

**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**

TESTIMONY & EXHIBITS OF:

MICHAEL G. SPOOR

DOCUMENT NUMBER-DATE

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FPSC-COMMISSION CLERK

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **DIRECT TESTIMONY OF MICHAEL G. SPOOR**

4 **DOCKET NO. 080677-EI**

5

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

7 A. My name is Michael G. Spoor. My business address is Florida Power & Light
8 Company, 700 Universe Blvd., Juno Beach, Florida, 33408.

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

10 A. I am employed by Florida Power & Light Company (“FPL” or the “Company”) as
11 Director of Business Services, Distribution.

12 **Q. Please describe your duties and responsibilities in that position.**

13 A. I am the Distribution Business Unit’s (Distribution) controller responsible for
14 managing Distribution’s budget, business planning and processes, quality, and
15 streetlight organization.

16 **Q. Please describe your educational background and professional experience.**

17 A. I have a Bachelor Degree in Industrial Engineering from Auburn University and a
18 Masters of Business Administration from Nova Southeastern University. I am a
19 Registered Professional Engineer in the State of Florida. I joined FPL in 1985
20 and have served in a variety of positions in Distribution, including engineering,
21 Field Supervisor, Area Operations Manager, Manager of Reliability, Director of
22 Distribution System Performance and Director of Business Services. I am also a
23 senior member of the Institute of Industrial Engineers.

1 **Q. Are you sponsoring any exhibits in this case?**

2 A. Yes. I am sponsoring Exhibits MGS-1 through MGS-3, which are attached to my
3 direct testimony.

- 4 • Exhibit MGS-1 Distribution Reliability Program Initiatives
- 5 • Exhibit MGS-2 Distribution Reliability Results
- 6 • Exhibit MGS-3 Distribution Costs by Cost Category 2006-2011

7 **Q. Are you sponsoring or co-sponsoring any Minimum Filing Requirements**
8 **(MFRs) in this case?**

9 A. Yes. I am co-sponsoring the following MFR schedules:

- 10 • B-13 – Construction Work in Progress
- 11 • B-15 – Property Held for Future Use – 13 Month Average
- 12 • B-24 – Leasing Arrangements
- 13 • C-15 – Industry Association Dues (Test/Subsequent)
- 14 • C-34 – Statistical Information
- 15 • C-41 – O&M Benchmark Variance by Function
- 16 • E-7 – Development of Service Charges
- 17 • E-14 – Proposed Tariff Sheets and Support for Charges

18

19 In addition, I am co-sponsoring the following 2009 supplemental MFR schedules
20 that FPL has agreed with the Commission Staff and the Office of Public Counsel
21 to file:

- 22 • B-13 – Construction Work in Progress
- 23 • C-15 – Industry Association Dues

- 1 • C-34 – Statistical Information
- 2 • C-41 – O&M Benchmark Variance by Function

3 **Q. What is the purpose of your testimony?**

4 A. The purpose of my testimony is to describe initiatives being employed to harden
5 and improve the storm resiliency and reliability of the distribution system’s
6 infrastructure, demonstrate that Distribution provides superior reliability and
7 excellent customer service, and present an overview of Distribution’s effectively
8 managed capital expenditures and Operations and Maintenance (O&M) expenses.

9 **Q. Please summarize your testimony.**

10 A. Distribution is responsible for the planning, engineering, construction, operation,
11 maintenance, and restoration of FPL’s distribution infrastructure. FPL’s recently
12 Florida Public Service Commission (“FPSC” or “Commission”) approved
13 infrastructure storm hardening and storm preparedness initiatives, including its
14 hardening plan, pole inspection and vegetation management programs, are further
15 strengthening FPL’s distribution system, providing value and long term benefits
16 to customers. Distribution also continues to deliver excellent system reliability
17 performance to FPL’s customers. FPL’s distribution reliability, as measured by
18 System Average Interruption Duration Index (SAIDI), has been the best among
19 major Florida investor owned utilities (IOUs) for four out of the last six years,
20 ranks among the industry’s top performers, and for the last decade has been, on
21 average, 45% better than the Edison Electric Institute (EEI) industry average.
22 Additionally, Distribution’s 2008 reliability results reflect extraordinary
23 performance, with best-ever recorded results achieved for most of our reliability

1 indicators including SAIDI, System Average Interruption Frequency Index
2 (SAIFI), Momentary Average Interruption Frequency Index (MAIFI and MAIFLe)
3 and Customers Experiencing More Than 5 Interruptions (CEMI-5).

4
5 Distribution has continued to search for and implement enhancements to its
6 customer service initiatives. The cumulative success of these initiatives has
7 resulted in a reduction of over 50% in logged service quality complaints per 1,000
8 customers filed with the Commission over the last decade. Also, in 2008, there
9 were 20% fewer service related complaints recorded than in 2007.

10
11 Distribution's reliability and customer service performance has been delivered
12 while maintaining a continual focus on safety. In fact, Distribution's 2008 safety
13 performance, like its 2008 reliability results, is the best on record for FPL. The
14 industry standard metric for reportable injuries has improved by almost 55% since
15 1998 and the number of work-related injuries has declined by nearly 60% during
16 this same time period.

17
18 All of these operational improvements have been achieved while still effectively
19 managing and controlling costs. Historical Distribution O&M expenses have
20 remained quite stable over the last few years and this trend is expected to continue
21 in the forecasted period 2009-2011. The stability in Distribution's O&M
22 expenses has been accomplished despite the fact that, over the last decade, more
23 than 1,000,000 new service accounts have been added and FPL has been required
24 to meet regulatory commitments associated with its storm hardening and storm

1 preparedness initiatives. As in the past, capital expenditures primarily result from
2 the requirement to fund construction of the infrastructure necessary to serve on-
3 going customer growth, our reliability programs, and the regulatory commitments
4 associated with the recently approved storm hardening and preparedness
5 initiatives.

6
7 Distribution has delivered excellent balanced performance resulting in substantial
8 value and benefits to customers – not only for today, but for the future as well.
9 This has been achieved as a direct result of Distribution’s management and
10 employees who are committed to safely provide superior reliability and customer
11 service at a reasonable cost.

12 13 **OVERVIEW OF DISTRIBUTION**

14
15 **Q. Please provide an overview of the Distribution organization and system.**

16 **A.** Contained within the 28,000 square miles of FPL’s service territory, there are
17 approximately 67,000 miles (over two and a half times the circumference of the
18 earth) of electrical conductor consisting of approximately 42,000 miles of
19 overhead wire and approximately 25,000 miles of underground cable, over 1.1
20 million poles, and almost 800,000 transformers that serve our customers.
21 Distribution is organized into five regions (North, East, West, Broward, and
22 Miami-Dade) which are further divided into 17 management areas that contain 35
23 service centers. There are also two dispatch centers. Today, within Distribution,

1 there are approximately 2,600 full-time FPL employees in total, including
2 bargaining unit and non-bargaining unit employees.

3

4

STRENGTHENING THE INFRASTRUCTURE

5

6 **Q. Did the 2004 and 2005 storm seasons cause FPL to make any changes**
7 **regarding the strength and resiliency of its distribution infrastructure?**

8 A. Yes. The seven hurricanes (five direct landfalls and two indirect impacts) that
9 affected FPL's service territory during 2004 and 2005 resulted in significant
10 customer outages and required extraordinary efforts to rebuild and restore the
11 system. Additionally, during that timeframe forecasters were predicting decades
12 of heightened tropical storm activity. As a result, FPL concluded that fundamental
13 and significant changes in the design, construction and operation of its system
14 were required.

15 **Q. What actions did FPL take to effect these changes?**

16 A. In January 2006, FPL filed its "Storm Secure Plan" with this Commission. This
17 comprehensive plan for increased storm preparedness included the following four
18 areas: hardening FPL's distribution network; investing in overhead to
19 underground conversions; modifying FPL's pole inspection program; and
20 enhancing FPL's vegetation management activities.

21 **Q. Was the FPSC also undertaking its own initiatives regarding storm**
22 **preparedness and electric infrastructure hardening?**

1 A. Yes. In 2006, the FPSC began to develop its own requirements for electric
2 utilities to improve their storm preparedness and harden their electric
3 infrastructure. These initiatives resulted in: requiring plans to implement an eight
4 year pole inspection cycle for distribution poles; requiring plans to address 10
5 storm preparedness initiatives; adopting new Contribution-in-Aid-of-Construction
6 (CIAC) rules for underground projects; and adopting new rules requiring the
7 filing of detailed electric infrastructure hardening plans.

8 **Q. Did FPL participate in these initiatives and is FPL complying with these**
9 **regulatory requirements and commitments?**

10 A. Yes. During 2006 and 2007, FPL participated in the various Staff workshops,
11 meetings and FPSC proceedings, and is complying with all of the resulting new
12 rules and orders. In 2006: (1) FPL's pole inspection plan was reviewed and
13 approved, with implementation initiated in May 2006; (2) FPL filed and received
14 approval of its Governmental Adjustment Factor (GAF) tariff, where, if certain
15 criteria are met, FPL will provide a 25% investment in local government
16 sponsored overhead to underground conversions; and (3) FPL's plans to address
17 the 10 storm preparedness initiatives were reviewed and approved, including the
18 adoption of a six-year average vegetation management cycle for laterals.

19
20 In 2007, the FPSC approved its "hardening rule", Rule 25-6.0342. This rule
21 requires the filing, review and approval of detailed hardening plans every three
22 years, including the overall hardening strategy, proposed projects, and expected
23 costs and associated benefits. Additionally, an annual update is filed each March

1 that specifies projects to be completed in the current year, including their
2 expected costs. Also included in the annual filing are the actual hardening results
3 and costs from the previous year. In 2007, as required, FPL filed and received
4 approval of its detailed electric hardening plan. FPL's approved plan includes its
5 three-prong hardening approach that: (1) applies Extreme Wind-Loading criteria
6 (EWL) to infrastructure that serves critical customers (e.g., hospitals and 911
7 centers); (2) targets strengthening existing infrastructure, up to and including
8 EWL, that serves community needs (e.g., gas stations and grocery stores); and (3)
9 employs revised design guidelines to apply EWL to new overhead construction,
10 major planned work, relocation projects and daily work activities where feasible
11 and practical. By the end of 2009, FPL expects to have hardened to EWL over
12 150 feeders serving critical infrastructure customers, including all feeders serving
13 hospitals and half of all feeders serving 911 centers, as well as more than 110
14 highway crossings. Additionally, more than 65 community project feeders will
15 have been incrementally hardened, up to and including EWL.

16 **Q. What benefits do these approved initiatives and programs provide to FPL's**
17 **customers?**

18 A. These hardening initiatives and investments will result in permanent long-term
19 improvements to the distribution system. These improvements will not only
20 improve the system's resilience against future storms and severe weather events,
21 but will also provide an increased level of day-to-day reliability for our
22 customers. The key long-term benefits derived from these initiatives will be

1 reductions in storm and non-storm restoration costs, customer outages and outage
2 duration.

3

4

RELIABILITY

5

6 **Q. Please describe Distribution's reliability program, initiatives and achieved**
7 **results.**

8 A. Distribution's comprehensive reliability program is comprised of multiple
9 initiatives designed to reduce the average time a customer is without electricity
10 and to sustain these improved results. Improvements are sought to both prevent
11 outages from occurring and to minimize outage time if an outage does occur.
12 Avoiding outages and minimizing outage time not only reduces customer
13 inconvenience, but also results in restoration cost savings.

14

15 These reliability initiatives are developed by identifying, analyzing and
16 prioritizing causes of past interruptions and then targeting those causes that, if
17 remedied and/or repaired, will yield the largest customer benefits. An integrated
18 set of initiatives has been designed to address the greatest areas of opportunity to
19 further improve reliability. A list of initiatives with annual costs greater than \$1
20 million is provided in Exhibit MGS-1. The effectiveness of each initiative within
21 the program is evaluated on an on-going basis and resources are redeployed as
22 necessary to maximize overall performance results.

1 For more than a decade, FPL has consistently delivered a superior level of
2 distribution reliability to its customers. Exhibit MGS-2 shows Distribution's
3 actual SAIDI performance over the last 10 years. SAIDI, a standard industry
4 performance metric for reliability, measures customers' average annual outage
5 time. It is the most relevant and best overall reliability indicator since it
6 encompasses two other standard performance metrics for reliability, SAIFI and
7 the Customer Average Interruption Duration Index (CAIDI). As can be seen,
8 except for 2006 and 2007, where the lingering after-effects of the 2004 and 2005
9 hurricane seasons were still affecting the system, Distribution's SAIDI over the
10 last decade and particularly over the period 2000-2005 remained extremely stable.
11 During this six-year period, SAIDI fluctuated, on average, only about one percent
12 per year. Additionally, SAIDI results for 2007 and 2008 both show improvement
13 from the previous year. 2008 reliability results indicate extraordinary performance
14 with Distribution achieving best-ever recorded results for many of its reliability
15 indicators including SAIDI, SAIFI, MAIFI, MAIFIe and CEMI-5.

16

17 Distribution's SAIDI performance compares very well to other electric investor
18 owned utilities, both within the state as well as on a national basis. In Florida,
19 which as a whole compares quite favorably on a national basis, Distribution's
20 SAIDI has been the best among the major investor owned utilities for four out of
21 the last six years. Additionally, based on the EEI Annual Reliability Report,
22 FPL's Distribution SAIDI performance over the last decade ranks among the

1 industry leaders and, on average, has been approximately 45 percent better than
2 the industry average.

3 **Q. Please provide some examples of Distribution's reliability initiatives and how**
4 **these programs benefit FPL's customers.**

5 A. Vegetation Management – Vegetation related outages represent one of the top
6 causes of customer interruptions and are a particular challenge in Florida due to
7 the year-round growing season. While FPL has always had a program in place for
8 vegetation management, in 2007 a significant change was implemented. As
9 mentioned earlier, in response to the 2004 and 2005 storm seasons, both FPL and
10 the FPSC realized that increased vegetation management was necessary for
11 improved storm preparedness and storm resiliency. FPL's approved plan to
12 address Initiative One of the FPSC's 10 Storm Preparedness Initiatives called for
13 FPL to continue with its three-year average trimming cycle for feeders and, in
14 2007, to begin to place its laterals on a six-year average trimming cycle.
15 Additionally, beginning in 2007, and by its own initiative, FPL now completes
16 trimming on circuits serving critical customers prior to the start of each storm
17 season. This provides a better opportunity for these critical customers to avoid
18 severe storm-related interruptions and damage to facilities serving them caused by
19 vegetation.

20
21 In 2008, FPL was recognized for the seventh straight year as a Tree Line USA
22 Utility by the National Arbor Day Foundation. To qualify for this recognition,
23 utilities must adopt certain work practices associated with pruning and working

1 around trees, conduct documented training on these work practices, have a
2 community tree-planting program sponsored by the utility and provide
3 educational information about trees to customers, for example, planting the
4 appropriate tree species near utility lines. Long-term benefits associated with
5 being a Tree Line USA Utility include lower vegetation management costs and
6 improved customer and community relations.

7

8 It is worth noting, however, that Distribution's vegetation program cannot address
9 all vegetation issues throughout its service territory. Local governments and
10 communities must also be willing to assist, for example, by adopting and
11 embracing FPL's "Right Tree, Right Place" program.

12

13 System Expansion – This on-going program ensures that there is sufficient feeder
14 capacity to serve all customers, during normal as well as emergency periods,
15 preventing outages caused by overloading. As a result of customer growth,
16 demand and/or increased usage by our customers, FPL is required to install new
17 feeders and other infrastructure to meet this new load.

18

19 Pole Inspections – Distribution's reliability initiatives have always included a pole
20 inspection program. However, beginning in mid-2006, this program was
21 significantly upgraded. Again, as a result of the 2004 and 2005 storm seasons,
22 both FPL and the FPSC recognized that a more robust pole inspection program
23 was necessary to improve storm preparedness and resiliency. FPL is now

1 inspecting its distribution pole population on an eight-year cycle and has
2 completed over one third of its initial eight year cycle. Inspections include tests
3 for strength as well as loading. Poles failing inspection are either reinforced or
4 replaced. This program ensures that FPL's pole population remains healthy and is
5 better able to withstand storm impacts and avoid or minimize storm related
6 outages.

7
8 Feeder/Lateral Cable – Another significant cause of interruptions for Distribution
9 has been underground cable failures. This program addresses direct buried feeder
10 and lateral cable through rehabilitation either by injecting the cable with silicone
11 which extends its life or, when injection is not an option, by replacing the cable.
12 Our experience has shown that once a section of cable experiences several
13 failures, replacing or injecting the cable is the best way to avoid increasingly
14 frequent outages. When direct buried cable is replaced, it is replaced with cable in
15 conduit. This makes subsequent restoration and/or repair quicker and more
16 efficient, reduces water intrusion, and thus decreases the likelihood of future cable
17 failure.

18
19 Priority Feeders and Laterals – The purpose of this program is to address those
20 feeders and laterals, and thus customers, experiencing the highest number of
21 outages and momentary interruptions on our system. While this has been a long-
22 standing initiative for feeders, Distribution has now incorporated laterals into this
23 initiative. Annually, these feeders and laterals are identified and targeted for

1 review and analysis in order to determine and implement the appropriate
2 corrective measures.

3

4 In summary, Distribution's reliability initiatives significantly contribute to the
5 avoidance and minimization of outages and customer inconvenience. These
6 initiatives have also made a major contribution towards FPL's superior reliability
7 results, including achieving best-ever reliability results in 2008.

8 **Q. Are there any research and development efforts currently in progress to
9 further improve Distribution's reliability?**

10 A. Yes. In 2006, the FPSC directed Florida's electric IOUs to solicit participation
11 from municipal electric utilities, rural electric cooperatives and other available
12 educational and research organizations in order to increase collaborative research
13 efforts. Specifically, these research efforts were intended to further the
14 development of storm resilient electric utility infrastructure and technologies that
15 reduce storm restoration costs and outages to customers. As a result, FPL, the
16 other Florida electric IOUs, and municipal and rural cooperative electric utilities
17 entered into a Memorandum of Understanding (MOU) with the University of
18 Florida's Public Utility Research Center (PURC). The MOU, which initially has
19 a three year term, can also be renewed by mutual agreement. Initial research areas
20 include the economics of placing electrical facilities underground, measuring
21 hurricane winds at a granular level, best practices in vegetation management, and
22 improved materials for distribution facilities.

1 **Q. Given the success of Distribution's reliability program, what are FPL's plans**
2 **going forward?**

3 A. FPL will continue to seek ways to further improve on the superior reliability
4 provided to our customers. As I've discussed previously, there have been
5 significant changes implemented since the 2004 and 2005 storm seasons. These
6 changes were necessary to address the resiliency of FPL's system against future
7 severe weather events. Although FPL's service territory has been less affected by
8 storm events during the last three years when compared to those in 2004 and
9 2005, FPL must continue to invest in these hardening initiatives to meet customer
10 needs now and in the future. Specifically, FPL is strengthening its electric
11 infrastructure through higher standards for construction and increasing the level of
12 certain existing reliability initiatives, such as, the six-year average vegetation
13 management cycle for laterals and eight-year pole inspection cycle. These
14 initiatives, coupled with FPL's more established reliability initiatives and research
15 efforts, will continue to provide our customers with superior reliability, help avoid
16 outages and reduce overall restoration costs.

17

18 **STORM PREPAREDNESS**

19

20 **Q. As was evident from the unprecedented 2004 and 2005 seasons, restoration of**
21 **service after hurricanes and tropical storms is an important issue in Florida.**
22 **Please comment on FPL's emergency preparedness efforts.**

23 A. As I've discussed earlier, FPL's approved system infrastructure hardening
24 initiatives will help reduce the amount of damage to the distribution system,

1 reduce the number of outages and reduce overall restoration time. Also, as part of
2 FPL's approved storm preparedness initiatives, FPL has increased its overall
3 vegetation trimming by integrating a six-year average trimming cycle for laterals.
4 Additionally, FPL now clears all lines serving critical customers prior to the
5 beginning of each storm season.

6
7 FPL also continues to hone its comprehensive plans for rapid and safe restoration
8 of customers' service. FPL's primary mission is to safely restore the greatest
9 number of customers in the least amount of time so that the communities served
10 by FPL are able to return to normal as rapidly as possible. FPL's restoration plans
11 are thoroughly tested and refined through annual "dry run" exercises and by
12 performance analysis after each event. Our many years of experience have shown
13 that extensive planning, training, process discipline, on-site management teams'
14 expertise, and scalable implementation are critical. Planning and preparation
15 include ensuring that: (1) storm roles and responsibilities are known; (2) adequate
16 training is provided (3) foreign crews are secured, including additional contractor
17 support and mutual assistance from other electric utilities; (4) staging sites are
18 identified, secured and ready; (5) all equipment and logistic needs are satisfied;
19 and (6) communication plans and processes, for internal as well as external
20 purposes, are in place.

21
22 FPL is recognized as an industry leader in storm restoration. Numerous other
23 utilities have visited FPL to learn and implement our processes and practices.

1 Further validation of this expertise is the industry awards the Company has
2 received. FPL received EEI awards for its emergency response performance in
3 2000, 2003, 2004 and 2005.

4
5 In summary, FPL has been and continues to be recognized as an industry leader in
6 storm preparedness and restoration. The Company's initiatives to strengthen its
7 infrastructure and continuously improve its storm preparedness plans, systems and
8 processes should allow FPL to continue to be an industry leader in storm
9 preparedness and restoration efforts and provide benefits to our customers today
10 as well as in the long-term.

11

12 **CUSTOMER SERVICE**

13

14 **Q. What measures has Distribution undertaken in order to continue its efforts**
15 **to provide excellent customer service?**

16 A. While the Company is always striving to improve customer service, several
17 recently implemented initiatives address improving customer communications.
18 One prime example is providing better information to our customers when they
19 experience an outage. FPL was an industry pioneer in providing customers with
20 immediate Estimated Time of Restoration (ETR) for service when a customer
21 calls to report an outage. The Company continues to work to improve the quality
22 of both the estimates and the delivery mechanisms. The voice response unit and
23 screens used by Care Center representatives are reviewed to ensure consistency,

1 the use of customer-friendly terms, and to include additional information and
2 scripting regarding issues such as the crew's status, outage cause, ETR updates,
3 and area-specific emergency messages. Finally, like other care center processes,
4 random samples of interactions with customers are monitored and evaluated to
5 ensure proper quality control and performance. Additionally, Distribution has
6 worked along with Corporate Communications and External Affairs to implement
7 a dedicated "Government Portal" website that has been customized with the types
8 of information that government leaders rely on to assist them with their storm
9 recovery efforts. As significant weather approaches, FPL informs government
10 users that the website is available. Information on this site includes: media alerts
11 and releases; customer outage information and outage maps; maps of impacted
12 areas; critical infrastructure facility information; estimated times of restoration;
13 FPL staging site locations; and crew work location maps.

14 **Q. Since excellent customer service relies on consistent process performance,**
15 **how do you ensure FPL is delivering on this throughout its service territory?**

16 A. FPL has always focused on continuous improvement in this area since
17 establishing consistent standards and processes, and then executing per those
18 standards, results in more efficient operations and ensures all customers are
19 treated equally and fairly. For example, building on previous efforts to achieve
20 operational excellence through standardized processes, Distribution implemented
21 an initiative in 2008 that resulted in what we refer to as our "Operational Model".
22 The goal of this initiative is to standardize well executed processes, replicate best
23 practices and provide a centralized location for information that is easily

1 accessible by all of our employees. This new tool, which now resides on the
2 internal Distribution website, is a “one-stop shop” for procedures, processes,
3 forms and training materials. It helps to better define the manner in which we
4 execute core business processes by allowing employees easier access to the
5 resources needed to do their jobs more efficiently and effectively.

6 **Q. Can you further explain the role technology is playing in delivering enhanced**
7 **customer service?**

8 A. Yes. Distribution has made, and continues to make, investments to expand
9 existing computer system capabilities to provide customers better and more
10 efficient service and information. Examples of this, in addition to those that I’ve
11 previously discussed, include:

12
13 (1) An automated engineering design tool that standardizes the creation of
14 construction drawings for underground as well as overhead to underground
15 conversion projects. This tool automatically determines engineering calculations
16 including voltage drop, flicker, phase balance and cable pull calculations. Future
17 phases of this initiative will include the automation of required inventory, along
18 with additional engineering calculations like pole wind loading and clearance sags
19 and interfaces with other existing FPL systems. FPL estimates that this tool, when
20 fully implemented, will reduce the amount of engineering time currently required
21 to complete these types of projects by up to 50%;

1 (2) Initial implementation of an automated notification to our field offices that
2 informs them immediately when a feeder in their area has experienced a
3 momentary interruption. This provides the opportunity for these field offices to
4 immediately know that a momentary interruption has occurred, and if necessary,
5 take action to investigate and remedy the problem. These actions could
6 potentially avoid an outage or, if an outage occurs, reduce outage restoration time;
7 and

8
9 (3) Continued development of the asset management system, which contains
10 records of all distribution facilities with their precise location and other relevant
11 information displayed in a geographical format. This system also is currently
12 being loaded with other information including pole inspection data and results,
13 joint use ownership/attachment/inspection data, hardening data, and streetlight
14 data.

15
16 All of these measures, and others that I have previously discussed, are improving
17 process consistency, achieving efficiencies, and enhancing already excellent
18 customer service.

19 **Q. Have these actions resulted in improved customer service?**

20 A. Yes. Over the last decade, there has been a reduction of more than 50% in
21 distribution service related FPSC logged customer complaints per 1,000
22 customers. Additionally, in 2008, there were 20% less service related FPSC
23 logged complaints recorded than in 2007.

1
2
3 **SAFETY**

4 **Q. Previously you mentioned “safe restoration” and “safely restore the greatest**
5 **number of customers” as priorities of Distribution. Is safety emphasized**
6 **within Distribution?**

7 A. Yes. FPL considers safety to be integral to effective operations. The superior
8 reliability and excellent customer service discussed earlier have been delivered
9 while maintaining a continual focus on employee safety. In fact, in 2008
10 Distribution recorded its best safety performance on record. As a result of
11 concerted and sustained efforts, we have achieved an almost 55% improvement
12 over the last decade in the Occupational Safety & Health Administration’s
13 (OSHA) industry-standard metric of reportable injuries per 200,000 man-hours.
14 The absolute number of injuries has declined by nearly 60% over this same
15 period. A key reason for this dramatic improvement is our continued commitment
16 to a “Total Safety Culture.” This program involves establishing a partnership
17 with employees to institute an environment where actions are guided by the
18 principles of trust, open communication, mutual respect, and actively caring.
19 Some of the specific actions involved are crew visits by supervisors to ensure
20 compliance with safety rules, peer-to-peer safety observations and coaching, plus
21 constant communication of the safety plan through various means of
22 communication. Distribution continues to enhance and refresh its safety program.
New initiatives, such as the recent corporate sponsored program “Zero Today”,

1 serve to constantly reinforce the need for everyone's continued commitment to
2 safety principles.

3

4

DISTRIBUTION COSTS

5

6 **Q. Please provide an overview of Distribution's recent actual and forecasted**
7 **capital expenditures and O&M expenses.**

8 A. Historically, Distribution's capital expenditures have been driven primarily by the
9 requirement to support customer growth in FPL's territory, followed by
10 expenditures required to support reliability initiatives, restoration of service
11 activities, and beginning in 2006, regulatory commitments associated with
12 infrastructure storm hardening initiatives. As can be seen in Exhibit MGS-3, for
13 the period 2006-2011, customer growth expenditures remains the largest cost
14 category. However, in 2007-2009, customer growth expenditures are reduced
15 from previous historical levels as well as from the previous year. This decrease is
16 primarily attributed to the downturn in the economy and housing market, which
17 resulted in fewer new service accounts. Customer growth is forecasted to
18 increase in 2010 and 2011; however, customer growth expenditures will still
19 remain below recent years' historical experience. As a result, the other cost
20 categories increase as a percentage to total capital expenditures. This is especially
21 true for infrastructure storm hardening expenditures, which are increasing
22 consistent with regulatory commitments associated with FPL's approved storm
23 hardening plan, as more circuit miles are being strengthened each year.

1 Distribution O&M expenses, on the other hand, are less affected by customer
2 growth and more affected by the other cost categories, particularly expenses
3 associated with on-going established reliability programs and day-to-day
4 restoration activities. Additionally, in conjunction with recently approved
5 infrastructure hardening plans and associated regulatory commitments, hardening
6 O&M expenses have emerged as the third highest O&M category.

7 **Q. Please provide more details for your recent actual and forecasted capital**
8 **expenditures.**

9 A. Exhibit MGS-3 shows actual capital expenditures for the period 2006 – 2008 and
10 forecasted capital expenditures for period 2009 – 2011. Total expenditures for the
11 entire period 2006 – 2011 total almost \$3.0 billion, with actual expenditures of
12 almost \$1.6 billion and forecasted expenditures of almost \$1.4 billion. While the
13 ratios of the major cost drivers to the total expenditures vary year to year, these
14 capital expenditures are primarily driven by customer growth, reliability
15 initiatives, infrastructure storm hardening, restoration and customer response.

16 **Q. For the actual period 2006 – 2008, provide a description and explanation of**
17 **the capital expenditures incurred.**

18 A. As mentioned earlier, actual capital expenditures during this period totaled just
19 under \$1.6 billion. The major contributor to this increase was the capital
20 expenditures required to meet customer growth. While there were declines in new
21 service accounts in 2007 and 2008 from the previous years, FPL still added
22 almost 300,000 new service accounts over this three year period. This accounted
23 for just over 50%, or approximately \$843 million, of the total capital investment

1 required during this period. Customer growth related activities include adding
2 new infrastructure (e.g., services and meters) to serve new customers, adding
3 capacity to accommodate the growth in load (e.g., additional feeders, capacitor
4 banks, and transformers) and adding new streetlights.

5
6 The remaining three largest cost categories contributing to this increase were
7 capital expenditures associated with Distribution's reliability programs,
8 restoration activities and approved storm hardening initiatives. Together, these
9 three cost categories accounted for almost 40% (approximately \$586 million) of
10 the total, with costs ranging from approximately \$155 million to \$226 million for
11 each of the three cost categories. Capital expenditures associated with these
12 reliability programs include costs for underground feeder and lateral cable
13 rehabilitation, automated feeder switches, thermovision and improvements on
14 those feeders and laterals experiencing a higher number of interruptions.
15 Restoration capital expenditures include expenditures required to repair and
16 restore facilities that failed and needed to be replaced, or were damaged as a result
17 of severe weather or other outage causes. Hardening activities include
18 expenditures attributable to regulatory commitments associated with approved
19 storm hardening initiatives, such as, the eight-year pole inspection program and
20 the three-prong storm hardening plan.

21
22 The remaining nearly 10%, or approximately \$146 million, of expenditures were
23 the result of responding to customer requests and field support costs. Customer

1 response expenditures are primarily associated with facility relocation costs
2 resulting from road construction projects. Field support expenditures include the
3 purchase of field vehicles and equipment to support construction activities as well
4 as staff support functions.

5 **Q. Please provide a description and explanation of the capital expenditures**
6 **forecasted for the period 2009 – 2011.**

7 A. As previously mentioned, total capital expenditures are forecasted to be just under
8 \$1.4 billion for the three years 2009-2011. This is over 12% or nearly \$200
9 million less than those capital expenditures required in 2006-2008. Like the
10 previous three year historical period, customer growth related expenditures
11 remain as the highest cost category. However, the ratio of customer growth
12 expenditures to the total, as well as the amount of customer growth expenditures,
13 has fallen from over 50% or approximately \$848 million for 2006-2008 to just
14 over 30% or \$448 million for 2009-2011. This decrease results primarily from a
15 drop in new service accounts forecasted for the period, primarily caused by the
16 downturn in Florida's economy and housing market. As mentioned earlier, new
17 service accounts for the period 2006-2008 totaled close to 300,000. For the
18 forecasted period 2009-2011, new service accounts are expected to decrease to a
19 total of approximately 109,000, a 60% decrease.

20
21 Expenditures resulting from regulatory commitments associated with approved
22 storm hardening initiatives, the next largest category, are also forecasted to be
23 approximately \$405 million, or almost 30% of the total expenditures for 2009-

1 2011. This is approximately double what they were compared to the previous
2 three year historical period. This increase is primarily the result of FPSC
3 approved plans to implement an eight-year pole inspection program and three-
4 prong storm hardening initiative being implemented during the entire three-year
5 period.

6
7 Reliability (\$197 million) and restoration expenditures (\$185 million) together are
8 almost 30% of the total expenditures for 2009-2011. This is similar to the amount
9 incurred for the previous three-year historical period.

10
11 As with the previous three-year historical period, the remaining 10% or \$138
12 million are expenditures resulting from our response to customer requirements
13 and field support expenditures.

14 **Q. Please comment on Distribution's recent and forecasted O&M expenses.**

15 A. As shown in Exhibit MGS-3, annual Distribution O&M expenses for the
16 historical period 2006-2008 remained relatively stable. This trend is forecasted to
17 continue for 2009-2011. In fact, the average annual O&M expenses for the
18 historical period 2006-2008 compared to the forecasted period 2009-2011
19 changes by less than 1% (\$239 million vs. \$241 million). The year-to-year
20 fluctuations that occurred during the historical period 2006-2008 are primarily
21 due to changes in the number of new service accounts seen each year and the
22 costs of regulatory commitments associated with the implementation of our

1 approved storm hardening initiatives in 2006 and 2007. For the forecasted period
2 2009-2011, these same cost categories contribute to the year-to-year fluctuations.

3 **Q. Provide a description and explanation of the activities and programs**
4 **included in Distribution's O&M expenses.**

5 A. The cost categories contained within Distribution's capital expenditures, which
6 were described earlier, remain the same for O&M expenses. However, the annual
7 amounts and ratios to the total O&M expenses differ. The largest O&M cost
8 category during 2006-2008 contains expenses associated with restoration
9 activities. These expenses averaged approximately \$79 million per year during
10 2006-2008. During 2009-2011, these expenses are forecast to average
11 approximately \$65 million per year, which shifts it to the second largest cost
12 category for this period. This decrease is primarily attributed to a projected
13 reduction in the volume of outage tickets, due to expected results from reliability
14 initiatives, as well as cost efficiency gains for the projected period.

15
16 The second largest category O&M cost category during 2006-2008 and the largest
17 cost category during 2009-2011 contain expenses associated with Distribution's
18 reliability programs. Expenses associated with the approved vegetation
19 management program make up the vast majority of this cost category. Total
20 reliability related expenses averaged approximately \$58 million per year during
21 2006-2008 and are forecast to average approximately \$69 million per year during
22 2009-2011. This increase is primarily associated with increased feeder vegetation

1 management costs as well incremental cost increases in other reliability
2 initiatives.

3

4 Expenses related to FPL's regulatory commitments associated with approved
5 storm hardening initiatives are the next largest cost category. During 2006-2008,
6 these expenses averaged \$29 million per year; however, for 2009-2011 these
7 expenses are forecast to average \$40 million per year. This increase is primarily
8 due to the fact that these initiatives were not approved and fully implemented
9 during 2006-2008.

10

11 Field support expenses, such as salaries of field support employees, training and
12 other general and administrative expenses, remain essentially flat over the entire
13 six-year period, averaging \$31 million per year for 2006-2008 and \$30 million per
14 year for the period 2009-2011.

15

16 The remaining cost category, customer response, consists of expenses associated
17 with joint use, environmental programs, and customer requests. Costs for 2006-
18 2008 averaged \$24 million per year and \$29 million per year for 2009-2011. The
19 increase in the forecasted period primarily results from higher joint use pole
20 expenses and increased environmental program expenses.

1 **Q. Are there other O&M expenses included in the Distribution FERC O&M**
2 **accounts and functional total presented in FPL's MFRs?**

3 A. Yes. Included in the Distribution FERC O&M accounts (accounts 580-598) and
4 functional total are O&M expenses incurred or associated with other FPL
5 business units that relate to operation and maintenance of the distribution system
6 (as defined by FERC). Examples of these expenses would include those incurred
7 by the Transmission business unit associated with distribution substations and
8 expenses incurred by the Customer Service business unit associated with meters.
9 In Exhibit MGS-3, an "Other" line has been provided that includes these expenses
10 in order to reconcile the Distribution Business Unit O&M expenses with the
11 Distribution FERC functional totals contained in the MFRs.

12 **Q. Has Distribution taken any actions in response to the 2008 economic**
13 **downturn?**

14 A. Yes. As a result of these changing economic conditions, Distribution had to re-
15 evaluate its plans and projected expenditures, not only for 2008 but also for 2009.
16 Opportunities to reduce costs were determined without affecting our high
17 standards for customer service, superior reliability, long term capacity plans and
18 safety. Actions taken include making significant reductions in spending due to
19 fewer than planned new service accounts, deferral of projects by customers, and
20 reducing our contractor and FPL workforce to match workload.

21

22 As more information became available, new service accounts forecasts were
23 reduced to reflect changing conditions in the housing and construction industry. In

1 fact, during 2008, the forecast for new service accounts was reduced several
2 times. For 2009, in order to reduce planned expenditures even more, Distribution
3 ultimately utilized a forecast for new service accounts that was substantially lower
4 than the corporation's 2009 budget assumption, based on the continuing trend of
5 fewer new service accounts that were being realized at the time the budget was
6 being developed. Accordingly, this resulted in a reduction in expenditures related
7 to growth. Reduced growth related construction activity has also allowed for
8 reductions in Distribution's contractor workforce. Specifically, in mid-2008, FPL
9 eliminated its entire contractor engineering workforce, a reduction of nearly 50
10 engineers. Similarly, by the end of 2008, Distribution had reduced its overhead,
11 underground and other contractors by approximately 20%. Also, in 2008,
12 Distribution eliminated over 60 full-time permanent positions. Finally, in mid-
13 2008, a hiring freeze was instituted, which still remains in effect as of the date of
14 this filing.

15
16 These key actions, in addition to reducing O&M expenses, resulted in
17 Distribution being able to reduce its planned capital expenditures by almost \$120
18 million in 2008 and over \$250 million in 2009.

19 **Q. Has Distribution effectively managed its costs?**

20 **A.** Yes. First, customer growth, as reflected in the annual number of new service
21 accounts added each year, has grown at a relatively constant rate over the last
22 decade. Since 1998, over 1,000,000 new service accounts have been added, an
23 average of over 100,000 new service accounts per year. These new service

1 accounts require new facilities to be added, maintained, restored, as well as new
2 customers that need to be adequately served. Costs associated with these activities
3 impact our required annual capital expenditures and O&M expenses.

4

5 For capital expenditures, over the last decade there has been a strong correlation
6 between new service accounts added in a particular year and the capital
7 expenditures required for that year. However, in 2004 there was an exception to
8 this trend when new service accounts increased yet capital expenditures
9 decreased. This unique occurrence resulted from the deferral of planned capital
10 expenditure projects due to the need to shift resources to support 2004 storm
11 restoration efforts. Also, beginning in 2006, capital expenditures started to reflect
12 an increase associated with the newly required and approved hardening initiatives.
13 For 2009-2011, the correlation between the required level of capital expenditures
14 and new service accounts continues. However, this correlation is not quite as
15 strong due to the increasing level of costs associated with the hardening
16 initiatives.

17

18 Regarding O&M expenses, from 1999 – 2003 annual increases in O&M expenses
19 averaged only about 1% a year. Decreases in O&M expenses occurred during
20 2004 and 2005, primarily the result of expenses being deferred or not incurred as
21 resources were shifted to support the 2004 and 2005 storm restoration efforts.
22 However, had the same trend occurred in 2004 and 2005 as in previous years,
23 2006 would have also shown a 1% increase. As I discussed earlier, annual O&M

1 expenses for the three-year period 2006-2008 averaged \$239 million per year vs.
2 \$241 million per year for the forecast period 2009-2011. This again represents an
3 increase of less than 1%. These modest O&M increases have been achieved
4 despite the recently required costs related to the regulatory commitments
5 associated with FPL's approved storm hardening and storm preparedness
6 initiatives as well as other cost pressures, including salary costs increases.

7
8 In summary, Distribution has worked hard and continues to work hard to provide
9 efficient and reliable service at a low cost. Over the last decade Distribution's
10 capital expenditures and O&M expenses have been effectively managed.
11 Historically, capital expenditures have shown increases that can be primarily
12 attributable to customer growth requirements and, beginning in 2006, to
13 regulatory commitments associated with storm hardening initiatives. The same
14 holds true for FPL's forecast of capital expenditures. For O&M expenses, annual
15 average increases have been held to 1% for almost the entire historical period
16 1999- 2008. For the forecasted period 2009-2011 vs. 2006-2008, the average
17 annual O&M expenses are expected to increase less than 1%. Despite the
18 addition of over 1,000,000 new service accounts during this ten year period,
19 additional costs required to implement storm hardening and storm preparedness
20 initiatives and other cost pressures, Distribution has effectively managed its costs.

21 **Q. Does this conclude your direct testimony?**

22 **A. Yes.**

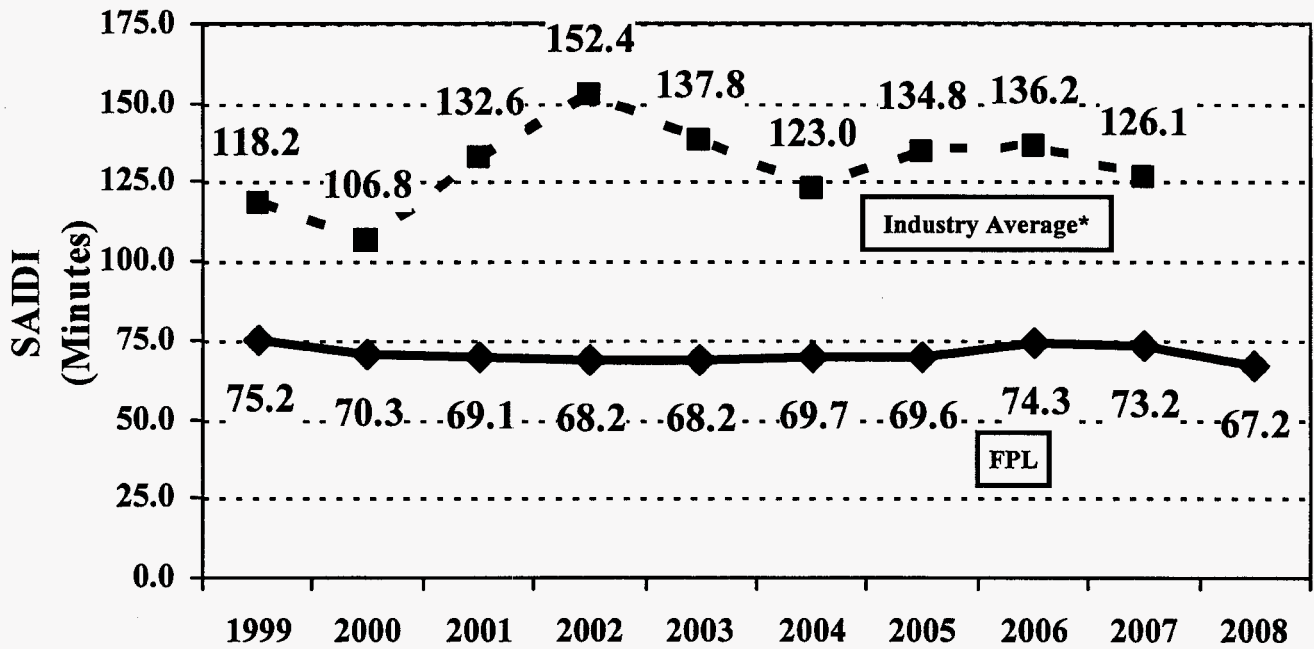
Distribution Reliability Program Initiatives*

Hardening Plan **	Approved 3-prong plan strengthens the distribution infrastructure
Pole Inspections **	Approved plan implements 8 year inspection cycle
Vegetation Management **	Approved 3-year average cycle (feeders) and 6-year average cycle (laterals) minimizes vegetation related interruptions
System Expansion	Provides necessary feeder capacity to serve all customers during normal and emergency periods, and installs necessary infrastructure to meet new loads
Priority Feeders & Laterals	Identification/remediation of feeders/laterals experiencing the most interruptions and momentaries
Overhead Line Inspections	Infrared predictive diagnostic technology detects signs of failures, or potential failures, in overhead facilities; coupled with a visual condition assessment
Feeder/Lateral Cable	Reduces direct buried feeder/lateral cable failures and associated interruptions
Submarine Cable	Reduces submersible feeder cable failures and associated interruptions
VAR Management	Maintains/improves power factor performance, improves system efficiency, reliability, and quality of service voltage
Automated Feeder Switching	Maintains switches that automatically sectionalize lines, isolates faults, and restores customers
Customer Impact	Projects that target improvements for specific customers or geographic areas
Vault Inspections	Inspection/remediation of non-compliant conditions in automatic throw-over systems and other vault equipment
Pad-mounted Security and Inspections	Inspection/remediation of non-compliant conditions
Switch Cabinets	Removal of live front switch cabinets which are reaching end of life
Handhole Inspections	Inspection/remediation of non-compliant conditions

* Reliability program initiatives with annual costs > \$1 million

** Can also be referred to as a “Hardening” and/or “Storm Preparedness” Initiative

Distribution Reliability Results



* Industry Average data from EEI (2008 not available until late 2009)

FPL Distribution SAIDI 45% Better Than Industry Average

Docket No. 080677-EI
Distribution Costs by Cost Category 2006-2011
Exhibit MGS-3, Page 1 of 1

DISTRIBUTION COSTS 2006 - 2011
(SMILLIONS)

ACTUAL 2006-2008	2006	2007	2008	TOTAL	AVERAGE	2006	2007	2008	TOTAL	AVERAGE
<u>COST CATEGORY</u>	<u>O & M</u>	<u>O & M</u>	<u>O & M</u>	<u>O & M</u>	<u>O & M</u>	<u>CAPITAL</u>	<u>CAPITAL</u>	<u>CAPITAL</u>	<u>CAPITAL</u>	<u>CAPITAL</u>
GROWTH	26.1	16.7	11.9	54.7	18.2	364.1	301.6	176.8	842.5	280.8
RELIABILITY	57.8	58.4	58.2	174.4	58.1	78.4	76.6	71.1	226.1	75.4
HARDENING	20.3	36.6	29.4	86.3	28.8	26.8	51.2	77.2	155.2	51.7
RESTORATION	80.3	79.3	78.0	237.6	79.2	63.6	66.9	74.6	205.1	68.4
CUSTOMER RESPONSE	24.4	21.4	25.4	71.2	23.7	48.0	38.1	26.3	112.4	37.5
FIELD SUPPORT	<u>27.2</u>	<u>34.3</u>	<u>30.2</u>	<u>91.7</u>	<u>30.6</u>	<u>2.4</u>	<u>16.4</u>	<u>14.4</u>	<u>33.2</u>	<u>11.1</u>
DISTRIBUTION BU COSTS	236.1	246.7	233.1	715.9	238.6	583.3	550.8	440.4	1574.5	524.8
OTHER *	<u>52.1</u>	<u>28.8</u>	<u>35.6</u>	<u>116.5</u>	<u>38.9</u>					
DISTRIBUTION FERC	288.2	275.5	268.7	832.4	277.5					
FORECAST 2009-2011	2009	2010	2011	TOTAL	AVERAGE	2009	2010	2011	TOTAL	AVERAGE
<u>COST CATEGORY</u>	<u>O & M</u>	<u>O & M</u>	<u>O & M</u>	<u>O & M</u>	<u>O & M</u>	<u>CAPITAL</u>	<u>CAPITAL</u>	<u>CAPITAL</u>	<u>CAPITAL</u>	<u>CAPITAL</u>
GROWTH	4.0	9.1	11.4	24.5	8.2	88.5	167.4	192.4	448.3	149.4
RELIABILITY	66.7	67.3	73.1	207.1	69.0	54.9	66.7	75.6	197.2	65.7
HARDENING	35.2	41.8	42.3	119.3	39.8	112.2	144.6	148.3	405.1	135.0
RESTORATION	62.7	63.9	69.6	196.2	65.4	53.8	61.0	69.8	184.6	61.5
CUSTOMER RESPONSE	27.4	28.0	30.5	85.9	28.6	29.7	30.3	30.9	90.9	30.3
FIELD SUPPORT	<u>32.7</u>	<u>28.0</u>	<u>27.8</u>	<u>88.5</u>	<u>29.5</u>	<u>5.5</u>	<u>21.0</u>	<u>21.0</u>	<u>47.5</u>	<u>15.8</u>
DISTRIBUTION BU COSTS	228.7	238.1	254.7	721.5	240.5	344.6	491.0	538.0	1373.6	457.9
OTHER *	<u>36.7</u>	<u>38.4</u>	<u>41.6</u>	<u>116.7</u>	<u>38.9</u>					
DISTRIBUTION FERC	265.4	276.5	296.3	838.2	279.4					

* Includes O&M expenses incurred or associated with other FPL business units that relate to operation and maintenance of the distribution system (as defined by FERC). Examples include Transmission and Customer Service business unit O&M expenses associated with distribution substations and meters, respectively. Not applicable for capital since FERC functional amounts are reported at a plant balance level.