

**BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION**

**DOCKET NO. 120015-EI
FLORIDA POWER & LIGHT COMPANY**

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

COM	5
APA	1
ECR	10
GCL	1
RAD	1
SRC	1
ADM	1
OPC	1
CLK	1
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TESTIMONY & EXHIBITS OF:

GEORGE K. HARDY

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
FLORIDA POWER & LIGHT COMPANY
DIRECT TESTIMONY OF GEORGE K. HARDY
DOCKET NO. 120015-EI

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1 **I. INTRODUCTION**

2

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

4 A. My name is George K. Hardy. My business address is Florida Power & Light
5 Company, 700 Universe Blvd., Juno Beach, Florida, 33408.

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

7 A. I am employed by Florida Power & Light Company (“FPL” or the “Company”) as
8 Vice President of the Distribution Business Unit (“Distribution”).

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

10 A. I am responsible for the planning, engineering, construction, operations,
11 maintenance and restoration of Distribution’s infrastructure.

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

13 A. I received a Bachelor of Science in Mechanical Engineering from North Carolina
14 State University. I am also a graduate of the Leadership Institute of Boston
15 University’s School of Business. My professional background with FPL includes
16 twenty four years of technical, managerial and commercial experience, with
17 progressively more demanding assignments. I have served as Vice President
18 within three FPL business units: Power Generation, Transmission and now
19 Distribution.

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

21 A. Yes. I am sponsoring the following exhibits:

- 22 • Exhibit GKH-1 Summary of Co-Sponsored MFRs
23 • Exhibit GKH-2 Distribution Reliability Program Initiatives

1 **Q. Are you co-sponsoring any Minimum Filing Requirements (“MFRs”) in this**
2 **case?**

3 A. Yes. Exhibit GKH-1 contains a listing of the MFRs that I am co-sponsoring.

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

5 A. The purpose of my testimony is to:

- 6 • provide an overview of Distribution’s initiatives to strengthen and improve
7 the storm resiliency and reliability of the distribution system infrastructure;
- 8 • demonstrate that Distribution provides excellent service reliability and
9 customer service; and
- 10 • present an overview of Distribution’s effectively managed capital
11 expenditures and operation and maintenance (“O&M”) expenses.

12 **Q. Please summarize your testimony.**

13 A. Distribution is responsible for the planning, engineering, construction, operation,
14 maintenance and restoration of FPL’s distribution infrastructure. Distribution’s
15 infrastructure storm hardening and preparedness initiatives include its storm
16 hardening plan, pole inspection program and vegetation management program, all
17 of which have been previously reviewed and approved by the Florida Public
18 Service Commission (“FPSC”). These programs further strengthen and improve
19 the distribution infrastructure and provide value and long term benefits to our
20 customers. Distribution also continues to deliver excellent system reliability
21 performance to our customers. Over the last decade (2002-2011), Distribution’s
22 reliability, as measured by the best overall indicator of reliability, the System
23 Average Interruption Duration Index (“SAIDI”), has been extremely stable and

1 ranks the best among Florida's other investor owned utilities ("IOUs").
2 Additionally, FPL's Distribution 2006-2010 SAIDI performance ranks in the first
3 quartile in a recently completed Davies Consulting Inc. reliability benchmarking
4 study which included 31 utilities in approximately 30 states, each of which serves
5 between 300,000 and 5 million customers.

6
7 Through the implementation of targeted initiatives, Distribution continually
8 strives to improve and enhance our customer service processes. The cumulative
9 success of these initiatives has resulted in a 48 percent reduction in distribution-
10 related logged FPSC complaints per 10,000 customers over the last decade. In
11 2011, Distribution achieved its best-ever recorded results for this metric for the
12 second consecutive year.

13
14 Distribution's superior reliability and customer service performance are also
15 delivered while maintaining a continual focus on safety. Our safety performance
16 over the last decade, as measured by the industry standard metric for reportable
17 injuries, has improved by 53 percent. In 2011, Distribution achieved its best-ever
18 recorded results for this metric.

19
20 Significantly, Distribution has achieved all of these operational performance
21 improvements, while still effectively managing and controlling costs and helping
22 FPL provide the lowest typical customer electric bill in Florida. In the face of
23 ever-rising costs, Distribution's historical O&M expenses have remained stable.
24 This trend is expected to continue through 2013 ("Test Year"). Additionally, this

1 stability was achieved while adding over 800,000 new service accounts over the
2 last decade and meeting additional regulatory commitments (e.g., costs associated
3 with approved storm hardening and storm preparedness initiatives).

4
5 Historically, Distribution's capital expenditures result primarily from the
6 requirement to fund investments necessary to serve on-going customer growth,
7 reliability programs, day-to-day restoration activities and regulatory commitments
8 associated with the approved storm hardening and preparedness initiatives.

9
10 In short, Distribution has delivered excellent, efficient and balanced performance
11 resulting in substantial value and benefits for our customers. This outstanding
12 outcome was achieved as a direct result of Distribution's management and
13 employee commitment to safely provide superior reliability and customer service
14 at reasonable costs.

15 16 **II. OVERVIEW OF DISTRIBUTION**

17
18 **Q. Please provide an overview of the Distribution organization and system.**

19 A. Within FPL's 28,000 square mile service territory, there are approximately 67,000
20 miles of distribution electrical conductor, consisting of approximately 42,000
21 miles of overhead wire and approximately 25,000 miles of underground cable.
22 Additionally, FPL's distribution system includes over 1.1 million poles and more
23 than 800,000 transformers serving our customers. Distribution is organized into

1 four regions (North, East, West and Miami-Dade), which are further divided into
2 16 management areas that contain 35 service centers. There are also two network
3 operations centers. As of December 2011, there were approximately 2,200 full-
4 time Distribution bargaining and non-bargaining employees.

5
6 **III. STRENGTHENING THE INFRASTRUCTURE**

7
8 **Q. Is Distribution taking actions to improve the strength and resiliency of its
9 distribution infrastructure against major storms?**

10 A. Yes. The seven hurricanes that affected FPL's service territory during 2004 and
11 2005 resulted in significant customer outages and required extraordinary efforts to
12 rebuild and restore the system. As a result, the FPSC and FPL initiated actions to
13 strengthen and improve the resiliency of the electrical distribution infrastructure.
14 For example, the FPSC opened new dockets that resulted in orders and rules
15 requiring, among other actions, an eight-year pole inspection program, plans to
16 address ten new storm preparedness initiatives, as well as storm hardening plans.
17 For FPL, its "Storm Secure Plan," filed with the FPSC in 2006, addressed similar
18 initiatives.

19 **Q. Please provide more specific details about Distribution's actions to
20 strengthen and improve the storm resiliency of its infrastructure.**

21 A. In compliance with FPSC orders and rules, Distribution filed and obtained
22 approval of its plans and programs to satisfy the new storm preparedness and

1 hardening requirements. The following are summaries of these approved
2 plans/actions:

3
4 Pole Inspections – Distribution’s plan to implement an eight-year distribution pole
5 inspection cycle was approved by the FPSC in 2006. Our 1.1 million-plus
6 distribution poles are inspected to ensure they meet National Electrical Safety
7 Code (“NESC”) strength and loading requirements. Poles not meeting these
8 requirements are either reinforced or replaced. Through 2011, Distribution has
9 inspected approximately 800,000 distribution poles, and remains on schedule to
10 complete its first eight-year cycle in 2013.

11
12 Storm Preparedness Initiatives – Distribution’s plans to address the 10 FPSC
13 storm preparedness initiatives were approved in 2006 (Initiatives 2-10) and 2007
14 (Initiative 1). The storm preparedness initiatives include plans for increased
15 vegetation management, audits of joint use poles, improved asset management
16 systems, gathering of storm damage forensics and the evaluation of overhead vs.
17 underground facilities’ storm performance. One key initiative, increased
18 vegetation trimming, includes Distribution’s plan to establish a six-year average
19 cycle for its laterals by 2013 and maintain its three-year average cycle for feeders.
20 Distribution remains on schedule to meet this plan.

21
22 Storm Hardening – Distribution’s hardening plans, first for 2007-2009 and most
23 recently for 2010-2012, were approved by the FPSC in 2007 and 2010,

1 respectively. The FPSC’s “hardening rule” (Rule 25-6.0342) requires the filing,
2 review and approval of detailed hardening plans every three years. These plans
3 include the overall hardening strategy, proposed projects, expected costs and
4 associated benefits. Additionally, annual updates filed with the FPSC each March
5 specify hardening projects and associated costs planned for the current year, along
6 with actual hardening projects and associated costs completed during the previous
7 year. Distribution’s approved hardening plan includes a three-prong approach
8 that: (1) applies Extreme Wind-Loading criteria (“EWL”) to infrastructure that
9 serves critical customers (e.g., hospitals and 911 centers); (2) targets the
10 strengthening of existing infrastructure, up to and including EWL, that serves key
11 community needs (e.g., gas stations, grocery stores and pharmacies); and (3)
12 employs revised design guidelines to apply EWL to new overhead construction,
13 major planned work, relocation projects and daily work activities where feasible
14 and practical. By the end of 2013, Distribution expects it will have hardened to
15 EWL 292 feeders serving critical infrastructure customers, including 100 percent
16 of all feeders serving hospitals, 911 centers and local government emergency
17 operation centers, and 118 major highway crossings. Additionally, 110 feeders
18 serving community needs will have been incrementally hardened, up to and
19 including EWL.

20
21 Investing in Overhead to Underground Conversions – FPL’s Government
22 Adjustment Factor (“GAF”) tariff was first approved by the FPSC in 2007 as a
23 pilot program. In 2010, the tariff was approved on a permanent basis. The goal

1 of the GAF tariff is to lower storm restoration costs for all customers by providing
2 a 25 percent incentive for applicable government-sponsored conversion projects.
3 Through 2011, one county and 10 municipalities have signed a GAF tariff
4 agreement and moved forward with conversion projects.

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

7 A. Distribution's storm strengthening and preparedness initiatives will result in long-
8 term improvements to the distribution system that not only improve the system's
9 resilience against future storms and severe weather events, but also provide an
10 increased level of day-to-day reliability for our customers, both now and in the
11 future. The expected long-term benefits derived from these initiatives include
12 fewer customer outages, reduced outage durations and reductions in storm and
13 non-storm restoration costs.

14

15

IV. RELIABILITY

16

17 **Q. Please provide a general description of Distribution's reliability program,**
18 **initiatives and achieved results.**

19 A. Distribution's comprehensive reliability program is comprised of multiple
20 initiatives designed to improve reliability by preventing outages and reducing
21 outage durations. The results and benefits of such initiatives include reduced
22 customer inconvenience and overall restoration cost savings. Reduced restoration
23 costs help keep our customers' electric bills the lowest in the state.

1 Distribution develops these reliability initiatives by identifying, analyzing and
2 prioritizing causes of past interruptions and then targeting those causes that, if
3 remedied and/or repaired, will yield the largest customer benefits. Distribution
4 has designed an integrated set of initiatives to address the greatest areas of
5 opportunity to further improve reliability. A list of reliability initiatives, with
6 annual costs greater than \$1 million, is provided in Exhibit GKH-2. The
7 effectiveness of each initiative is evaluated on an on-going basis and resources are
8 redeployed, as necessary, to maximize overall performance results.

9
10 As a result of these initiatives, Distribution has consistently delivered and
11 maintained a superior level of reliability to its customers for more than a decade.
12 As previously discussed, SAIDI measures customers' average annual outage time.
13 It is the most relevant and best overall reliability indicator because it encompasses
14 two other standard performance metrics for overall reliability: the System
15 Average Interruption Frequency Index ("SAIFI") and the Customer Average
16 Interruption Duration Index ("CAIDI"). Over the last decade, Distribution's
17 SAIDI performance has remained extremely stable and ranks the best among the
18 Florida IOUs. Additionally, FPL's Distribution 2006-2010 SAIDI performance
19 ranks in the first quartile in a recently completed Davies Consulting Inc.
20 reliability benchmarking study which included 31 utilities in approximately 30
21 states, each of which serves between 300,000 and 5 million customers.

1 **Q. Please provide some specific examples of Distribution’s reliability initiatives**
2 **and how these programs benefit FPL’s customers.**

3 A. Vegetation Management Program – Vegetation-related outages represent one of
4 the top causes of customer interruptions and present a particular challenge in
5 Florida due to the year-round growth cycle. Distribution continues to maintain a
6 three-year average trim cycle for feeders and is implementing its six-year average
7 cycle for laterals through Initiative 1 of its approved FPSC Storm Preparedness
8 Plan. Additionally, trimming on circuits serving critical customers, e.g., hospitals,
9 is completed prior to the peak of each storm season; thereby reducing severe
10 storm-related interruptions and damage to the facilities serving these critical
11 customers.

12
13 In 2011, FPL was recognized for the ninth straight year as a Tree Line USA
14 Utility by the National Arbor Day Foundation. To qualify for this recognition,
15 utilities must adopt certain work practices associated with pruning and working
16 around trees and conduct documented training on these work practices. In
17 addition, utilities must sponsor a community tree-planting program and provide
18 educational information about trees to customers (e.g., planting the appropriate
19 tree species near utility lines). Long-term benefits associated with being a Tree
20 Line USA Utility include lower vegetation management costs and improved
21 customer and community relations.

1 Feeder/Lateral Cable Program – Another significant cause of distribution
2 interruptions is underground cable failures. This program addresses “direct-
3 buried” feeder and lateral cable through rehabilitation by either injecting the cable
4 with silicone, which extends its life, or, when injection is not an option, by
5 replacing the cable. Our experience shows that once a section of cable
6 experiences several failures, replacing or injecting the cable is the best way to
7 avoid increasingly frequent outages. For replacements, Distribution utilizes cable
8 in conduit. This makes subsequent restoration and/or repair quicker and more
9 efficient, thereby reducing water intrusion and decreasing the likelihood of future
10 cable failure.

11
12 Priority Feeder Program – The purpose of this program is to address feeders
13 experiencing the highest number of outages and momentary interruptions on our
14 system. Annually, these feeders are identified and targeted for review and
15 analysis to determine and implement the appropriate corrective measures.

16
17 In summary, Distribution’s reliability initiatives significantly contribute to
18 excellent reliability through the avoidance and minimization of outages and
19 customer inconvenience. These initiatives have made a major contribution
20 towards FPL’s excellent reliability results historically and are expected to do the
21 same in the future.

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

3 A. Distribution will continue to seek ways to further improve the superior reliability
4 provided to and expected by our customers. Although FPL's service territory has
5 not recently been affected by major storm events like those experienced in 2004
6 and 2005, FPL must continue to invest in its hardening and storm preparedness
7 initiatives to meet customer needs and expectations, now and in the future. This
8 includes continuing to construct infrastructure to higher standards, increasing tree
9 trimming through its six-year average vegetation management cycle for laterals
10 and conducting its eight-year pole inspection cycle. These initiatives, coupled
11 with Distribution's more established reliability initiatives, will continue to provide
12 our customers with superior reliability, help avoid and minimize outages and
13 reduce overall restoration costs.

14

15 **V. STORM PREPAREDNESS**

16

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

20 A. As discussed earlier, Distribution's approved infrastructure hardening and storm
21 preparedness initiatives will help reduce the amount of damage to the distribution
22 system, reduce the number of outages and reduce overall restoration duration.
23 Distribution also continues to hone its comprehensive plans for rapid and safe
24 restoration of customers' service. After a major storm, FPL's primary mission is

1 to safely restore service to the greatest number of customers in the least amount of
2 time, enabling the communities served by FPL to return to normal as rapidly as
3 possible. Our restoration plans, which include working with county emergency
4 preparedness officials to prioritize restoration of critical infrastructure facilities,
5 are thoroughly tested and refined through annual “dry run” exercises and by
6 performance analysis after each event. Our many years of experience have shown
7 that extensive planning, training, process discipline, the expertise of on-site
8 management teams and scalable implementation are critical. Planning and
9 preparation include ensuring that: (1) storm roles and responsibilities are known;
10 (2) adequate training is provided; (3) foreign crews are secured, including
11 additional contractor support and mutual assistance from other electric utilities;
12 (4) staging sites are identified, secured and ready; (5) all equipment and logistic
13 needs are satisfied; and (6) communication plans and processes, for internal as
14 well as external purposes, are in place.

15
16 FPL is recognized as an industry leader in storm restoration. Numerous other
17 utilities have visited FPL to learn and implement our processes and practices.
18 FPL has also received Edison Electric Institute (“EEI”) awards for its emergency
19 response performance in 2000, 2003, 2004 and 2005, further validating FPL’s role
20 as an industry leader in this area. In summary, Distribution’s initiatives to
21 strengthen its infrastructure and continuously improve its storm preparedness
22 plans, systems and processes will allow FPL to continue to be an industry leader

1 in storm preparedness/restoration and provide benefits to our customers now and
2 in the future.

3
4 **VI. CUSTOMER SERVICE**

5
6 **Q. What measures has Distribution undertaken in order to continue its efforts
7 to provide excellent customer service?**

8 A. Distribution continually strives to improve customer service. One key area where
9 we continue to focus our efforts is the improvement of communications with our
10 customers. For example, our Estimated Time of Restoration (“ETR”) information
11 is provided to our customers when they experience an outage. We continually
12 review and improve the quality of ETR information as well as its method of
13 delivery. A continual review of the voice response unit and messaging used by
14 Customer Care Center representatives ensures that the messaging is consistent,
15 utilizes customer-friendly terms and provides information that is useful to
16 customers. This information includes our crews’ locations, outage cause,
17 restoration status, ETR updates and area-specific emergency messages.

18
19 We also recently implemented our new FPL Power Tracker interactive online
20 map which shows, in near real-time, the location of any power outage across
21 FPL’s service territory. Customers can access this system through FPL’s web
22 page and enter an address, city or ZIP code to find out if there are any power
23 outages currently affecting an area. If a customer is currently experiencing an
24 outage, they can access the map via a battery-powered laptop with internet

1 connection, smart phone, internet devices or by asking a friend or family member
2 to go online from another location. The map information mirrors the information
3 provided to customers who call FPL's Customer Care Center and is based on data
4 that is updated every 15 minutes, 24 hours a day. By clicking on an outage icon,
5 certain detailed information is provided, including the time an outage began or
6 was reported, the number of customers affected, the cause, the latest status report
7 on the progress of the restoration and an estimated time when power will be
8 restored.

9
10 We've also implemented a dedicated email address that customers can now use to
11 send pictures of our facilities where there is or may be an issue. This new visual
12 tool provides customers and FPL another means to describe and discuss what the
13 customer is seeing or experiencing. This allows for quicker resolution of issues.

14 **Q. How do you ensure Distribution is consistently delivering excellent customer**
15 **service throughout its service territory?**

16 A. Distribution maintains a constant focus on process performance and execution of
17 consistent standards and processes. This focus results in more efficient operations
18 and ensures fair and equal treatment of all customers. For example, Distribution
19 has implemented its Operational Model to standardize well-executed processes,
20 replicate best practices and provide a centralized location for information that is
21 readily accessible by all of our employees. This web-based tool is a "one-stop
22 shop" for procedures, processes, forms and training materials.

1 **Q. Can you further explain the role technology plays in delivering enhanced**
2 **customer service?**

3 A. Distribution continually develops improvements to expand existing computer
4 system capabilities to provide customers better and more efficient service and
5 information. Examples of recent enhancements, in addition to those previously
6 discussed, include the implementation and deployment of such tools as the
7 Restoration Spatial View (“RSV”), and sMobile. Below is a brief description of
8 these recently implemented enhancements and their associated benefits to
9 customers:

10

11 RSV – This technology is a Google Earth-based tool that is accessible to our
12 office employees and our field crews, utilizing the computers installed in their
13 trucks. RSV allows for the viewing and monitoring of field conditions; the
14 location of facilities and equipment, including the location of recently installed
15 smart grid technology (e.g., automated feeder switches, which automatically
16 sectionalize lines and isolate faults to restore service), the location of outages, the
17 types of outages being experienced and the location of crews nearest to the
18 outages – all of which allow us to work more efficiently.

19

20 sMobile – This application is another step in modernizing tools utilized by
21 Distribution’s field workforce. Through the use of computers installed in their
22 trucks and vehicles, field crews are now able to electronically receive work
23 orders, receive and submit timesheets, receive turn-by-turn driving instructions

1 and view up-to-date information from various other systems (e.g., asset
2 management and trouble call systems), all of which improve our crews'
3 efficiencies and productivity.

4
5 We are also integrating smart meter data with our Trouble Call Management
6 System, which provides real-time outage information/visibility and will decrease
7 dependence on customer outage calls. Additionally, it provides outage and
8 restoration verification, includes a “ping” button that provides real-time
9 confirmation of a meter’s current status and will allow us to provide customers
10 more accurate estimated initial times of restoration.

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

12 A. Yes. As previously noted, the cumulative success of our customer service
13 initiatives has resulted in a 48 percent reduction in distribution-related FPSC
14 logged complaints per 10,000 customers over the last decade. In 2011,
15 Distribution achieved its best-ever recorded performance for this metric for the
16 second consecutive year.

17
18 **VII. SAFETY**

19
20 **Q. Previously you mentioned “safe restoration” and “safely restore the greatest**
21 **number of customers” as priorities of Distribution. How is safety**
22 **emphasized within Distribution?**

1 A. Distribution considers safety to be integral to effective operations. The superior
2 reliability and excellent customer service discussed earlier are delivered while
3 maintaining a continual focus on employee safety. As a result of concerted and
4 sustained efforts, over the last decade, we have improved our Occupational Safety
5 & Health Administration's ("OSHA") industry-standard metric of reportable
6 injuries per 200,000 man-hours by 53 percent. The absolute number of injuries
7 has declined by 70 percent for this same period. In 2011, Distribution achieved
8 best-ever recorded results for the OSHA reportable injury metric. A key reason
9 for this dramatic improvement is our continued commitment to a Total Safety
10 Culture. This program establishes a partnership with employees to institute an
11 environment where actions are guided by the principles of trust, open
12 communication, mutual respect and active caring. Some of the specific aspects of
13 this program include crew visits by supervisors to ensure compliance with safety
14 rules, peer-to-peer safety observations and coaching and constant communication
15 of the safety plan through various means of communication. Additionally,
16 Distribution continues to enhance and refresh its safety program, including
17 initiatives such as the recent corporate-sponsored program Zero Today and
18 Hazard Recognition Training for all Distribution employees. These programs
19 serve to constantly reinforce the need for everyone's continued commitment to
20 safety principles.

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VIII. DISTRIBUTION COSTS

Q. Please provide an overview of Distribution’s actual and forecasted capital expenditures and O&M expenses.

A. Recent history indicates that Distribution’s capital expenditures have been driven primarily by four cost categories. These four cost categories are growth, hardening, restoration and reliability. Two remaining cost categories, customer response and field support, also contribute to total Distribution capital expenditures, but to a much lesser extent. Distribution forecasts this trend to continue for the Test Year.

Recent historical Distribution O&M expenses were driven primarily by two cost categories; restoration and reliability. The remaining cost categories (hardening, customer response, field support, and growth) also contribute to total O&M expenses, but to a much lesser extent. This trend is also expected to continue for the Test Year.

Q. Please provide more details regarding Distribution’s forecasted capital expenditures for the Test Year.

A. Total Distribution capital expenditures are forecasted to be approximately \$430 million for the Test Year. As previously discussed, the four cost categories that contribute most significantly to this total are growth (\$112 million), hardening (\$106 million), restoration (\$92 million) and reliability (\$58 million). Together,

1 they contribute \$368 million or 86 percent of total Test Year Distribution capital
2 expenditures. The remaining cost categories, customer response and field
3 support, contribute \$62 million or 14% of total Test Year Distribution capital
4 expenditures.

5 **Q. Please provide a description and explanation of these capital expenditures**
6 **and long term infrastructure investments.**

7 A. Customer and system growth related capital additions include: the addition of
8 infrastructure (e.g., services) to serve new customers; increased capacity to
9 accommodate the load growth (e.g., additional feeders, capacitor banks and
10 transformers); and new streetlights. Hardening/strengthening activities include
11 expenditures attributable to regulatory commitments such as Distribution's
12 approved eight-year cycle pole inspection program and three-prong hardening
13 plan. FPL makes long-term infrastructure investments to maintain and improve
14 reliability. These expenditures include costs associated with underground feeder
15 and lateral cable rehabilitation, automated feeder switches, thermovision follow-
16 up repairs and replacements and improvements on those feeders experiencing the
17 highest number of interruptions. Restoration expenditures include costs required
18 to repair and restore facilities that have failed and need to be replaced or were
19 damaged as a result of severe weather or other causes. Customer response
20 expenditures are primarily associated with non-reimbursable facility relocation
21 costs resulting from road construction projects. Field support expenditures
22 include the purchase of vehicles and equipment to support construction activities
23 as well as staff support functions.

1 **Q. Please comment on Distribution's recent and forecasted Test Year O&M**
2 **expenses.**

3 A. The primary contributors to both recent and forecasted O&M expenses are
4 associated with restoration and reliability cost categories. These are followed by
5 expenses from hardening, customer response, field support, other business unit
6 distribution related expenses and growth. For the Test Year, total Distribution
7 O&M expenses are forecasted to be approximately \$295 million (see MFR C-6).

8 **Q. Please provide a description and explanation of the activities and programs**
9 **included in Distribution's O&M expenses.**

10 A. The cost categories contained within Distribution's capital expenditures, as
11 described earlier, remain the same for O&M expenses. However, the annual
12 amounts and ratios to total O&M expenses differ. First, the two largest cost
13 categories for the Test Year, restoration (\$92 million) and reliability (\$66
14 million), account for 54 percent of Distribution's O&M expenses. Second, the
15 costs associated with hardening/strengthening the infrastructure (\$37 million),
16 customer response (\$31 million), field support (\$30 million) and costs incurred or
17 associated with other FPL business units that relate to operating and maintaining
18 the distribution system (\$27 million) account for 42 percent of Distribution's total
19 O&M expenses for the Test Year. Lastly, the remaining 4 percent of
20 Distribution's O&M Test Year expenses are associated with growth (\$12 million).

1 **Q. Comparing the 2013 Test Year to the 2012 Prior Year, are there any**
2 **accounts in which the change to Distribution’s non-fuel O&M expenses**
3 **exceeds the threshold defined in MFR C-8?**

4 A. No. None of the 19 Distribution Test Year non-fuel O&M expense accounts
5 exceed the MFR C-8 threshold.

6 **Q. How do Distribution’s O&M expenses for the Test Year compare to the**
7 **Commission’s O&M benchmark (MFR C-41, O&M Benchmark Variance by**
8 **Function)?**

9 A. Distribution Test Year O&M expenses are \$14 million under the Commission’s
10 O&M benchmark threshold.

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

12 A. Yes. For the Test Year, capital expenditures are forecasted to be less than actual
13 2011 capital expenditures (\$430 million vs. \$432 million). This reduction is
14 despite projecting to add 17,000 or 70 percent more new service accounts in the
15 Test Year than in 2011 (2013 – 41,000 vs. 2011 – 24,000).

16

17 Distribution O&M expenses for the Test Year are forecasted to grow at an
18 average annual rate of 1.9 percent over actual 2011 expenses (\$295 million vs.
19 \$284 million), which is below the forecasted annual Consumer Price Index
20 (“CPI”) growth rate for this period. Additionally, as previously mentioned, all 19
21 Distribution O&M expense accounts as well as the Distribution O&M function
22 total continue to remain under the Commission’s established thresholds set forth
23 in MFRs C-8 and C-41.

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

2 A. Yes.

Summary of Co-Sponsored MFRs by George K. Hardy

MFR	PERIOD	TITLE
B-13	Test	Construction Work in Progress
B-15	Test / Prior	Property Held for Future Use – 13 Month Average
B-24	Test / Prior	Leasing Arrangements
C-15	Historic / Test	Industry Association Dues
C-34	Historic 5 Years	Statistical Information
C-41	Test	O&M Benchmark Variance by Function
E-7	Test	Development of Service Charges
E-14	Test	Proposed Tariff Sheets and Support for Charges

Distribution Reliability Programs*

Program	Program Description
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 (feeders) and 6-year average cycles (laterals) minimize vegetation related interruptions
Feeder/Lateral Cable	Replace direct buried feeder/lateral cable to reduce failures and associated interruptions
Priority Feeders	Identify/remediate feeders experiencing a higher level of interruptions and momentaries
Overhead Line Inspections	Infrared predictive diagnostic technology detects signs of or potential for failures in overhead facilities; also includes visual condition assessment
Vault Inspections	Inspect/remediate non-compliant conditions in automatic throw-over systems and other vault equipment
Submarine Cable	Reduce submersible feeder cable failures and associated interruptions
VAR Management	Maintain/improve power factor performance, improve system efficiency, reliability and quality of service voltage
Switch Cabinets	Remove live front switch cabinets reaching the end of their service life
Handhole Inspections	Inspect/remediate non-compliant conditions
Small Wire Replacement	Replace/upgrade smaller overhead feeder wire to current standards
Cathodic Protection	Install low impedance grounding and Zinc to protect the lead jacket on paper and lead insulated cables
System Expansion	Provides necessary feeder capacity to serve all customers during normal and emergency periods and installs necessary infrastructure to meet new loads

* Reliability programs with annual costs > \$1 million

** Hardening/Storm Preparedness programs which also provide day-to-day reliability benefits