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October 4, 1996

By Hand Delivery

Blanca S. Bayó, Director
Records and Reporting
Florida Public Service Commission
4075 Esplanade Way, Room 110
Tallahassee, Florida 32399-0850

961198-FI

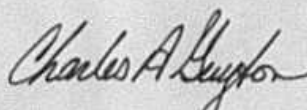
Re: Commercial/Industrial New Construction Research Project

Dear Ms. Bayó:

Enclosed for filing on behalf of Florida Power & Light Company are the original and fifteen (15) copies of Petition For Approval Of Florida Power & Light Company's Commercial/Industrial New Construction Research Project.

If you or your Staff have any questions regarding this filing, please contact me.

Very truly yours,



Charles A. Guyton

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FPSC-BUREAU OF RECORDS

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10610 OCT-4 96

FPSC-RECORDS/REPORTING

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Florida Power & Light Company For Approval of Commercial/Industrial New Construction Research Project)
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Docket No.

Filed: October 4, 1996

**PETITION FOR APPROVAL OF
FLORIDA POWER & LIGHT COMPANY'S
COMMERCIAL/INDUSTRIAL NEW CONSTRUCTION
RESEARCH PROJECT**

Florida Power & Light Company ("FPL"), pursuant to Section 366.82(2), Florida Statutes (1995), hereby petitions the Florida Public Service Commission ("Commission") to approve the Commercial/Industrial New Construction Research Project as part of FPL's Demand Side Management Plan and to allow FPL to recover reasonable and prudent expenditures for administrative costs incurred for the Commercial/Industrial New Construction Research Project through FPL's Energy Conservation Cost Recovery ("ECCR") Clause. The grounds for this Petition are:

1. FPL is an investor-owned electric utility regulated by the Commission pursuant to Chapter 366, Florida Statutes. FPL is subject to the Florida Energy Efficiency Conservation Act ("FEECA"), Section 366.80-85, 403.519, Florida Statutes (1995), and its ECCR Clause is subject to the Commission's jurisdiction. FPL is substantially affected thereby.

2. FPL's address is 9250 West Flagler Street, Miami, FL 33174. Correspondence, notices, orders and other documents concerning this Petition should be sent to:

Charles A. Guyton
Steel Hector & Davis
Suite 601
215 S. Monroe St.
Tallahassee, FL 32301

William G. Walker, III
Vice President, Regulatory Affairs
Florida Power & Light Company
9250 W. Flagler Street
Miami, FL 33174

DOCUMENT NUMBER-DATE

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FPSC-RECORDS/REPORTING

3. In the final order in Docket No. 930548-EG, the order establishing FPL's conservation goals for the period 1994 through 2003, the Commission established conservation goals for FPL through the year 2003 which were approximately 300 MW in excess of the level of DSM FPL had found to be reasonably achievable. In establishing these aggressive goals, the Commission discussed the possibility of FPL research and development efforts yielding some of the additional MW needed for FPL to achieve its goals:

FPL witness Hugues indicated that there is a very good possibility that due to changes in technology, FPL's R&D program might be able to achieve the additional 130 MW of DSM-RIM necessary to defer the 2002 need. (Tr. 620, 4499) FPL's R&D program may result in approved programs producing the additional capacity savings in much the same manner as the 1990 DSM Plan produced an additional 342 MW. (Tr. 619-20) The Current R&D program is evaluating approximately seven C/I programs and four residential programs. (Tr. 620) ... It is possible that FPL might exceed its proposed goal, considering its prior history of exceeding internal DSM goals, and the potential contributions from R&D programs and green pricing options.

Order No. PSC-94-1313-FOF-EG, at 32-33.

4. Consistent with the Commission's expectation that FPL will need to develop additional DSM measures through research and development efforts, FPL is petitioning for approval of the Commercial/Industrial New Construction Research Project. The objective of the Commercial/Industrial New Construction Research Project is to identify conservation opportunities in new construction which would provide cost-effective efficiencies beyond that required by the Florida Energy Efficiency Code. The Commercial/Industrial New Construction Research Project is described in more detail in Appendix A.

5. The Commercial/Industrial New Construction Research Project is tentatively scheduled to last for a period of no longer than 30 months from the date of Commission approval.

The projected cost of the Commercial/Industrial New Construction Research Project is \$ 1,525,000. A more detailed schedule and budget is presented in Appendix A.

6. The Commercial/Industrial New Construction Research Project will help achieve the goals of FEECA and Commission Rule 25-17.001, Florida Administrative Code. One of the expressed intents of the Commission's rules implementing FEECA is to foster research and development. If the research project finds that commercial / industrial new construction measures and practices may be offered cost-effectively, then the project will help FPL to achieve its numeric conservation goals. Regardless of whether the technology proves to be cost-effective, the research will add to the understanding of the commercial / industrial new construction measures and practices, foster their development, and potentially provide information for consideration in the revision of the Florida Energy Efficiency Code.

7. A cost-effectiveness analysis for the Commercial/Industrial New Construction Research Project is not included because research is needed to determine the cost-effectiveness of new construction measures. One of the primary purposes of the project will be to determine the reliable assumptions necessary to measure the cost-effectiveness of commercial / industrial new construction measures and practices.

8. The Commercial/Industrial New Construction Research Project is directly monitorable and will yield measurable results. FPL's monitoring and assessment efforts are more fully addressed in Appendix A.

9. FPL is not aware of any disputed issues of material facts. The Commercial/Industrial New Construction Research Project should be approved and incorporated into FPL's DSM Plan, and FPL should be authorized to recover through its ECCR clause its reasonable and prudent expenditures for the Commercial/Industrial New Construction Research Project.

WHEREFORE, FPL respectfully petitions the Commission to approve FPL's Commercial/Industrial New Construction Research Project as part of FPL's DSM Plan and allow FPL to recover its reasonable and prudent project expenditures through FPL's ECCR clause.

Respectfully submitted,

STEEL HECTOR & DAVIS LLP
215 S. Monroe St., Suite 601
Tallahassee, Florida 32301-1804

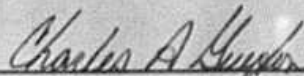
Attorneys for Florida Power
& Light Company

By: Charles A. Guyton
Charles A. Guyton

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the Petition For Approval Of Florida Power & Light Company's Commercial/Industrial New Construction Research Project was mailed this 4th day of October, 1996 to the following:

Jack Shreve, Esquire
Office of Public Counsel
111 West Madison Street
Room 812
Tallahassee, FL 32399-1400



Charles A. Guyton

APPENDIX A
PROJECT DESCRIPTION

APPENDIX A

FPL'S COMMERCIAL/INDUSTRIAL NEW CONSTRUCTION RESEARCH PROJECT TECHNICAL DESCRIPTION

Section 1 - Project Objective:

The objective of FPL's Commercial/Industrial New Construction Research Project is to identify cost-effective conservation opportunities in the commercial/industrial new construction market which would provide efficiencies beyond that required by the Florida Energy Efficiency Code. The activities in this project will be designed to increase overall energy efficiency cost-effectively in new construction and building operation. The activities will evaluate the quality of new construction, energy code compliance and encourage efficiency levels that exceed the levels associated with Florida's building and energy code minimum requirements.

Section 2 - Project Description:

FPL's Commercial New Construction Research Project will evaluate the impacts of potential measures, both individually and collectively. This evaluation will reveal which measures and groups of measures are viable for a possible program, and second, if these measures or groups of measures are cost-effective using the Commission approved methodology. Initially, an investigation of past and current new construction programs and projects will be performed, with successes and issues identified to assist in formulating a general direction for FPL's future efforts. Then, the evaluation of potential measures will include (1) simulations of measures and their interactions by building type within Florida's three climate zones, and (2) field monitoring of actual installations. In addition, actual commercial buildings will be investigated through both energy surveys and a review of the original building design plans to assess the relationship between their actual performance and the operation

customers' facilities after the research project is completed. FPL may seek a research facility to manage and perform the Commercial/Industrial New Construction Research Project on a turnkey basis. All costs associated with the project that are to be recovered through FPL's Energy Conservation Cost Recovery (ECCR) clause will be limited to the amounts shown in EXHIBIT I. FPL may seek funding for this project from sources such as the U.S. Department of Energy (DOE), the Florida Department of Community Affairs (DCA), and/or other entities interested in electric energy conservation research. If successful, such funds would be used to lower ECCR costs and/or expand the scope of the research project.

Section 3 - Project Monitoring and Analysis:

FPL, or the research facility contracted to perform the project work tasks, would conduct facility surveys and research, including the installation of various measuring instrumentation, to provide the necessary data to resolve the established research objectives.

FPL anticipates that the site selection, equipment installation, monitoring and analysis phases of the research project would be for a period of 22 to 30 months. The tentative project schedule is as follows:

Site Selection/Installation	6 to 8 months
Monitoring	12 to 16 months
Analysis	4 to 6 months

FPL will require the research facility to submit quarterly progress reports describing significant accomplishments or problems, as well as interim and final project reports estimating market potential and energy and demand reduction attributed to the Commercial/Industrial New Construction Program. At the conclusion of the research project, FPL will prepare a Project Summary Report to be submitted to the Commission.

Section 4 - Cost-Effectiveness:

A Commercial/Industrial New Construction Program is anticipated to be cost-effective using the Commission's approved methodology. After the simulations and field monitoring are completed, FPL will have the data necessary to perform the cost-effectiveness analyses.

Section 4 - Project Budget:

The projected cost of the Commercial New Construction Research Project is \$1,525,000. The estimated costs for the different stages of the research project are shown in EXHIBIT I.

EXHIBIT I

PROPOSED BUDGET FOR FPL'S COMMERCIAL
NEW CONSTRUCTION RESEARCH PROJECT

		<u>Projected Costs</u>
Phase I	- Literature Search	\$ 50,000
	1) Identify Sources	
	2) Conduct Search	
Phase II	- Simulations	\$ 250,000
	1) Develop List of Measures	
	2) Develop Baseline Estimates	
	3) Develop Models	
	4) Estimate Impacts	
	5) Select Measures and Structure	
Phase III	- Field Research	\$ 750,000
	1) Refine Baseline	
	2) Select Field Samples	
	3) Site Audits and Data Collection	
	4) Model Calibration	
	5) Determine Impacts	
Phase IV	- Market Study	\$ 100,000
	1) Determine Customer Acceptance	
	2) Determine Architect and Engineer Acceptance	
	3) Establish Target Markets	
Phase V	- Economic Analysis	\$ 50,000
	1) Develop Cost/Benefit Estimates	
	2) Identify Demand and Energy Impacts	
	3) Perform Cost-Effectiveness Analysis	
Phase VI	- Program Design	\$ 200,000
	1) Trade Ally Analysis	
	2) Market Analysis	
	3) Implementation Strategy	
	4) Program Evaluation Plan	
Phase VII	- Project Management	\$ 125,000
Total Project R&D Costs =		\$ 1,525,000