

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Adoption of Numeric  
Conservation Goals by Florida  
Power & Light Company.

DOCKET NO. 971004-EG  
ORDER NO. PSC-99-1412-S-EG  
ISSUED: JULY 23, 1999

The following Commissioners participated in the disposition of this matter:

JOE GARCIA, Chairman  
J. TERRY DEASON  
SUSAN F. CLARK  
JULIA L. JOHNSON  
E. LEON JACOBS, JR.

ORDER APPROVING STIPULATION

BY THE COMMISSION:

On August 6, 1997, Docket No. 971004-EG was opened to set numeric demand-side management (DSM) goals for Florida Power & Light Company (FPL). A series of staff workshops were held to assist in identifying issues for this docket. FPL filed direct testimony, including proposed numeric DSM goals, on February 1, 1999.

On June 23, 1999, FPL and the Legal Environmental Assistance Foundation (LEAF) filed a Joint Motion to Approve Stipulation. The Stipulation is included in this Order as Attachment A, and is incorporated herein by reference. If the Stipulation is approved by the Commission, LEAF has agreed to withdraw from this docket and take no position on FPL's proposed numeric DSM goals. In return, FPL has agreed to investigate and, if feasible, develop various energy-efficiency measures such as low income weatherization assistance, green pricing, and project-specific energy efficiency measures for Commercial/Industrial (C/I) customers.

This Order only addresses the Stipulation between FPL and LEAF. The appropriate numeric DSM goals for FPL will be addressed at the hearing currently scheduled for August 17, 1999. The energy-efficiency measures proposed by FPL in the stipulation will be evaluated in a future docket on FPL's DSM Plan.

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If the Stipulation is approved, FPL has agreed to the following actions:

- (1) Develop and seek Commission approval in its DSM Plan filing a Low Income Weatherization Retrofit Research Project.
- (2) Investigate and, if feasible, implement a new Green Energy Program. Under this program, FPL would purchase energy from new renewable sources and sell to program participants at a cost equal to FPL's current applicable rate plus the additional incremental cost to purchase such energy.
- (3) Implement or seek Commission approval, in the upcoming docket to approve FPL's DSM Plan, for the following initiatives:
  - a. Low Income New Construction Program
  - b. Low Income DSM Program Participation
  - c. New Construction "Energy Star" Initiative
  - d. New Construction Education Initiative
  - e. Photovoltaic Research & Development Initiative
  - f. Photovoltaic Education Initiative
  - g. Commercial/Industrial Energy Star Initiative
- (4) Develop and market energy efficiency options to C/I customers. These options would be offered in addition to approved C/I programs recovered through FPL's Energy Conservation Cost Recovery (ECCR) Clause. No contribution would be made by non-participants through the ECCR Clause.

The Stipulation is consistent with applicable laws and rules. Sections 366.80-366.85 and 403.519, Florida Statutes, are collectively known as the Florida Energy Efficiency and Conservation Act (FEECA). FEECA is summarized in Rule 25-17.001(2), Florida Administrative Code:

The Florida Energy Efficiency and Conservation Act requires increasing the efficiency of the electric systems of Florida, increasing the conservation of expensive resources, such as petroleum fuels, reducing

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the growth rate of weather sensitive peak demand, and reducing and controlling the growth rate of kilowatt hour consumption to the extent cost effective. (Emphasis added)

The Stipulation is a reasonable resolution of the likely issues that may arise between the parties in this docket. By this stipulation, LEAF does not necessarily endorse FPL's proposed numeric goals. However, LEAF will not take a position on whether the goals should be approved.

The Stipulation is in the public interest. The following statement, from page 1 of the Stipulation, contains the general position of FPL and LEAF on this subject:

LEAF and FPL wish to avoid the time, expense, uncertainty, and acrimony associated with adversarial litigation in this docket in keeping with the Commission's long-standing practice of encouraging parties to contested proceedings to settle issues whenever possible.

(Stipulation, page 1)

In summary, the Stipulation between FPL and LEAF is consistent with applicable law, is a reasonable resolution of the likely issues that may arise between the parties in this docket, and is in the public interest. For these reasons, the Joint Motion to Approve Stipulation filed by FPL and LEAF is granted.

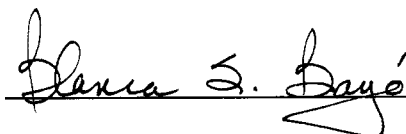
Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the Stipulation between the Legal Environmental Assistance Foundation and Florida Power & Light Company, which is included in this Order as Attachment A and is incorporated herein by reference, is approved. It is further

ORDERED that this docket shall remain open pending the establishment of numeric demand and energy savings goals for Florida Power & Light Company.

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By ORDER of the Florida Public Service Commission this 23rd  
day of July, 1999.



BLANCA S. BAYÓ, Director  
Division of Records and Reporting

( S E A L )

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NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Any party adversely affected by the Commission's final action in this matter may request: 1) reconsideration of the decision by filing a motion for reconsideration with the Director, Division of Records and Reporting, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, within fifteen (15) days of the issuance of this order in the form prescribed by Rule 25-22.060, Florida Administrative Code; or 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water and/or wastewater utility by filing a notice of appeal with the Director, Division of Records and reporting and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days after the issuance of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.



2. In consideration of the obligation undertaken by LEAF pursuant to paragraph 1 above, FPL agrees to the following:

- a. As described more fully in Attachment A, FPL will develop and submit for Commission approval in its DSM plan filing implementing the DSM goals approved in this proceeding a Low Income Weatherization Retrofit Research Project. If FPL determines that a full-scale program is cost-effective, it will continue the pilot while approval of a full-scale program is pending. If FPL determines that a full-scale program cannot be offered cost-effectively, then FPL will terminate the pilot.
- b. As described more fully in Attachment B, FPL will investigate and, if feasible, implement a Green Energy Program under which FPL would purchase electric energy generated from new renewable resources. The Program would offer to meet all or part of a customer's load with generation from the new renewable resources for an additional charge calculated to recover no more than FPL's related Program expenses and its incremental cost to purchase the energy.
- c. As described more fully in Attachment C, FPL will implement or seek Commission approval in the DSM plan docket implementing this Goals docket the following initiatives:

Low Income Initiatives

- Low Income New Construction Program
- Low Income DSM Program Participation

Residential New Construction Initiatives

- New Construction "Energy Star" Initiative
- New Construction Education Initiative

Renewable Energy Initiatives

- Photovoltaic Research & Development Initiative
- Photovoltaic Education Initiative

Commercial/Industrial Initiative

- Commercial/Industrial Energy Star Initiative

- d. As described more fully in Attachment D, FPL will develop and market energy efficiency options to Commercial/Industrial customers. These energy efficiency options will be offered in addition to approved C/I programs recovered through FPL's ECCR clause, and these additional energy efficiency options will not depend upon cost recovery from non-participating customers through the ECCR clause. This C/I energy efficiency project will be designed to produce energy savings supplemental to the energy savings reflected in FPL's proposed goals.
3. This stipulation shall be come null and void, and FPL shall be relieved of any ongoing obligations pursuant to paragraph 2 above, in the event (a) the conservation goals established in this proceeding are, in FPL's judgement, materially higher than those proposed by FPL, (b) any regulatory or legislative change substantially impairs FPL's ability to recover its costs for its initiatives stated in paragraph 2, provided, however, that FPL commits to make good faith efforts to recover such costs, including making reasonable modifications to facilitate cost recovery, (c) FEECA or the Conservation

Goals rule is repealed or substantially amended, or (d) retail competition within Florida is commenced.

4. This stipulation is expressly conditioned upon approval in its entirety by the Commission no later than the date of the Prehearing Conference in this docket and shall be of no further force or effect if such approval is not granted.

Dated: June 23, 1999

**Florida Power & Light Company**

**Legal Environmental Assistance  
Foundation, Inc.**

By Charles A. Guyton  
Charles A. Guyton  
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Tallahassee, FL 32301

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### Attachment A

#### Low Income Weatherization Research Project

FPL will propose a Low Income Weatherization Retrofit Research Project in conjunction with the implementation of its new DSM programs resulting from this Goals proceeding. The research project will address the needs of low income housing retrofits by providing monetary incentives to housing authorities (both weatherization agency providers, WAPS, and non-weatherization agency providers, non-WAPS) for individual homes they are retrofitting. These incentives will be used by the housing authorities to leverage their funds to increase the overall energy efficiency of homes they are retrofitting. FPL either will conduct a home energy survey, train housing authority employees to perform FPL home energy surveys, accept the NEAT audit (as supplemented to capture water heating recommendations not included in the NEAT audit), or approve similar FPL approved audits conducted by weatherization providers to determine the need for energy efficient retrofit measures for each home. FPL will design the pilot so as to minimize extra work for the retrofit housing authorities. The following energy end uses will be addressed as part of each audit:

- HVAC system
- Duct system
- Ceiling insulation
- Water heating
- Lighting
- Reduced air infiltration

The maximum potential incentive per home will reflect the incentives applicable to the DSM measures approved in FPL's new DSM Plan, plus incentives totaling a maximum \$185 per home for the following additional measures:

- HVAC maintenance (\$30)
- Duct system test cost (\$30)
- Reduced air infiltration (\$50)
- Water heating wrap (\$25)
- Lighting (\$50)

Based on FPL's existing DSM programs, the maximum potential incentive per home would be \$953.

FPL will conduct this pilot program initially in six counties, with a minimum of 6 participating WAPs and 6 participating non-WAPs. FPL will confer with the Department of Community Affairs or the Florida Housing Coalition to target the counties for the initial pilot effort, but the decision of the counties actually targeted will be left to FPL's sole discretion.

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ATTACHMENT A

FPL will monitor the demand and energy impacts of this pilot in order to determine its cost-effectiveness and the proper vehicle for a full-scale program, if appropriate. When at least 500 homes have been retrofitted, FPL will assess the cost-effectiveness of a potential program. During the assessment of cost-effectiveness, FPL will continue to provide the pilot program. If FPL determines that a full-scale program is cost-effective, it will continue the pilot while approval of a full-scale program is pending. If FPL determines that a full-scale program cannot be offered cost-effectively, then FPL will terminate the pilot.

## Attachment B

### Green Energy Program

FPL is currently finishing a R&D project addressing customer acceptance of green energy where donations are used as the funding mechanism for the purchase and installation of utility grid connected photovoltaic (PV) systems. This project raised in excess of \$89,500 and a 10 kW PV system is currently being constructed at FPL's Martin power plant site. FPL anticipates this system to be fully functional in June 1999.

In an attempt to determine the customer acceptance of green pricing rates, FPL agrees to investigate and, if determined by FPL to be feasible, to design and implement a Green Energy Program. Under this program FPL would purchase electric energy generated from new renewable resources.<sup>1</sup> The Program would offer to meet all or part of a customer's load with generation from new renewable resources, with the remaining portion of that load being served by the Company's conventional supply. Participants will be residential (and possibly commercial) customers. Participants in this program will be charged an additional charge calculated to recover no more than the incremental costs<sup>2</sup> for the new renewable energy.

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<sup>1</sup> For purposes of this stipulation, the term "renewable resources" includes all solar-powered technologies, biomass energy, landfill methane, wind energy, and/or low impact hydroelectric energy. Other technologies deemed to be acceptable renewable energy technologies might be added by mutual agreement of LEAF and FPL. The parties acknowledge that in LEAF's view, energy from municipal solid waste is neither renewable nor green. The term "new" renewable resources includes (a) renewable energy projects that are completely new (begin commercial operation after the date FPL's Green Energy Program is approved), (b) existing renewable energy projects in which overall efficiency is increased through repowering or retrofitting after the date of FPL's Green Energy Program is approved, (c) the increased capacity of existing renewable energy projects which undergo repowering or retrofitting after the date FPL's Green Energy Program is approved, and (d) existing renewable energy projects that would cease operation without further intervention. New renewable resources do not include renewable resources that have been included in a regulated utility's rate base. To avoid potential double counting of a new renewable resource, FPL will monitor the output of producers who supply the renewable resources for the Green Energy Program to insure that FPL receives the contracted amount of renewable energy. FPL regularly reports purchases of power on its "A Schedules" filed in its fuel adjustment docket. If these schedules become confidential, FPL will share with LEAF its Green Energy Program energy purchases subject to a nondisclosure agreement which does not foreclose LEAF's enforcement of this stipulation.

<sup>2</sup> For purposes of this stipulation, "incremental costs" means the sum of (a) Green Energy Program administration costs (program administration costs are the administrative costs associated with the delivery of the program; they would include but not be limited to personnel costs, marketing and promotion costs, materials and supplies, start-up costs and office costs; they do not include power production or purchase costs for new renewable energy or program research and development costs),

The first step in the development of this Program will consist of research into customer acceptance of the concept as well as the availability of new renewable energy in Florida. First, FPL will conduct consumer research to determine:

- The preferences of its customers for new renewable energy.
- Customer willingness to pay the incremental costs associated with new renewable energy.
- The amounts of new renewable energy customers are willing to purchase and the acceptance of blended rate offerings.

Specifically, the consumer research will build upon the key lessons from FPL's existing green energy research project and will determine customer preferences regarding energy offerings linked to renewable sources, including the perceived benefits and costs of these technologies.

The second step will be research to determine the availability of new renewable energy sources and supplies within Florida (their availability by season, day of week, time of day, etc.), the terms and conditions, including prices and contract lengths, pursuant to which FPL may obtain the resources for the program participants, and regulatory issues which may arise in offering a Green Energy Program.

If FPL's research shows that a sufficient number of customers are willing to pay the incremental costs associated with new renewable energy under terms and conditions that correspond favorably with the availability and terms and conditions pursuant to which FPL can purchase new renewable energy and that there are no regulatory impediments, FPL will proceed with the design and implementation<sup>3</sup> of the Green Energy Program.

The design of the Green Energy Program will contain marketing, public education and evaluation components. In recognition of Florida's climate and the limited potential of certain forms of renewable resources, such as hydroelectric and geothermal energy, solar PV's are expected to play

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and (b) the excess of total power production costs for new renewable energy (expressed in cents per kWh) over and above normally applicable charges (i.e., the fuel, purchased power capacity and energy, conservation, environmental cost recovery, and basic energy charges) which would have been charged by FPL for delivery of an equivalent amount of energy from conventional power supply sources. For example, if a kWh of green energy cost FPL six cents/kWh and FPL's cost to generate or purchase that same kWh from a conventional source was four cents/kWh, the incremental cost to green energy customers would be two cents/kWh. It is the parties' intent that (a) FPL be made whole for purchases of green energy, (b) green energy program participants pay no more or less than the incremental costs of the Green Energy program, and (c) non-participants will not pay any more or less because of the program.

<sup>3</sup> Subject to the approval of the Commission and any other required regulatory authorities.

an important role in the design of the Program. FPL will attempt to include the maximum amount of PV's in the mix of options for customers, consistent with the results of the market and new product research.

FPL will provide LEAF and its consultants a timely opportunity to review and comment upon FPL's research and program design plans and procedures. However, FPL retains final control over the content and conduct of the research and program design.

Program implementation will commence with an initial offering. If the response to the initial offering reflects reasonable participation levels consistent with those estimated by the market research,<sup>4</sup> FPL will continue and expand the Program so long as it remains viable - sufficient number of customers are willing to pay the incremental costs associated with new renewable energy under terms and conditions that correspond favorably with the terms and conditions that FPL can purchase these resources. If the program is continued and expanded, FPL will have the goal of obtaining 10,000 participants by the end of 2003. When the Program reaches 10,000 participants, FPL will include at least 150 kW of PVs in its resource mix for customers in this Program. FPL will add PVs to its resource mix proportional to the 10,000 participant goal prior to reaching this goal if feasible. If the Program exceeds 10,000 participants, FPL will add PVs to its resource mix to maintain a ratio of at least .015 kW per participant.

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<sup>4</sup> The parties recognize that, to a reasonable degree, actual participation levels can be expected to be lower than the participation levels indicated solely on the basis of survey responses.

### Attachment C

#### **Low Income New Construction Program**

FPL will apply its BuildSmart Program procedures to increase the energy efficiency of low-income new home construction. It is FPL's intent to select providers of low-income housing such as Habitat for Humanity to work with in this effort. FPL will give a priority to Habitat for Humanity homes, but will work with SHIP coordinators or the Florida Housing Coalition to identify other low-income housing providers.

FPL will obtain the home plans for proposed homes and work with the provider to determine the optimal mix of upgrades in order to result in an energy performance index (EPI) of 90, 80 and 70. FPL will perform the other key BuildSmart Program procedures including the mid-point inspection (if deemed necessary by FPL), and the final inspection, at no cost to the provider. Each completed qualifying home will be certified as a BuildSmart home.

FPL will also attempt to certify all BuildSmart Gold level homes in the program to Energy Star status.

This program will commence upon Commission approval of this stipulation and continue until the next goals setting process or until there are changes to the rules covering the goals setting process. This Program will be limited to 1,000 homes per 24-month period.

#### **Low Income DSM Program Participation**

FPL will conduct at least three workshops per year for local housing and community development agencies throughout the FPL service territory. The objective of these orientations is to increase the utilization of FPL's DSM programs by the various agencies. The orientations will serve as a forum to educate these agencies in FPL's DSM programs and procedures as well as for FPL to obtain feedback in areas such as participation process improvements and other hurdles to program participation.

These orientations will be held in 2000 and 2001 at a minimum. It is FPL's intention to coordinate these meetings through an umbrella group such as the Florida Housing Coalition.

#### **New Construction "Energy Star Homes" Initiative**

FPL will propose as part of its DSM Plan filing to implement the goals established in the proceeding to enhance FPL's existing program for new home construction, BuildSmart, to meet the standards of the EPA's Energy Star Homes Program.

FPL will attempt to certify each BuildSmart Gold level new home to Energy Star status.

FPL will adopt the following goals for its BuildSmart program. FPL will certify a minimum of 3% of participating BuildSmart homes to Energy Star status in the year 2000, increasing to 20% by the year 2009.

### **New Construction Education Initiative**

FPL will work with realtor, architect, and builder associations, as well as other related trade groups, to provide educational workshops designed to promote the construction of energy-efficient, affordable housing.

Two workshops will be conducted in 1999 to launch this initiative. One workshop will be located in Dade/Broward County and the second workshop will be in Volusia County. A minimum of five workshops will be sponsored each year beginning in 2000 and continued as needed.

In conjunction with lending institutions, local housing and community development groups, nonprofit and for profit builders, FPL will also provide "Home Buyer" courses, which will educate new owners on topics such as:

- efficient operation of electrical appliances
- energy conservation practices
- what to look for when replacing appliances

FPL will make reasonable efforts to promote participation in these "Home Buyer" workshops, including holding them at venues such as home shows that have "captive" audiences, and promoting the classes through LEAF and other organizations, whose members would likely be interested in participating.

"Home Buyer" workshops will be conducted in 1999 in five locations: Manatee, Sarasota, Dade, Broward, and Palm Beach Counties. A minimum of ten workshops will be conducted each year beginning in 2000 throughout FPL service territories. These workshops will continue for as long as they contribute to the effectiveness of the BuildSmart Program.

### **Photovoltaic Research & Development Initiative**

In order to gain a complete understanding of the cost and benefits of photovoltaic (PV) roof tile systems, FPL will submit for Commission approval an R&D effort addressing this technology. The proposed project is consistent with the Federal Government's Million Solar Roofs initiative and will provide the following benefits:

- Increase the public awareness of roof tile PV technologies.
- Provide data to determine the durability of this technology and its impact on FPL's electric system.
- Collect demand and energy data to better understand the coincidence between PV roof tile system output and FPL's system peaks as well as the energy capabilities of roof tile PV systems.
- Collect data to assess the homeowner's financial benefit of PV roof tile systems.

The proposed R&D project will work with homebuilders to install five to ten PV roof systems in new single family homes. Each roof system will be approximately 2 kW each, resulting in 10 to 20 kW of PV arrays in total.

#### **Photovoltaic Education**

Based on FPL's research to date, a primary hurdle to the physical installation of photovoltaic (PV) systems is the lack of awareness, understanding and acceptance by local building officials. For the most part, these officials are unclear how these systems work and how to address these systems as part of the building permitting process. This leads to reluctance to pursue this technology.

FPL will develop and conduct educational workshops for the building departments that are active in FPL's service territory. These workshops will incorporate the results of the above-described FPL PV roof tile research project. The workshops will have the following objectives:

- Understanding of the various types of PV systems and supplemental systems
- General education on the design, construction and installation of PV systems
- Develop an understanding of the performance and reliability of PV systems
- PV perspectives of the various stakeholders including the Federal and State government, utilities, builders

To make these workshops relevant to the intended audience, FPL will seek participation by industry experts, such as the Florida Solar Energy Center, for the design and implementation of these events.

#### **Commercial/Industrial Energy Star Initiative**

The US Department of Energy ENERGY STAR Buildings and Greenlights Program spurs investment in energy-efficient building technologies with US businesses. The ENERGY STAR Buildings integrated systems approach takes advantage of a building's system interactions to reduce energy consumption.



FPL will agree to join this Program as a Partner and perform the following based on the Program agreement:

- Upgrade at least one Partner pilot building within two years of the effective date of this agreement.
- Upgrade at least 60% of the Partner's eligible facilities within 7 years, according to the Partnership's five-stage integrated approach to maximize energy savings to the extent that the upgrades are profitable and maintain or improve productivity and worker comfort.
- Submit annual ENERGY STAR Buildings Utility Data Report to the EPA for completed upgrade projects.

### **Attachment D**

#### **Commercial/Industrial Energy Efficiency Initiatives**

FPL will develop and market energy efficiency options to Commercial/Industrial customers as a stand-alone business project and receive no support through the ECCR clause for technologies that are not part of FPL's DSM programs.

FPL will provide to LEAF an annual report summarizing actual energy efficiency achievements of FPL's commercial and industrial customers that are part of this initiative that will include:

- The number of completed projects by end-use
- The annual kWh and winter and summer kW savings for the completed projects
- The number of new projects (signed contracts) by end-use

FPL agrees to pursue this initiative in good faith for so long as it remains a viable business venture. FPL reserves the right to reduce or eliminate this initiative if, in FPL's opinion, such action is warranted by sound business judgment, taking into account, but not limited to, such considerations as:

- Whether the project remains profitable to FPL.
- Whether participating customers are able and willing to pay the cost of participation.
- Whether customer participation can be maintained at reasonable levels.
- Whether the FPL corporate structure can support this initiative.