, depending on whether the unit is a straight
21 cool unit or a heat pump. In February 2007, ACEEE published a report
22 titled "Examining the Peak Demand Impacts of Energy Efficiency
23 (EPDIEE)." This report estimated savings of 378 kWh per year for an

1 energy efficient central air conditioning system. Based on FPL's analysis
2 and ACEEE's EPDIEE report, the energy savings for this measure as
3 stated in the ACEEE Florida report is at least 4 times greater than it should
4 be.¹

- 5
- 6 • The ACEEE Florida report claims an annual savings of 589 kWh per
7 home in Florida that has leaking ductwork repaired. FPL's own estimates,
8 based on monitoring and evaluation done of FPL customers who
9 participate in its existing residential Duct System Testing and Repair
10 program, is only 308 kWh or 45 percent less than the ACEEE claim.
- 11
- 12 • The ACEEE Florida report claims an annual savings of 1,066 kWh for
13 Energy Star refrigerators. The ACEEE EPDIEE report uses a range of
14 savings from 52 kWh to 212 kWh per year. Once again, the ACEEE
15 Florida report is overstating savings by as much as 20 times more than
16 their own separate study.
- 17
- 18 • The ACEEE Florida report includes two packages of energy efficiency
19 measures for retrofitting existing Florida homes that it claims would
20 reduce annual energy usage by 9,159 kWh per home. Package one
21 contains six measures that ACEEE claims will save 6,167 kWh per year

¹ While in many cases, the information provided by FPL to ACEEE was specific to FPL's service territory, I would not expect the statewide results to differ significantly because FPL has more customers than any other Florida utility.

1 per participant. Package two contains six measures that save 2,992 kWh
2 per year per participant, of which 24% is identified as miscellaneous load
3 reduction. To put this in perspective, an average FPL residential customer
4 uses 13,964 kWh per year. Implementing these packages, which include
5 12 measures, would result in a 66% reduction in average residential usage
6 if ACEEE's claims are true. It is highly improbable that ACEEE's
7 projected savings from retrofitting homes would actually occur.

8
9 Unfortunately, there was insufficient data in the ACEEE Florida report to
10 perform a similar comparison for the commercial segment, but FPL expressed
11 its concerns that there is a similar gross overstatement of DSM potential for
12 this customer segment.

13
14 FPL also expressed its concerns about the report's estimates of market
15 penetration. In summary, the report recommends a totally unrealistic DSM
16 potential for Florida that: 1) starts with non-Florida data, 2) vastly overstates
17 customer participation rates, and 3) uses per-participant impacts that are in
18 direct conflict with FPL's findings and ACEEE's own EPIDIEE report.

19
20 Three levels of market potential are discussed in the ACEEE Florida report.
21 They are technical potential, economic potential and achievable potential.
22 The methodology for translating technical potential to economic potential, and
23 further to achievable potential, is not clear from the report. The technical

1 potential used was not for Florida but rather, was used from prior work in
2 other states. The economic potential methodology is not explained, but
3 ACEEE claims significant market penetration. For example, the report claims
4 that 50% of existing homes can cost-effectively implement the six retrofitting
5 measures in Package one discussed above and 25% can implement the six
6 retrofitting measures in Package two. Again, this is highly unlikely. Further,
7 the report adjusts from economic potential to achievable potential based on a
8 set of proposed policy objectives, but there is not an explanation how these
9 policies are linked to the economic potential. In conclusion, there are many
10 missing pieces and speculative claims that make the report's findings
11 regarding market potential highly unreliable.

12 **Q. Did the ACEEE Florida report address any other means of meeting**
13 **Florida's energy needs besides energy efficiency?**

14 A. Yes. The report identified renewable energy as a second means of meeting
15 the energy needs of Florida.

16 **Q. Did the IOUs express concerns with renewable energy portion of the**
17 **ACEEE Florida report?**

18 A. Yes. The IOUs expressed concerns with ACEEE's conclusions regarding
19 renewable energy potential in Florida. The ACEEE project leader agreed with
20 the IOUs that there was a significant overstatement in the report of the
21 potential for renewable energy in Florida. He said that ACEEE planned to
22 issue a revised report to correct this error. The rebuttal testimony of Mr. Rene
23 Silva addresses renewable energy potential in Florida.

1 **Q. What do you conclude regarding the ACEEE Florida report and Mr.**
2 **Plunkett's findings based on the report as it relates to FPL?**

3 A. Mr. Plunkett states that FPL's DSM plan is more than the Company's share of
4 the statewide potential identified in the ACEEE Florida report. Given the
5 concerns that I have just discussed about this report, it is reasonable to
6 conclude that FPL is not just doing "more than FP&L's share of statewide
7 efficiency potential" but rather, doing substantially more than what a
8 corrected ACEEE Florida report would show.

9
10 **II. ENERGY-EFFICIENCY PORTFOLIOS IN OTHER JURISDICTIONS**

11
12 **Q. Mr. Plunkett bases his projections for additional DSM savings on**
13 **portfolios from other jurisdictions because, he says, other states have**
14 **longer track records of acquiring considerably more DSM than Florida**
15 **(page 7, lines 13-17). Do you agree that Florida lags behind other states**
16 **in its DSM efforts?**

17 A. No I do not. Florida and FPL have a long history of identifying, developing
18 and implementing DSM resources to cost-effectively avoid or defer the
19 construction of new power plants. FPL first began offering DSM programs in
20 the late 1970s with the introduction of its Watt-Wise Home Program. FPL has
21 continued to develop and offer to its customers additional DSM programs.
22 These programs have included both conservation and load management
23 programs, targeting the residential and business markets. More importantly,

1 while other states moved away from DSM in the 1990s, Florida and FPL
2 continued to emphasize the importance of this resource for meeting growth in
3 peak demand. Indeed, based on the Florida Public Service Commission's
4 (FPSC) February 2007 report titled Annual Report on Activities Pursuant to
5 the Florida Energy Efficiency and Conservation Act (FEECA), between 1980
6 and 2006, utility DSM programs reduced peak summer demand by 4,983
7 MW, and thereby "deferred the need for ten typical 500 MW electric
8 generating plants, or enough capacity to serve approximately 1.6 million
9 households" (Executive Summary). This FPSC report is further evidence of
10 the continued emphasis on and positive impact of DSM efforts in Florida.

11 **Q. How do FPL's DSM efforts compare to the efforts of other utilities**
12 **nationwide?**

13 A. As addressed in detail in my direct testimony, FPL has compiled an enviable
14 record nationally in regard to its DSM achievements. Indeed, the U.S
15 Department of Energy ranks FPL first in the nation for cumulative
16 conservation achievement and number four in load management, based on the
17 most current data available.

18 **Q. Is the amount spent on DSM per kWh, a concept suggested by Mr.**
19 **Plunkett, an appropriate means of determining whether FPL is utilizing**
20 **all reasonably available DSM measures?**

21 A. No. A key element of successful DSM programs is cost-effectiveness, not
22 how much money is spent. It is the peak hour kW reduction value of DSM
23 options that enables utilities to avoid the need for new generation additions.

1 For a detailed discussion of the problems with Mr. Plunkett's testimony as it
2 relates to the cost-effectiveness of DSM measures, please refer to the rebuttal
3 testimony of FPL witness Dr. Sim. Without considering the cost-effectiveness
4 of a DSM program or portfolio, excess spending directly impacts the price of
5 electricity to customers in a non-cost effective manner.

6 **Q. Do you agree with Mr. Plunkett that DSM plans in the Northeast and**
7 **California offer a basis for projecting spending and savings for FPL?**
8 **(pages 7-8).**

9 A. No, I do not. I believe the process prescribed by the Commission and used by
10 the Florida utilities is the appropriate means to determine DSM savings and
11 spending. This very logical process starts with utilities determining all the
12 cost-effective DSM potential for a 10-year planning horizon. The review and
13 approval of this cost-effective DSM potential by the Commission results in
14 DSM goals for each utility. The subsequent review and approval of 10-year
15 DSM goals every five years ensures that all the relevant DSM potential is
16 always included in the goal setting process. Based on these 10-year DSM
17 goals, each utility develops a DSM Plan, which specifies the DSM programs
18 that will be used to meet the DSM goals. Once again, the Commission
19 approves each utility's DSM program plan. Finally, based on the approved
20 DSM program plan, DSM spending levels are set. These spending levels are
21 set such that goals can be achieved in a cost-effective manner.

1 This Florida and utility-specific approach is far superior for determining
2 savings and spending targets than using other states' plans for projecting these
3 targets.

4 **Q. Do you feel it is reasonable to compare DSM spending between**
5 **jurisdictions?**

6 A. No, I do not. Mr. Plunkett's overly simplistic comparisons ignore many of the
7 drivers of DSM spending and potential. Some of these drivers are customer
8 mix, weather, customer growth, existing generation fleet, fuel costs, electric
9 rates, availability of fuel switching opportunities, age of housing and building
10 stock, cost-effectiveness, regulatory rules and the state of the local economy.
11 The comprehensive approach to DSM in Florida appropriately considers each
12 of these unique characteristics of FPL's service territory in setting the
13 appropriate target for achievable savings. Nowhere in Mr. Plunkett's
14 testimony does he explain his understanding of the FPL market and how it
15 impacts his selection of other jurisdictions for comparisons.

16 **Q. Do you agree with Mr. Plunkett that Massachusetts makes the best choice**
17 **for projecting additional spending and savings for FPL (page 8, lines 23-**
18 **25)?**

19 A. No. Mr. Plunkett provides no reasonable basis for selecting Massachusetts as
20 the best for projecting total spending and savings for FPL. Exhibit JJP-2 of
21 Mr. Plunkett's testimony includes data that compares the annual kWh saved
22 per dollar spent on DSM for seven northeastern states. In 2004, of these seven
23 states, Massachusetts spent the most in the non-residential sector in terms of

1 absolute dollars and dollars per MWh of sales. However, when you examine
2 the effectiveness of Massachusetts' energy efficiency programs in terms of
3 annual kWh savings per dollar spent, Exhibit JJP-2 shows Massachusetts as
4 the least effective of all states listed. Therefore, it appears Mr. Plunkett is
5 more concerned with how much is being spent, rather than how effectively the
6 money is being used.

7 **Q. Do you agree that Pacific Gas & Electric (PG&E) offers a good basis for**
8 **projecting FPL's performance (page 9, lines 24-25)?**

9 A. No, for the reasons stated above. Also, one very prominent area where PG&E
10 and FPL differ is the price for electricity. Based on PG&E's residential tariff
11 that was effective July 2006, a 1,000 kWh monthly bill for a PG&E customer
12 would be \$193.85 versus \$108.61 for an FPL customer. PG&E customers,
13 whose electric rate is almost double that of FPL's, would achieve a much
14 faster payback on a DSM investment than they would if they were an FPL
15 customer. When a customer elects to participate in a DSM program, the
16 customer's cost to implement the program measure is directly impacted by the
17 cost of the measure, any tax benefits, grants, utility rebates and savings on the
18 customer's utility bill. Therefore, all else equal, a customer is far more likely
19 to implement a DSM measure where the price of electricity is higher.

20 **Q. Can you provide an example of how the price of electricity influences**
21 **customers' willingness to take advantage of a DSM program?**

22 A. Yes. Assume a customer installs ceiling insulation that saves 600 kWh per
23 year at an initial out-of-pocket cost of \$300 (total job cost of \$500, minus

1 utility rebate of \$200). At 10 cents per kWh, the payback is five years (\$300 /
2 (600 kWh * \$0.10/kWh)), while at 20 cents per kWh the payback is reduced
3 to 2.5 years. It follows that many more people would participate in a program
4 that has a 2.5 year payback than one with a five year payback.

5 **Q. Besides substantial differences in the price of electricity, are there other**
6 **reasons why PG&E does not afford a good basis for projecting FPL's**
7 **conservation performance?**

8 A. Yes. For example, each year utilities report to the U.S Department of Energy
9 their annual conservation achievement and the corresponding dollars spent.
10 Document No. DB-3 shows the cost per kW of conservation for PG&E and
11 FPL from 1999 to 2005, the last year data is available from the U.S.
12 Department of Energy. It shows that the amount FPL spends per kW of
13 achieved savings is as much as one-third less than the amount PG&E spends
14 per kW of achieved savings. Therefore, as was the case in selecting
15 Massachusetts to compare to FPL, Mr. Plunkett's focus seems to be more on
16 dollars spent versus results.

17 **Q. Why do you think Mr. Plunkett selected PG&E and Massachusetts as**
18 **benchmarks for FPL?**

19 A. Mr. Plunkett has previously submitted substantially the same information in
20 prior testimony and it did not require additional work or analysis on his part.
21 For example in October 2006, Mr. Plunkett submitted testimony to the British
22 Columbia Utilities Commission regarding BC Hydro's 2006 Integrated
23 Electricity Plan. As part of his testimony, Mr. Plunkett once again chose to

1 try to benchmark BC Hydro's DSM efforts with the efforts of PG&E and
2 utilities in the northeast United States. In fact, as shown in Document No.
3 DB-4, Mr. Plunkett included as exhibits in his BC Hydro testimony exhibits
4 that are substantially the same as his exhibits JJP-2 and JJP-3 in this
5 proceeding. Exhibit JJP-1 is Mr. Plunkett's resume, so for this proceeding,
6 only JJP-4 is new, and it merely consists of a table showing FPL's projected
7 summer MW requirements with his incremental DSM savings added to it.
8 Therefore, it seems that regardless of the utility and the appropriateness of the
9 benchmark, Mr. Plunkett is simply relying on prior analysis not based on or
10 related to FPL specific factors, leading to unfounded and erroneous
11 conclusions.

12
13 **III. THE EFFECT OF ADDITIONAL FPL ENERGY-EFFICIENCY ON**
14 **THE NEED FOR THE GLADES UNITS**

15
16 **Q. Addressing one of the differences between FPL's service area and that of**
17 **PG&E and Massachusetts utilities, Mr. Plunkett, on page 11, lines 8-14,**
18 **states that "[p]otential savings from high-efficiency air conditioning**
19 **should be greater and more cost-effective in FP&L territory than in**
20 **Massachusetts or PG&E territory." Will incremental potential savings**
21 **from air conditioning programs defer the need for the FGPP units?**

22 **A. No. The future potential for savings from high-efficiency air conditioning has**
23 **been diminished due to the recent minimum efficiency code changes for this**

1 equipment. All cost-effective achievable potential from high-efficiency air
2 conditioning is already captured in FPL's existing programs and Mr. Plunkett's
3 suggestion to the contrary is unfounded and incorrect.

4 **Q. If FPL utilized what Mr. Plunkett refers to as “best practices...of the**
5 **most aggressive DSM portfolios” (page 14, lines 1-2), would additional**
6 **savings on the scale suggested by Mr. Plunkett be achievable to defer the**
7 **need for the Glades units?**

8 A. No. FPL continuously strives to implement best practices in the Company’s
9 DSM programs. These best practices are identified in numerous ways
10 including, benchmarking with other utilities, the review of industry literature
11 regarding successful DSM programs, the review of non-utility literature to
12 identify transferable concepts from other industries and using consultants who
13 work in DSM with multiple utilities. FPL continuously enhances its DSM
14 portfolio to take advantage of cost-effective best practices. FPL has been
15 doing DSM since the early 1980s and has been very successful. FPL’s current
16 level of cost-effective DSM potential incorporates best practices from both
17 within and outside the utility industry, as well as, FPL’s many years of
18 experience. Furthermore, in Mr. Plunkett’s testimony regarding BC Hydro’s
19 2006 Integrated Electricity Plan, he referenced the “Best practices website:
20 www.eebestpractices.com/.” Several of FPL’s DSM programs were included
21 in this best practices study to which he referred and FPL’s programs
22 incorporate many of the recommended best practices. In fact, FPL’s Business
23 HVAC program was commended by this website for its program strategy and

1 goals, quality control, participation process, marketing and program
2 evaluation.

3 **Q. Should FPL be directed to conduct a thorough study of the economically**
4 **achievable potential for energy-efficiency investments?**

5 A. No, because FPL and other Florida utilities already do this. The
6 Commission's DSM goal setting process already accomplishes this objective.
7 FPL completed the Commission-required analysis in 2004. In 2005, FPL's
8 forecast of customer demand increased significantly. There were also changes
9 to minimum equipment efficiency standards and changing market conditions.
10 As a result of these changes, in 2006 FPL performed a comprehensive review
11 of all its DSM programs, as well as other potential measures. This analysis
12 resulted in Commission approval of changes to FPL's offerings that will result
13 in an incremental 564 MW of peak savings above that included in FPL's
14 approved DSM goals. FPL has included all of this cost-effective DSM
15 potential in its analysis of the need for the FGPP units. FPL expects to
16 perform the next comprehensive DSM potential analysis as part of the
17 Commission's goal setting process in 2009. In the interim, FPL will continue
18 to perform research and development of new DSM concepts and request
19 Commission approval as appropriate.

20 **Q. Should FPL's need petition be denied on grounds that the units can be**
21 **deferred if FPL triples the peak-demand reductions it plans to realize**
22 **over the long-term from its DSM portfolio, as asserted by Mr. Plunkett**
23 **on page 5, lines 10-11, of his testimony?**

1 A. No. Mr. Plunkett has not presented any credible evidence that shows FPL can
2 cost-effectively triple its DSM potential over the undefined time period that he
3 refers to as “the long term.” Section 403.519 of the Florida Statutes requires
4 the Commission to consider the conservation measures taken by or reasonably
5 available to the applicant which might mitigate the need for the proposed unit.
6 Mr. Plunkett admits he has not done a detailed analysis of, and has no “actual
7 experience” with, Florida (page 11, lines 4-5) and that his projections provide
8 only a “rough idea” of how much DSM FPL could be expected to achieve
9 (page 11, line 17) – in fact he did not even review my testimony or that of Dr.
10 Sim addressing FPL’s DSM efforts (Plunkett testimony, page 6, lines 9-17).

11
12 **IV. SUMMARY AND CONCLUSION**

13
14 **Q. Please summarize your rebuttal testimony.**

15 A. Mr. Plunkett’s analysis of the potential for DSM at FPL is lacking in detail,
16 unsubstantiated and not Florida specific. He apparently did not take any time
17 to understand FPL’s DSM plan, its current programs, the unique
18 characteristics of the FPL service area, or how DSM potential is determined
19 based on FPSC guidelines.

20
21 Mr. Plunkett discusses two estimates of the DSM potential for FPL, neither
22 one of which provides a reasonable basis for accepting his recommendation
23 that the need for FGPP units can be deferred through incremental DSM. The

1 first is his high level benchmarking analysis comparing FPL to Massachusetts
2 utilities and PG&E that focuses on DSM spending per kWh. Of the
3 Northeastern states identified by Mr. Plunkett, Massachusetts is the least
4 effective in terms of annual kWh savings per dollar spent. Moreover, it is the
5 peak hour kW reduction value of DSM options that enables utilities to defer
6 the need for new generation additions. The amount FPL spends per kW of
7 achieved savings is as much as one-third less than the amount PG&E spends
8 per kW of achieved savings. Mr. Plunkett has not presented any credible
9 evidence that shows FPL can cost-effectively triple its DSM potential over the
10 undefined time period that he refers to as the "long term."

11
12 The second estimate Mr. Plunkett provides of FPL's DSM potential is based
13 on the ACEEE Florida report. Though the findings in this report are
14 questionable, Mr. Plunkett's conclusion that FPL's planned DSM savings
15 exceed its share of statewide energy efficiency included in this report indicate
16 that FPL has clearly met the conservation-related requirements of Section
17 403.519, Florida Statutes.

18
19 Despite FPL's substantial conservation efforts, which are acknowledged by
20 Mr. Plunkett, there is not sufficient cost-effective, reasonably achievable DSM
21 potential on FPL's system to defer the need for the FGPP units. For the
22 reasons discussed above Mr. Plunkett's testimony does not afford a basis for
23 reasonably concluding that the need for the FGPP units can be deferred.

1 **Q. Does this conclude your testimony?**

2 **A. Yes, it does.**

Docket No. 070098-EI
 D. Brandt, Exhibit No. _____
 Document No. DB-3, Page 1 of 1
 Dollar per kW Comparison for
 FPL and PG&E

PG&E and FPL - Conservation Dollars Per kW

Year	PG&E			FPL		
	Inc Con	Con \$	\$/KW	Inc Con	Con \$	\$/KW
1999	66	\$ 121,087	\$ 1,833	91	\$ 42,706	\$ 469
2000	96	\$ 174,970	\$ 1,817	76	\$ 42,706	\$ 559
2001	219	\$ 196,738	\$ 898	74	\$ 47,101	\$ 637
2002	82	\$ 156,989	\$ 1,915	85	\$ 47,829	\$ 563
2003	Not Available			74	\$ 39,124	\$ 529
2004	128	\$ 94,555	\$ 739	64	\$ 38,201	\$ 597
2005	235	\$ 140,419	\$ 598	74	\$ 39,119	\$ 529

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Energy Performance Comparison

Exhibit JJP-2, Page 1 of 2

Energy Efficiency Portfolio Performance Comparison							
Residential		Spending Depth (4) / (5)	Savings Yield (6) / (4)	Savings Depth (6) / (5)	Data		
State	Year	(1) \$ Spent (2005\$) per Retail Sector MWh Sales	(2) Annual kWh Savings per \$ Spent (2005\$)	(3) Annual MWh Savings per Retail Sector MWh Sales	(4) Spending (Nominal \$ millions)	(5) Retail Sector Sales (MWh)	(6) Annual MWh Savings
Connecticut	2004	\$1.4	5.1	0.65%	\$16.4	12,366,484	80,617
	2003	\$1.2	1.9	0.20%	\$14.4	12,331,116	25,000
	2002	\$1.7	4.3	0.62%	\$18.3	11,772,238	72,460
	2001	\$2.0	5.1	0.81%	\$20.2	11,446,846	92,550
Maine	2004	\$0.4	4.0	0.13%	\$1.5	4,359,020	5,580
	2003	\$0.1	4.6	0.04%	\$0.4	4,359,020	1,918
	2002	-	-	-	NAV	NAV	NAV
Massachusetts	2004	\$3.3	4.3	1.29%	\$51.7	16,430,880	211,781
	2003	\$2.3	2.8	0.55%	\$34.6	16,114,567	88,913
	2002	\$1.8	2.3	0.36%	\$25.9	15,522,546	55,241
	2001	\$2.2	2.5	0.45%	\$30.1	15,159,987	68,291
New Hampshire	2004	\$1.7	2.3	0.35%	\$6.9	4,218,015	14,896
	2003	\$1.7	2.2	0.32%	\$6.5	4,129,405	13,344
	2002	-	-	-	NAV	NAV	NAV
New Jersey	2004	\$1.5	3.5	0.46%	\$37.4	26,947,140	124,369
	2003	\$1.5	2.6	0.33%	\$36.7	26,384,718	88,230
	2002	\$1.1	1.0	0.09%	\$26.8	26,598,261	24,161
	2001	\$1.0	1.1	0.09%	\$23.0	24,783,958	22,882
Long Island Power Authority (LIPA)	2004	\$2.0	2.8	0.51%	\$16.1	9,182,520	43,312
	2003	\$2.7	2.7	0.64%	\$21.8	8,489,702	54,742
	2002	\$2.8	2.3	0.54%	\$21.6	8,489,702	46,102
	2001	\$2.4	2.7	0.52%	\$17.3	8,143,069	42,574
New York State Energy Research and Development Authority (NYSERDA)	2004	\$1.4	1.9	0.24%	\$44.8	33,582,007	80,900
	2003	\$0.7	3.3	0.19%	\$20.3	33,260,213	62,700
	2002	\$0.6	3.5	0.17%	\$17.9	33,305,596	57,800
	2001	-	-	-	NAV	NAV	NAV
Vermont	2004	\$3.6	4.3	1.44%	\$7.0	2,016,715	29,026
	2003	\$3.4	3.3	0.99%	\$6.1	1,917,142	18,969
	2002	\$3.2	3.8	1.02%	\$5.7	1,955,203	19,991
	2001	\$2.7	4.4	0.99%	\$4.7	1,919,617	18,917

Notes:

1. NAV = Information Not Available; NAP = Not Applicable (No Program)
2. 2001, 2002, 2003 and 2004 sector sales as reported by US EIA
3. Maine sales are from Bangor Hydro (2003), Central Maine Power (2004) and Maine Public Service (2002); in addition, all others are assumed to be 5% of these sales
4. U.S. Bureau of Labor and Statistics Consumer Price Index Inflation Calculator used to calculate present worth in 2005\$
5. Connecticut programs were suspended for part of 2003
6. New Hampshire annual savings = lifetime savings / assumed average 15 year measure life
7. Vermont data excludes Burlington Electric Department

Energy Efficiency Portfolio Performance Comparison							
Nonresidential		Spending Depth (4) / (5)	Savings Yield (6) / (4)	Savings Depth (6) / (5)	Data		
State	Year	(1) \$ Spent (2005\$) per Retail Sector MWh Sales	(2) Annual kWh Savings per \$ Spent (2005\$)	(3) Annual MWh Savings per Retail Sector MWh Sales	(4) Spending (Nominal \$ millions)	(5) Retail Sector Sales (MWh)	(6) Annual MWh Savings
Connecticut	2004	\$1.5	5.7	0.76%	\$23.4	16,779,631	127,385
	2003	\$1.2	6.1	0.63%	\$18.6	16,756,800	105,700
	2002	\$1.7	5.1	0.73%	\$26.2	16,622,278	122,036
	2001	\$1.7	5.5	0.76%	\$26.1	16,867,301	128,200
Efficiency Maine	2004	\$0.3	6.4	0.17%	\$2.0	7,462,290	12,338
	2003	\$0.1	8.5	0.03%	\$0.5	7,462,290	3,909
	2002	-	-	-	NAV	NAV	NAV
	2001	-	-	-	NAP	NAV	NAP
Massachusetts	2004	\$3.4	3.2	1.10%	\$68.6	19,173,983	210,152
	2003	\$2.9	4.7	1.18%	\$56.2	21,030,110	247,488
	2002	\$3.4	3.5	1.02%	\$63.4	20,247,516	205,856
	2001	\$3.4	5.2	1.44%	\$60.5	19,728,983	284,286
New Hampshire	2004	\$1.3	5.7	0.65%	\$7.6	6,457,719	41,879
	2003	\$1.2	6.7	0.70%	\$6.9	6,241,509	43,412
	2002	-	-	-	NAV	NAV	NAV
	2001	-	-	-	NAP	NAV	NAP
New Jersey	2004	\$0.7	7.8	0.50%	\$27.2	32,295,198	204,144
	2003	\$0.7	7.6	0.48%	\$27.6	41,105,248	197,347
	2002	\$0.9	4.5	0.32%	\$35.4	45,129,424	144,635
	2001	\$0.3	2.9	0.07%	\$11.8	43,671,352	30,943
Long Island Power Authority (LIPA)	2004	\$0.8	3.7	0.27%	\$7.2	9,666,377	25,828
	2003	\$0.9	2.8	0.22%	\$7.9	9,593,209	20,884
	2002	\$0.9	4.0	0.31%	\$7.5	9,026,264	27,542
	2001	\$0.9	3.0	0.22%	\$7.3	9,002,154	19,510
New York State Energy Research and Development Authority (NYSERDA)	2004	\$1.3	9.0	1.21%	\$32.5	37,897,275	456,900
	2003	\$0.6	12.3	0.69%	\$24.7	41,500,182	284,500
	2002	\$0.6	10.1	0.49%	\$25.8	48,471,686	239,100
	2001	-	-	-	NAV	NAV	NAV
Efficiency Vermont	2004	\$1.6	6.0	0.86%	\$4.9	3,294,004	28,410
	2003	\$1.9	5.7	0.93%	\$5.4	3,069,837	28,453
	2002	\$1.6	4.6	0.63%	\$4.9	3,291,679	20,630
	2001	\$1.3	5.5	0.56%	\$3.8	3,293,986	18,572

Notes:

1. NAV = Information Not Available; NAP = Not Applicable (No Program)
2. 2001, 2002, 2003 and 2004 sector sales as reported by US EIA
3. Maine sales are from Bangor Hydro (2003), Central Maine Power (2004) and Maine Public Service (2002); in addition, all others are assumed to be 5% of these sales
4. U.S. Bureau of Labor and Statistics Consumer Price Index Inflation Calculator used to calculate present worth in 2005\$
5. Connecticut programs were suspended for part of 2003
6. 2003 Connecticut savings are for United Illuminating only
7. New Hampshire annual savings = lifetime savings / assumed average 15 year measure life
8. Vermont data excludes Burlington Electric Department

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Pacific Gas & Electric Efficiency Spending and Savings

Energy Performance Comparison
Exhibit JJP-3, Page 1 of 1

	Actual	Projected		
	2004	2006	2007	2008
Electric Efficiency Spending (\$)				
Residential	\$ 54,484,071	na	na	na
Non-Residential	\$ 52,872,929	na	na	na
Total	\$ 107,357,000	\$ 236,675,907	\$ 270,316,969	\$ 332,188,355
Savings (GWh)				
Residential	251	581	674	793
Non-Residential	312	275	303	337
Total	564	856	977	1,130
Sales (GWh)				
Residential	21,389	25,186	27,331	29,657
Non-Residential	32,506	36,581	38,854	41,300
Total	53,895	61,768	66,185	70,958
Savings yield (kWh Savings/Spending \$)				
Residential	4.62	3.25	3.24	3.04
Non-Residential	5.90	4.16	4.14	3.89
Total	5.25	3.70	3.68	3.46
Savings depth (kWh Savings/kWh Sales)				
Residential	1.2%	2.3%	2.5%	2.7%
Non-Residential	1.0%	0.8%	0.8%	0.8%
Total	1.0%	1.4%	1.5%	1.6%
Lifetime	Levelized cost of saved electric energy			
10 Residential	\$ 0.0314	\$ 0.0445	\$ 0.0447	\$ 0.0476
15 Non-Residential	\$ 0.0190	\$ 0.0270	\$ 0.0271	\$ 0.0289

Sources:

1. Pacific Gas and Electric Company's Energy Efficiency Programs Annual Report - May 2005, Table 1.1, Summary of Costs (Electric), page I-6
2. Pacific Gas and Electric Company's Energy Efficiency Programs Annual Report - May 2005, Table 1.2a Summary of EEP Effects (Annual Energy Reductions, Net MWh), page I-7
3. California Public Utility Commissions 9/22/05 Decision, Application 05-06-004, Attachment 4
4. PG&E filing to the CPUC 7/15/05, 2006-2008 Energy Efficiency Program Portfolio Additional Program Details
5. US Energy Information Agency, Table 6. Class of Ownership, Number of Bundled Ultimate Consumers, Revenue, Sales, and Average Retail Price for the Residential Sector by State Utility, 2004
6. US Energy Information Agency, Table 7. Class of Ownership, Number of Bundled Ultimate Consumers, Revenue, Sales, and Average Retail Price for the Residential Sector by State Utility, 2004
7. US Energy Information Agency, Table 8. Class of Ownership, Number of Bundled Ultimate Consumers, Revenue, Sales, and Average Retail Price for the Residential Sector by State Utility, 2004