

**BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION**

**DOCKET NO. 080677-EI
FLORIDA POWER & LIGHT COMPANY**

**IN RE: PETITION FOR RATE INCREASE BY
FLORIDA POWER & LIGHT COMPANY**

**REBUTTAL TESTIMONY OF:
CHRISTOPHER A. BENNETT**

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5 **AUGUST 6, 2009**

6

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

8 A. My name is Christopher A. Bennett. My business address is Florida Power &
9 Light Company, 700 Universe Boulevard, Juno Beach, Florida 33408-0420.

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. No.

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

15 A. My rebuttal testimony responds to claims made in the direct testimony of South
16 Florida Hospital and Healthcare Association (SFHHA) witness Kollen relating to
17 FPL's application for grant funding for the Smart Grid Initiative, as well as
18 proposed adjustments to revenue requirements. I will also address renewable
19 energy assertions made by Thomas Saporito.

SUMMARY

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Q. Please summarize your rebuttal testimony.

A. SFHHA witness Kollen claims that any funds FPL may receive pursuant to funding requests it has made to the Federal Government pursuant to the American Reinvestment and Recovery Act (“ARRA” or “Stimulus Bill”) should be removed from revenue requirements. Mr. Kollen’s assertion is inappropriate and misleading. While FPL has applied for funding for three separate projects under the ARRA, each application is for work that is completely incremental to and does not replace a single dollar of what is included in FPL’s rate case filing. FPL hopes to but has no guarantee of receiving ARRA funds. However, if any funds are received, FPL will ensure that they are appropriately accounted for from a regulatory perspective. Initial award announcements are not expected to occur until September. Accordingly, no adjustment or ruling is appropriate in this base rate proceeding with respect to the ARRA applications.

In the second portion of my testimony I briefly address witness Saporito’s assertion that FPL has not reasonably pursued purchases and development of renewable energy resources. In fact, FPL is a leader in renewable energy in Florida as evidenced by its extensive and long-standing purchase contracts from renewable suppliers and FPL’s current construction work on three major solar facilities totaling 110 MW. FPL is committed to developing the maximum cost-

1 effective amount of renewable resources to serve its customers and continues to
2 explore the use of emerging renewable energy technologies.

3
4 **REBUTTAL TO TESTIMONY OF LANE KOLLEN**

5
6 **Q. Has FPL applied to the Department of Energy (DOE) for matching grants
7 under the Stimulus Bill?**

8 A. Yes. FPL has applied for three grants. Two have been submitted for plug-in
9 hybrid electric vehicles (PHEV) technology – one for PHEV Bucket Trucks to
10 directly support electric distribution system work and another for PHEV fleet
11 vehicles. FPL’s third application, which is planned for submission by August 6,
12 2009, is for “Energy Smart Florida” (ESF).

13 **Q. Please describe the PHEV Bucket Truck project and FPL’s grant request.**

14 A. On May 13, 2009 FPL applied for a grant under the DOE’s Transportation
15 Electrification program funded by the Stimulus Bill (Funding Opportunity
16 Announcement (FOA) DE-FOA-0000028). According to the DOE, medium duty
17 trucks (single-unit trucks with gross vehicle weight greater than 26,000 pounds)
18 account for more than 30% of the total fuel consumed by trucks. FPL, in
19 partnership with Navistar, Eaton, Altec, CalStart and Gridpoint, and subject to the
20 awarding of this grant to FPL by DOE, intends to advance the development of
21 PHEV medium-duty trucks in an effort to drive industry adoption. There are five
22 key objectives for this project:

- 1 ● Develop the electric drive train and battery system for PHEV medium-
2 duty trucks with an all-electric drive range of more than 10 miles.
- 3 ● Demonstrate on-road operation by deploying up to 200 trucks in FPL's
4 fleet and collect data to validate fuel efficiency, emissions, performance
5 and reliability.
- 6 ● Demonstrate successful integration of the vehicle with electric charging
7 infrastructure.
- 8 ● Disseminate the field findings to the trucking industry to drive adoption.
- 9 ● Create a roadmap to commercialize the PHEV platform across the
10 medium-duty truck segment.

11
12 The total project cost is \$44.2 million. This is an up to 50% matching grant
13 program and, therefore, FPL is requesting that DOE provide \$22.1 million.

14 **Q. How are these funds treated in your rate case proposal?**

15 A. Our rate case includes costs associated with periodic replacements of fleet
16 vehicles. However, this project to convert some of these vehicles to PHEVs was
17 not anticipated at the time the rate case MFRs were being prepared. Therefore,
18 none of the incremental conversion costs or associated project costs were
19 included. The Stimulus Bill grant award we are seeking would offset these
20 incremental costs that are not included in the rate case. If no funds are awarded,
21 the project, and associated incremental cost, will not be pursued.

22 **Q. When does FPL expect to receive word as to acceptance or denial of this**
23 **grant application?**

1 A. The last formal word FPL received from the DOE was June 5, 2009. At that point,
2 the DOE stated that the comprehensive evaluation phase would take
3 approximately 90 days. Therefore, FPL currently expects to be provided more
4 information, if not a final determination, in September. Should FPL be selected,
5 it is our understanding that it generally takes another 30 days or so to negotiate
6 final contract terms with the DOE.

7 **Q. Please describe the PHEV fleet vehicle project and FPL's grant request.**

8 A. On May 29, 2009, Miami-Dade County, as the primary applicant, submitted a
9 grant proposal for the Clean Cities FY09 Petroleum Reduction Technologies
10 Projects for the Transportation Sector (FOA DE-PS26-09NT01236-00). This is a
11 collaborative public/private partnership between Miami-Dade County, Clean
12 Cities Gold Coast and FPL to:

- 13 ● Establish the viability of PHEVs
- 14 ● Reduce fossil emissions through the conversion of fleet vehicles to
15 PHEVs
- 16 ● Reduce fleet vehicle fuel and maintenance costs
- 17 ● Provide public access to plug-in stations
- 18 ● Provide community education and outreach regarding PHEVs

19
20 Through this grant, FPL plans to purchase and deploy approximately 300 Toyota
21 Prius vehicles which will be converted to PHEVs using the A123 Hymotion
22 conversion kit. These PHEVs are designed to be charged from an 110V outlet.
23 The total cost of this collaborative project for FPL is estimated at \$13.3 million.

1 The associated amount of requested DOE matching funding is \$6.4 million with
2 FPL's resulting net investment being about \$6.9 million.

3 **Q. How are these funds treated in your rate case proposal?**

4 A. This project to replace some employee-owned contract vehicles with company-
5 owned PHEVs was not anticipated at the time rate case MFRs were being
6 prepared. Therefore, none of the incremental purchase and conversion costs or
7 associated project costs were included. The Stimulus grant award we are seeking
8 would offset these incremental costs that are not included in the rate case. If no
9 funds are awarded, the project, and the associated incremental costs, will not be
10 pursued.

11 **Q. When would Miami-Dade County and FPL expect to receive word regarding
12 acceptance or denial of this grant application?**

13 A. Similar to the other PHEV application, FPL does not expect to hear more on the
14 disposition of the application until September. Again, if the coalition is selected
15 for an award, it is our understanding that it generally takes another 30 days or so
16 to negotiate final contract terms with the DOE.

17 **Q. Please describe Energy Smart Florida (ESF).**

18 A. At the time of writing this testimony, FPL is in the process of developing a grant
19 proposal under the Integrated and Crosscutting Systems Topic Area of the DOE's
20 Smart Grid Investment Grant (SGIG) Program (FOA DE-FOA-0000058). FPL's
21 proposed ESF project will validate Smart Grid functionality by upgrading
22 multiple portions of the electric system with intelligent devices as well as
23 collecting, integrating and analyzing relevant data. Grid upgrades will include

1 installation of monitoring, control and diagnostics equipment and software
2 applications in the areas of end-use consumption, distribution and transmission.
3 In April 2009, FPL announced the Energy Smart Miami (ESM) project, which
4 would enable Miami-Dade County customers to realize the benefits of an
5 intelligent electrical infrastructure. ESM was widely acknowledged and supported
6 by local, state and federal governments. After the DOE announced increased
7 funding levels in its final FOA, FPL broadened the scope of ESM to become ESF.

8
9 FPL's approach to Integrated and Crosscutting Systems is comprehensive and
10 involves equipment and software applications that cover multiple Topic Areas as
11 defined by the DOE:

- 12 • Electric Transmission Systems
- 13 • Electric Distribution Systems
- 14 • Advanced Metering Infrastructure (AMI)
- 15 • Customer Systems

16
17 ESF is planned to be completed by the end of 2011 (essentially two years). At
18 completion of this project, FPL will have integrated, strengthened and secured its
19 electrical system providing customers benefits through the deployment of:

- 20 • 2.6 million automated digital customer meters with real-time data
21 collection representing over 55% of FPL's customers
- 22 • In-Home Displays and Home Energy Controllers with planned trials
23 of associated alternative rate structures

- 1 ● Grid integration of renewable distributed generation
- 2 ● Over 9,000 intelligent devices on the distribution network
- 3 ● Phasor Measurement Units that will provide 100% of the coverage
- 4 needed for FPL's transmission systems
- 5 ● State-of-the-art cyber security encompassing ESF's systems and
- 6 operations

7

8 FPL plans to file this application with the DOE on August 6, 2009.

9 **Q. When will FPL expect to receive word as to acceptance or denial of this grant**
10 **application?**

11 A. Based on present DOE indications, FPL expects to hear in the October to
12 November timeframe. As with the other grants, if FPL is selected for an award, it
13 generally takes another 30 days or so to negotiate final contract terms with the
14 DOE.

15 **Q. What funding level is FPL applying for?**

16 A. FPL's qualifying expenditures in the 2009-2011 period covered by the SGIG are
17 about \$580 million. FPL is requesting the maximum amount available of
18 \$200 million in matching funds.

19 **Q. How are these funds treated in your rate case proposal?**

20 A. The portion of the approximate \$580 million ESF proposal reflected in FPL's rate
21 case MFRs is approximately \$380 million for residential and small
22 commercial/industrial AMI deployments. These are FPL's required contributed
23 "matching funds". As with the other projects, the DOE will match up to 50% of

1 the project cost under the SGIG program. The DOE's \$200 million will cover the
2 cost of the other ESF activities discussed previously in my testimony. These
3 expenditures are over and above those included in the rate case, but the DOE's
4 funding will permit customers to get the benefits of those investments without
5 requiring any payment on their part. If FPL had not proposed a large integrated
6 and crosscutting project (which includes the functionality of more than one Topic
7 Area) the maximum DOE funding available would have only been \$20 million, a
8 mere 10% of the maximum amount now eligible. It should also be noted that the
9 DOE also wishes to incentivize investments that are incremental to those which
10 would have been undertaken without the provision of federal funding

11 **Q. Witness Kollen suggests the Commission should incorporate the \$20 million**
12 **DOE Smart Grid Grant from the Stimulus Bill in the revenue requirement**
13 **even though the Company has not yet received approval for any grant**
14 **funds. Do you agree?**

15 A. No. There is no guarantee that FPL will receive any Stimulus funds. The initial
16 awards are not expected to occur until September with the larger award
17 announcements in the October/November time frame. Moreover, the projects and
18 associated funding requests to the DOE are over and above what is included in
19 FPL's rate case filing and thus should not result in an adjustment to FPL's base
20 rate request.

21 **Q. On page 37 of his testimony, Mr. Kollen says that these preliminary CIS III**
22 **costs are not recurring in nature and will not continue after 2012. Do you**
23 **agree?.**

1 A. No. This is incorrect because every year FPL is constantly developing and
2 evaluating new systems. Key drivers for these investments include:

- 3 • **Lower than normal technology investment from 2004 to 2009:** Key drivers
4 include inability to perform work due to factors, including severe hurricanes and
5 necessary budget reductions due to the economic downturn.
- 6 • **Need for timely system upgrades / replacements:** Critical systems, including
7 CIS are due (perhaps overdue) for normal, lifecycle replacement. This is due to
 - 8 ○ FPL's conservative approach of leveraging investments as long as
9 possible
 - 10 ○ The lower investments mentioned above
- 11 • **Growing demands from customers and regulators:** Various drivers including
12 climate change, customer choice, advanced grid operations (e.g. SmartGrid) are
13 heavily reliant on a foundation of application systems that are flexible, customer
14 accessible, and easy to use. Implementing and operating these systems are
15 expected to address these drivers, and will require ongoing investment.

16
17 Additionally, projections beyond 2012 are based on initial, high level planning. Per
18 our normal, accepted process, prior to 2013, FPL will develop strategies to further
19 refine these long range plans as well as detailed annual budgets with specific
20 investment plans. What is absolutely certain is that CIS III and other information
21 management systems investments will continue to be required consistent with the
22 drivers I have mentioned for 2012 and beyond at least at FPL's projected 2009-
23 2012 levels.

1 All such costs have been and will continue to be properly accounted for in the
2 future. Therefore, Witness Kollen's proposed adjustment should be rejected.

3
4 **REBUTTAL TO TESTIMONY OF THOMAS SAPORITO**

5
6 **Q. Please comment on Mr. Saporito's assertion that FPL has failed to act with**
7 **respect to renewable energy resources?**

8 A. This assertion is baseless and ignores FPL's track record. FPL is a leader in
9 renewable energy in the state of Florida. For example FPL has been providing a
10 portion of its customers' energy needs from renewable resources since 1980.
11 This energy is purchased from owners of waste-to-energy, biomass and landfill
12 gas power plants located in Florida. During 2008 FPL provided its customers
13 with a total of 1,627,407 MWh of electricity from these renewable resources. In
14 addition, FPL is building three major solar facilities in the state.

15 **Q. Please describe the three solar facilities that are currently under construction**
16 **in Florida.**

17 A. FPL has begun construction of 110 MW of zero emissions renewable solar
18 generating projects in Florida. When these projects are completed, Florida will be
19 the second largest electric generator of solar electricity in the United States.
20 These solar projects will provide both the benefit of zero carbon emissions and
21 will help meet the requirements of the state's renewable energy standard or a
22 federal renewable energy standard if either one is enacted.

1 FPL is constructing a 75 MW solar thermal steam generating facility which will
2 be integrated into an existing combined cycle power plant at the Martin Power
3 Plant site in Martin County, Florida, thereby creating the world's first hybrid
4 energy center. Martin Solar will be the second largest solar generating facility in
5 the world. This generation plant is being constructed on an approximately 600-
6 acre site and will be the first of its kind to integrate solar technology with a
7 combined cycle natural gas plant.

8
9 The DeSoto Solar project is being built utilizing solar photovoltaic ("PV")
10 technology. The project is planned to be 25 MW of capacity and is projected to
11 produce an average of 51,000 MWh of electricity annually. When completed, this
12 project will be the largest solar PV facility in the country. Construction of the
13 plant began during the first quarter of 2009 with a projected in-service date during
14 the fourth quarter of 2009.

15
16 The Space Coast Solar Energy Center also will utilize solar PV technology and
17 will be located at NASA's Kennedy Space Center in Florida. The project is
18 planned for 10 MW of installed capacity that is projected to produce
19 approximately 17,000 MWh of electricity annually. Construction of the project is
20 expected to begin in the third quarter of 2009 with a projected in-service date
21 during the third quarter of 2010.

1 **Q. Mr. Saporito claims there could be benefits from allowing customers to**
2 **install renewable generation and sell excess capacity back to FPL through a**
3 **process called net metering. Please comment.**

4 A. FPL agrees that there are benefits from net metering in that it encourages
5 customers to invest in renewable energy.

6 **Q. Is net metering approved in Florida?**

7 A. Yes. F.A.C. Rule 25-6.065 (Interconnection and Net Metering of Customer-
8 Owned Renewable Generation) was modified and passed by the Florida Public
9 Service Commission on March 19, 2008 allowing the interconnection and net
10 metering of customer-owned renewable generation up to 2 megawatts.

11 **Q. Please describe net metering.**

12 A. Net metering allows FPL customers who install up to 2 megawatts of renewable
13 generation an opportunity to get full retail credit for their excess generation.

14 **Q. Is FPL involved in any projects to promote rooftop solar facilities?**

15 A. Yes. FPL has promoted rooftop solar in cooperation with SunSmart Schools,
16 along with numerous projects including three Publix Stores (Miami Lakes, Boca
17 Raton and Palm Beach Gardens) and the FAU Downtown Ft. Lauderdale campus.
18 FPL is currently working on the installation of six ground-mounted solar arrays at
19 Mandarin Lakes Elementary in Miami-Dade County, Deerfield Middle School in
20 Broward County, Suncoast High School in Palm Beach County, J. D. Parker
21 Elementary School in Martin County, Hinson Middle School in Volusia County
22 and L. A. Ainger Middle School in Charlotte County. FPL is also developing a

1 “living lab” with various working solar rooftop technologies at its Juno Beach
2 headquarters to educate employees and customers on rooftop solar.

3 **Q. Mr. Saporito claims that FPL could sponsor LED street lights to its customer**
4 **resulting in cost savings. Do you agree?**

5 A. No. While LED lighting shows promise as a way to conserve energy, reduce
6 costs and reduce light pollution, it is clear based on FPL’s research and testing
7 that greater technological advancement and industry development to drive
8 economies of scale are needed for this to be a cost-effective choice for our
9 communities. At this point LED streetlights are far more expensive than
10 conventional lighting and their maintenance and life expectancy are unknown.

11 **Q. Are there any other claims that Mr. Saporito makes in his testimony that you**
12 **would like to address at this time?**

13 A. No. Other issues raised by Mr. Saporito are subsumed in the FPL rebuttal
14 testimony of other intervenor witnesses.

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

16 A. Yes.