## **ORIGINAL**

STEEL II HECTOR BDAVIS<sup>\*\*</sup> Steel Hector & Davis LLP 200 South Biscayne Boulevard Miami, Florida 33131-2398 305.577.7000 305.577.7001 Fax www.steelhector.com

January 28, 2002

John T. Butler, P.A. 305.577.2939 jbutler@steelhector.com

#### VIA HAND DELIVERY -

Ms. Blanca S. Bayó
Director of the Commission Clerk and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Docket No. 001148-El

Dear Mr. Bayó:

I am enclosing for filing in the above docket the original and fifteen (15) copies of the prefiled testimony and exhibits for the following Florida Power & Light Company ("FPL") witnesses:

Mark R. Bell 01061-02
M. Dewhurst-01062-02
William W. Hamilton 01063
Dr. J. Stuart McMenamin
Armando J. Olivera 01065
John M. Shearman 01066

M. Michael Davis 01067-07
Paul J. Evanson 01068-02
Steven P. Harris 01069-02
Rosemary Morley 01070-02
James K. Peterson 01071-02
Samuel S. Waters 01072-02

FPL is filing these witnesses' testimonies today in accordance with Order No. PSC-02-0089-PCO-EI, dated January 15, 2002. FPL's witnesses sponsor and explain the MFRs FPL has previously filed in this docket. Together with the MFRs, their testimonies demonstrate that FPL's 2002 test year results do not support any reduction in FPL's base rates.

AUS \_\_\_\_\_ in CAF \_\_\_\_ in CAF \_\_\_\_ COM STOR \_\_\_\_ CIR \_\_\_ CIR \_\_\_ CCR \_\_\_ GCL \_\_\_ OPC \_\_\_ MMS \_\_\_ SEC \_\_\_ OTH \_\_\_\_ COTH \_\_\_\_\_ COTH \_\_\_\_ COTH \_\_\_\_ COTH \_\_\_\_\_ COTH \_\_\_\_\_\_ COTH \_\_\_\_\_ COTH \_\_\_\_\_\_ COTH \_\_\_\_\_\_\_ COTH \_\_\_\_\_\_\_ COTH \_\_\_\_\_\_ COTH \_\_\_\_\_\_\_ COTH \_\_\_\_\_\_\_\_ COTH \_\_\_\_\_\_\_\_ COTH \_\_\_\_\_\_\_\_\_\_ COTH \_\_\_\_\_\_\_\_\_ COTH \_\_\_\_\_\_\_\_\_\_\_\_ COTH \_

Sincerely,

John T. Butler, P. A.

Enclosures

cc: Counsel of record (w/copy of enclosures)

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São Paulo

Rio de Janeiro

Santo Domingo

#### **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that true and correct copies of the prefiled testimony and exhibits of Mark R. Bell, K. Michael Davis, M. Dewhurst, Paul J. Evanson, William W. Hamilton, Steven P. Harris, Dr. J. Stuart McMenamin, Rosemary Morley, Armando J. Olivera, James K. Peterson, John M. Shearman and Samuel S. Waters were served by hand delivery (\*) or overnight delivery this 28<sup>th</sup> day of January, 2002 to the following:

Robert V. Elias, Esq.\* Legal Division Florida Public Service Commission 2540 Shumard Oak Boulevard Room 370 Tallahassee, FL 32399-0850

Thomas A. Cloud, Esq. Gray, Harris & Robinson, P. A. 301 East Pine Street, Suite 1400 Orlando, Florida 32801

Michael B. Twomey, Esq. Post Office Box 5256 Tallahassee, FL 32314-5256

Joseph A. McGlothlin, Esq. Vicki Gordon Kaufman, Esq. McWhirter Reeves 117 South Gadsden Tallahassee, FL 32301 Florida Industrial Power Users Group c/o John McWhirter, Jr., Esq. McWhirter Reeves 400 North Tampa Street, Suite 2450 Tampa, FL 33601-3350

J. Roger Howe, Esq.
Office of the Public Counsel
c/o Florida Legislature
111 W. Madison Street
Room No. 812
Tallahassee, Florida 32399-1400

Andrews & Kurth Law Firm Mark Sundback/Kenneth Wiseman 1701 Pennsylvania Ave., NW, Suite 300 Washington, DC 20006

3v: (

ńn T. Butler, P. A

# BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

### DOCKET NO. 001148-EI FLORIDA POWER & LIGHT COMPANY

**JANUARY 28, 2002** 

IN RE: REVIEW OF THE RETAIL RATES
OF FLORIDA POWER & LIGHT COMPANY

TESTIMONY & EXHIBITS OF:
ARMANDO J. OLIVERA

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		TESTIMONY OF ARMANDO J. OLIVERA
4		DOCKET NO. 001148-EI
5		<b>JANUARY 28, 2002</b>
6		
7	I.	INTRODUCTION AND BACKGROUND
8	Q.	Please state your name and address.
9	A.	My name is Armando J. Olivera. My address is 9250 W. Flagler Street,
10		Miami, Florida, 33174.
11	Q.	By whom are you employed and what is your position?
12	A.	I am employed by Florida Power & Light Company (FPL) as Senior Vice
13		President, Power Systems.
14	Q.	Please state your education and business experience.
15	A.	I have a Bachelor of Science degree in electrical engineering from Cornell
16		University and a Masters of Business Administration from the University of
17		Miami. I am also a graduate of the Professional Management Development
18		Program of the Harvard Business School. I joined FPL in 1972 and have
19		served in a variety of positions in transmission and distribution operations. I
20		have been Vice President of Distribution, Power Delivery, and Planning and
21		Resource Allocation. I also hold the position of Secretary/Treasurer of the
22		Florida Reliability Coordinating Council (FRCC) Executive Board, and I am a
23		member of the Committee on Power Delivery of the Association of Edison
24		Illuminating Companies, Inc.

#### 1 Q. What is the purpose of your testimony?

- 2 A. The purpose of my testimony is to describe the superior reliability, customer
- 3 service, and effective cost management that the Power Systems business unit
- 4 provides for FPL customers. My testimony also supports the return on equity
- 5 (ROE) adder proposed by Mr. Dewhurst.
- 6 Q. Have you prepared or caused to be prepared under your supervision,
- 7 direction and control an Exhibit in this proceeding?
- 8 A. Yes, I have. It consists of 4 documents. An index is provided as Document
- 9 AJO-1.
- 10 Q. Are you sponsoring any Minimum Filing Requirement schedules (MFRs),
- either individually or jointly?
- 12 A. Yes. A list of the MFRs I am sponsoring is provided in Document AJO-2 of
- my testimony.
- 14 Q. Please summarize your testimony.
- 15 A. The Power Systems business unit is responsible for the operations,
- maintenance and construction of FPL's distribution and transmission
- infrastructure. Since launching an aggressive reliability program in 1997, the
- delivery system operational performance has been dramatically improved. As
- a consequence, FPL's customers now benefit from reduced service
- 20 unavailability (the average amount of time a customer is without electricity
- per year). Unavailability levels are 50% better than in 1997, rank among the
- industry's top performers, and are 35% better than the industry average.

At the same time, Power Systems has continued to search for and implement enhancements to customer service. The cumulative success of these initiatives has resulted in a 35% reduction in service quality related customer contacts (warm transfers, courtesy calls and logged complaints per 1000 customers) to the Commission since 1996.

These reliability and customer service improvements have been achieved while still effectively managing costs. As can be seen in Document KMD-8 of FPL witness Davis, the projected test year distribution and transmission operations and maintenance (O&M) expense is about 45% below the Commission benchmark. This translates into annual customer savings of more than \$240 million.

- This excellent balanced performance has been achieved as a direct result of the commitment of FPL's management and employees to providing superior reliability and customer service at a reasonable cost.
- 17 Q. The Company is proposing an ROE adder in this proceeding based on 18 superior performance. How would you characterize FPL's performance 19 in the area of Power Systems?
- A. For the reasons expressed in my response to the previous question, I believe that from a Power Systems standpoint, our performance has been superior.

  The balance of my testimony will provide details that further support this conclusion.

#### II. RELIABILITY

Q. Can you describe FPL's Distribution reliability program and its results?

The initial 3-year phase of the program began in 1997. The program is comprised of multiple initiatives designed to dramatically reduce the average time a customer is without electricity. Improvements were sought in both outage duration and frequency to achieve desired reductions in annual outage time, as reported by the System Average Interruption Duration Index ("SAIDI"), a standard industry measurement. This is the most comprehensive indicator, and, therefore, the most useful for customers.

A.

A centralized organization was established to provide a coordinated system-wide perspective. This was to ensure that resources were applied where they benefit the most customers and to avoid potential sub-optimization of resources if each local area were to address its individual largest perceived needs. This group identified and prioritized causes of past interruptions, targeting causes that would yield the largest customer benefits if addressed. An integrated set of initiatives was then designed to address the greatest areas of opportunity. A summary list of the major initiatives is provided in Document AJO-3 of my testimony. The effectiveness of each initiative within the program is evaluated on an ongoing basis and resources re-balanced as necessary to ensure the maximum overall performance results.

1 As can be seen in Document AJO-4 of my testimony and as summarized 2 below, results to-date have been impressive: 3 - 50% reduction in customers' average annual outage time (SAIDI). 4 Based on the Edison Electric Institute's (EEI's) 2000 Reliability 5 Report, FPL's performance now ranks among the industry leaders 6 and is 35% better than the industry average. 30% reduction in customers' average length of individual 7 8 interruptions (CAIDI - Customer Average Interruption Duration 9 Index). 10 28% reduction in customers' average frequency of interruption 11 (SAIFI - System Average Interruption Frequency Index). 12 Q. Please provide some examples of the reliability initiatives. 13 **Vegetation Management –** Vegetation growing in power lines represents one A. 14 of the top causes of customer interruptions and is a particular challenge in 15 Florida due to the year-round growing season. Power Systems has 16 implemented a very aggressive program that increased the yearly amount of 17 miles cleared by 11%, or 600 miles, from the 1997 level of about 5,350 miles. 18 We are now on a 3-year cycle for all feeders with future plans to place all 19 laterals onto a similar cycle. As a result, we estimate that since 1997 about 20 863,000 customer interruptions have been avoided to-date. 21 22 **Cable Injection and Replacement** – Another top cause of interruptions has

been underground cable failures. Since 1997 almost 1,700 miles (about 9

million feet) of direct buried feeder and lateral cable have had faults either

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repaired by injecting the cable with silicone, which extended its life, or when injection was not an option, the cable was replaced. This represents a 20% increase over the 1997 level in the amount of underground cable repaired or replaced annually. The original objective of this initiative was to stop the increase in the number of outages associated with underground cable failures. However, this goal was exceeded. We estimate this program has avoided about 33,000 customer interruptions since 1997. Starting in 2001, more resources have been allocated to this initiative because it has turned out to be more effective than planned.

Thermovision – This predictive diagnostic technology employs a vanmounted heat-sensitive camera that uses infrared images to detect signs of
failure on power lines and equipment. Identifying these hot spots allows for
preventative repairs or replacements to be made before any customer outages
can occur. Though FPL had used this technology in the past, it was not used
as extensively and was not part of a formalized program. Since 1998 we have
conducted about 3,000 patrols, surveying approximately 1,700 feeders. We
concentrate on feeders that have experienced outages. But we will also
proactively evaluate those that have not yet had a significant outage history in
an effort to avoid possible future outages. One of the unique and successful
features of our program is that our crews do not just conduct thermography.
They also conduct visual inspections using checklists to ensure that the
facilities' current condition is up to our standards (i.e., that there are no other
problems such as damaged lightning arrestors, rotten crossarms, etc). We

estimate that since 1998 this initiative has avoided about 310,000 customer interruptions.

Bird Discouragers – Transmission line outages, though infrequent, affect large numbers of customers. In an effort to further reduce these types of outages, analysis was conducted that led to the discovery that streamers of bird excrement from large wading birds and other birds of prey were the cause. Environmentally friendly solutions to prevent birds from roosting directly over the conductors were developed in partnership with the Miami Museum of Science's Falcon Batchelor Bird of Prey Center. The pilot results were an 81% improvement in outage performance on a twenty-mile test section. Subsequent installations on six other transmission lines improved their outage performance related to bird activity by 100% in 2001. Thirty other transmission lines are being targeted for bird countermeasures in 2002.

**Research and Development -** Power Systems has also developed, and is presently evaluating, a number of new innovative technologies. These technologies include:

Partial Discharge Testing – This process detects and locates small electrical arcs in cable insulation to help predict where and when a particular underground cable could fail. It is a significantly more accurate test than has been traditionally employed. Our initial results have shown that we can predict where a cable will fail in 80% of the cases. We are now working on developing our

analytical capabilities to predict when a failure will occur. The expected result will be a reduction in the number of customer interruptions and cost savings from avoiding premature retirement and replacement of full cables when smaller sections with localized faults can be identified.

A.

Cellemetry – This tool identifies line sections that generate momentaries (i.e., outages lasting less than 1 minute). A fault indicator on the line transmits detected faults via a radio signal to a solar-powered cellemetry unit, which transmits via the local cellular network to a master station and ultimately to a user's workstation. We anticipate that this technology will allow identification of short-duration customer interruptions that otherwise would be undetectable with current equipment.

# Q. Given the success of the Company's reliability program, is it now completed?

No. The program is ongoing. We continue to aggressively seek ways to further improve reliability and service to our customers. In fact, an example of the difficult challenges we still face is reducing tree-related interruptions. Even though the number of customers affected has been reduced, more work remains to be done to reduce the total number of interruption events. Therefore, we believe it necessary to increase our investment in line clearing. We will also continue replacement, as appropriate, of aging infrastructure such as overhead and underground lines. In addition, we will continue to improve our inspection programs through the use of more Thermovision.

Finally, we will continue to work on optimizing our feeder configuration to
ensure the most effective utilization of our facilities.

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- Q. In your view, should the Commission consider instituting a new regulatory regime in this proceeding that provides for refunds to retail customers incurring frequent outages?
  - No. This is an issue that had been raised in a rulemaking docket, Docket No. 011351-EI. I believe that further discussion of this issue, if any, should be pursued in the rulemaking docket where questions of policy that affect all investor-owned utilities can be fully and adequately considered in a forum that allows for a greater exchange of ideas and information, as opposed to "litigating" the issue in the context of a rate review for an individual utility. Implementing a new regulatory regime that penalizes utilities for "frequent outages" raises a host of policy issues that are more appropriately addressed in an industry-wide rulemaking. Such issues include: whether the mechanism should be based on a company's overall reliability versus isolated incidents, whether benchmarks or standards are required to assure specific levels of reliability, whether the approach should be symmetrical in operation (i.e., also authorizing surcharges for no or "less than frequent" outages), whether the costs of implementing such a program exceed the benefits, and whether such a program would expose the utilities and the Commission to a tidal wave of new complaints or causes of action. However, putting aside the broader policy issues that would affect all utilities, in light of FPL's superior performance in distribution reliability, it is not clear to me that the Commission needs to institute an additional set of rules and regulations to promote improved

reliability at FPL. Thus, at least with respect to FPL, the notion of refunds for frequent customer outages amounts to a perceived solution that is searching for a problem.

Q. Restoration of service after tropical storms and hurricanes is an important issue in Florida. Can you briefly comment on your emergency preparedness?

Extensive contingency plans for rapid and safe restoration of customers' service have been developed. These plans undergo continuous testing and refinement based on critiques following "dry runs" conducted each year as well as analysis of performance after each event. These capabilities have been particularly important during the last few years due to the high number of storms that have affected our territory. We have developed processes that allow us to rapidly mobilize both internal and external resources during these events. This rapid mobilization, along with our use of staging sites to supplement our service centers, has allowed us to maintain a high state of readiness without needing to increase permanent locations or personnel.

A.

FPL is recognized as one of the leaders in storm restoration. We have been visited by numerous other utilities desiring to learn and implement our processes and practices. In 2000 FPL was a recipient of the EEI Emergency Response Award for our performance during Hurricane Irene, which affected 1.4 million customers.

#### III. CUSTOMER SERVICE

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2	Ο.	Can y	you describe so	me of Power	r Systems <sup>3</sup>	' customer	service	objectiv	ves
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Power Systems is very focused on providing our customers with dependable service delivered in a responsive and caring manner. We recognize that power outages, and the weather conditions that at times give rise to extended outages, are a source of stress for customers. For this reason, we created an organization within the business unit to focus solely on addressing customer needs. This group identified key issues, developed solutions, and then led the implementation of many new processes aimed at enhancing the effectiveness of our customer service, particularly in the areas of communications, process improvement, and front-line interaction.

# Q. Regarding customer communications, what measures has Power Systems undertaken to ensure effective execution in this critical area?

**Estimated Time of Restoration -** FPL was an industry pioneer in providing customers with immediate estimated times for restoration of service when a customer calls to report a power outage. Even though a few other companies at the time provided estimates, most used manual processes and none could provide the estimate when the customer initially called.

FPL uses sophisticated computer simulations that analyze the pattern of calls received to determine what type of facility is likely affected and uses those results to create the estimate. Some of the factors that are evaluated are historical requirements for the specific type of repair, crew workload, time of day, season, and geographic location. To provide customers further

flexibility, they can receive this information either through our voice response unit (VRU) or by speaking directly with a care center representative. Once repair personnel arrive and assess the situation, if necessary, an updated estimate is communicated to our dispatch center. Customers are automatically called back to update them on the changes whenever the new estimate varies from the original by 1 hour or more (either up or down).

We continue to work to improve the quality of both the estimates and the delivery mechanisms. The tables used for the estimates are routinely updated to reflect anticipated performance based on history in order to provide the most accurate times possible. Also, the VRU and screens used by the care center representatives have undergone substantial redesign to include additional information and scripting regarding issues such as the crew's status, outage cause, and special area-specific emergency messages. In addition, like other care center processes, random samples of interactions with customers are monitored and evaluated to ensure proper quality control and performance.

Customer Advance Notifications and Follow-ups – These communications are provided to customers before any planned work is begun in their area or to provide information after an event has occurred. Notifications allow customers the opportunity to plan ahead if it is a situation where an interruption may be required. The follow-ups provide information on the actions we will be taking next. We have replaced what was previously a manually-intensive process with an automated system that allows us to target

affected customers based on linking them to the specific facility (i.e., feeder, lateral, or transformer) that is affected. The automated system also significantly increased our capability to generate customer correspondence. In 2001 about 950,000 of these types of communications were provided to customers. We have over 55 templates that can be customized by location, type of customer, and specific situation. These are available in both Englishonly or bilingual formats, which are targeted to specific areas based on U.S. census data.

The following are examples of our customer correspondence:

- System improvement activities describes the nature of the work,
   the reasons it is necessary, expected short-term impacts, and long-term benefits of system capacity upgrades and replacements (360,000 provided in 2001).
- Follow-up includes information on a problem that occurred, why
  it happened, how we plan to resolve it, who is handling it, and
  when it will be completed (330,000 provided in 2001).
- <u>Pre-arranged outages</u> describes necessary system upgrades, when the work will occur, and interruption expectations (30,000 provided in 2001).

In addition to written correspondence, in about 60,000 instances last year outbound calling was used as an alternative means to contact customers regarding pre-arranged outages. We contact customers this way if there isn't

sufficient time to notify them by mail due to imminent schedule changes or other short-notice situations. FPL uses both automated and live voice methods. Automated voice is used in cases where there is, for example, just simple update information to be communicated. For more involved information or situations that are out of the ordinary the call will be made by a representative.

# Q. Please provide some examples of process and front-line improvement initiatives.

A. Three such examples are the damage claims resolution process, community outreach programs, and customer service skills training.

Significant efforts have gone into improving our handling of damage claims. We have implemented an elevated call process that has allowed us to accelerate response to one business day, or less, when the claim concerns what the customer feels is "essential equipment" (such as air conditioning or refrigeration). Also, increased follow-through using callbacks and correspondence ensures that the claim is resolved as quickly as possible to the customer's satisfaction. The result of these initiatives has been an approximate 27% reduction in Commission damage claims-related complaints in 2001.

We also have been working with groups of customers through community outreach programs for the siting of new transmission lines and substations. This has proven successful in allowing customers to have direct input into projects that affect their neighborhood. In addition, we continue to make efforts to improve the appearance of our substation facilities through increased maintenance and landscaping.

A.

Finally, face-to-face interactions with our customers have also been an area of focus. We are investing in customer service skills training designed specifically for our front-line personnel (linemen, service planners, service center support staff, etc). This provides them with practical skills for communicating with customers during both routine and difficult transactions. We also train them in the best use of our communication materials (brochures and door hangers) which are provided to all field personnel to help keep customers informed about various subjects like vegetation management and power quality. In 2001 we completed training for about 600 personnel. We expect to continue and enhance this training over the next several years. After the classes are completed, we continue to reinforce the training effort by working closely with front-line supervisors to ensure they can coach and teach these skills on a day-to-day basis.

#### Q. Is technology playing a role in delivering enhanced customer service?

Yes. It is playing a significant role. Power Systems has made, and plans to continue making, substantial improvements to our existing systems' capabilities to provide customers better service and information. As part of a five-year comprehensive development effort, which began in 2000, a large number of new systems have been, or are in the process of being, implemented. For example, we recently installed a new data and voice radio

communication system. This system eliminates delays in the movement of service restoration crews throughout our service territory and provides more complete coverage allowing mobile data terminals to be used statewide. The value of these capabilities was evident during Tropical Storm Gabrielle last year. Crews moved from the east to west coasts could immediately go to work, eliminating the delay previously required to reprogram radios and mobile terminals.

Another new system eliminates the manual paper process of dispatching and completing small work orders, such as service connects and disconnects. Real-time two-way communication is now available to employees using handheld devices and all relevant information is also relayed to the care center. This allows us to provide faster service to our customers along with more timely information on work status.

#### Additional examples of new or upgraded systems are:

- New asset management system that will house records of all facilities with their precise location and other relevant information that can be displayed in a geographical format.
- Improved system control and data acquisition (SCADA) system
   that controls remote operations of switches and relays.
- New work management system to better optimize resources through enhanced scheduling to better meet customer commitments.

- New web site for builders and developers that will provide on-line
   information such as process checklists, fee information, policies,
- and standards to those requesting new service.
- 4 All of these will substantially improve efficiency, speed execution, and
- 5 enhance customer communications.

#### 6 Q. Has the Company seen results from these customer service actions?

- 7 A. Yes. Since 1996 there has been a 35% reduction in service quality-related
- 8 customer contacts (warm transfers, courtesy calls and logged complaints per
- 9 1000 customers) to the Commission.

#### 10 IV. SUMMARY AND CONCLUSION

#### 11 Q. Would you please summarize your testimony?

- 12 A. Power Systems' programs and initiatives have delivered excellent balanced 13 performance in the key areas of reliability, customer service and cost
- management providing customers substantial benefits. Aggressive and
- comprehensive action on the part of management and employees have brought
- dramatic improvements in reliability and customer service to a level among
- the top industry performers. These achievements have been confirmed by the
- significant reductions in Commission complaints and the overwhelmingly
- 19 positive customer response at the customer service hearings. FPL remains
- 20 committed to building on these achievements through initiatives, programs,
- and technologies designed to enhance service reliability and customer service
- in the future, while continuing to maximize cost management.

#### 23 Q. Does this conclude your testimony?

24 A. Yes.

Docket No. 001148-EI
Armando J. Olivera Exhibit No.
Document AJO-1, Page 1 of 1
Index of Documents

### **Index of Documents**

- AJO-2 Sponsored MFRs
- AJO-3 Reliability Program Major Initiatives Summary
- ♦ AJO-4 FPL Distribution Reliability

Docket No. 001148-EI
Armando J. Olivera Exhibit No. \_\_\_\_\_\_

Document AJO-2, Page 1 of 1
Sponsored MFRs

### **Sponsored MFRs**

#### Sole sponsorship:

C-22 – Maintenance on Customer Owned Facilities, Installations on
 Customer Premises and Leased Property on Customer Premises

#### • Joint sponsorship:

- A-8 Five Year Analysis Change in Cost
- **B-10** Capital Additions and Retirements
- **B-12a** Property Held for Future Use 13-Month Average
- **B13b** Construction Work in Progress Other Details
- B-20 Plant Materials and Operating Supplies
- B-27 Detail of Changes in Rate Base
- B-28a Leasing Arrangements
- C-8 Report of Operation vs. Forecast Revenue and Expenses
- C-12 Budgeted vs. Actual Operating Revenues and Expenses
- C-19 Operation and Maintenance Expenses Test Year
- C-20 Operation and Maintenance Expenses Historic Year
- C-21 Detail of Changes in Expenses
- C-27 Industry Association Dues
- C-65 Outside Professional Services
- **F-17** Assumptions

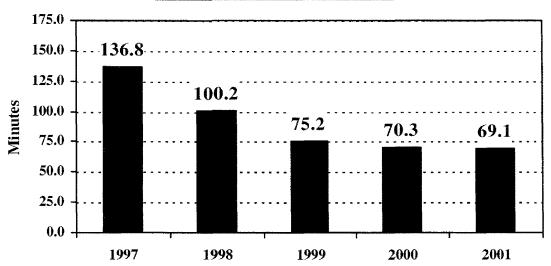
Docket No. 001148-EI
Armando J. Olivera Exhibit No
Document AJO-3, Page 1 of 1
Reliability Program - Major Initiatives Summary

## **Reliability Program - Major Initiatives Summary**

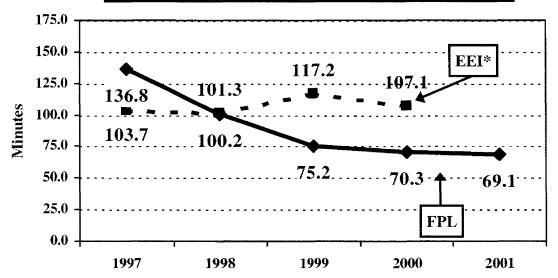
Major Initiatives	Description
Vegetation Management	Integrated program designed to minimize tree and vine related
	interruptions
Cable Injection and Replacement:	
Feeders	Replacement of direct-buried cables
Laterals	Rehabilitation with silicone injection in order to extend life or
	replacement
Cathodic Protection	Rehabilitation of paper and lead and submarine cables by
	installing new anodes in manholes and underground vaults
Thermovision	Predictive diagnostic technology used to detect signs of failure or
	potential failures on power lines and overhead equipment
Telemetry	Installation of metering devices which provide real-time load
	information to balance overload conditions and speed restoration
Inspection and Repair:	
Padmount Transformers	Identify and correct non-compliance conditions (e.g., leaks, rust,
	etc.)
Oil Circuit Recloser (OCR)	Statewide assessment of three-phase reclosers including
Maintenance	prevention of possible failures by replacing (OCRs) nearing the
	end of their duty cycle
Poles Inspection/Replacement	Proactive program to brace and/or treat creosote poles or replace
	poles that cannot be rehabilitated
Vaults	Identify and correct non-compliance conditions in automatic
	throw-over systems and other vault equipment
Wiredown	Ensure investigations and necessary remedies occur after a
	second wiredown event within a 24-month period at a given
Standards Compliance	Identify and correct non-compliance conditions with any facilities
	not yet addressed through other Inspection and Repair initiatives
Local Customer/Area Impact Programs	Specific projects identified and implemented by Service Centers
	that focus on improving reliability for specifically targeted
	customers or areas
Reducing Multiple Interruptions:	
Momentary Plan	Identify and correct feeders incurring the largest number of
	momentary interruptions
Multiple Interruptions	Identify and correct feeders, OCRs, laterals and transformers with
	the highest number of interruptions
3% Repeat Feeder List	Identify and correct feeders that have for two or more
	consecutive years been listed as one of the 3% worst-performing
	feeders
Voltage Control	Install, maintain and control distribution capacitor banks
Infrastructure/Load Requirement Planning	i · · · ·
	customer loads expectations
Feeder Configuration:	
Configuration	Align existing configurations to the optimum feeder
	configuration model
Automation	Installation of switches that automatically sectionalize faults and
	restore customers

## FPL Distribution Reliability

**FPL Distribution SAIDI** 



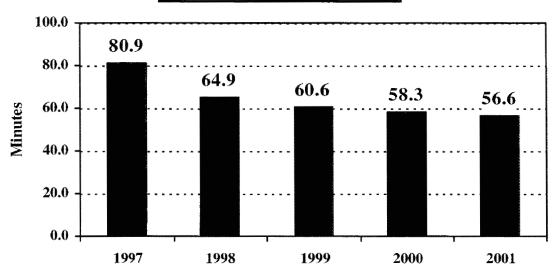
FPL vs. EEI Average Distribution SAIDI



<sup>\* 2001</sup> EEI information not yet available

## **FPL Distribution Reliability**

**FPL Distribution CAIDI** 



**FPL Distribution SAIFI** 

