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FLORIDA PUBLIC UTILITIES COMPANY

Docket No. 140025-EI

DIRECT TESTIMONY and EXHIBITS

April 28, 2014



DOCKET NO. 140025-EI

VOLUME III

FLORIDA PUBLIC UTILITIES COMPANY

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FLORIDA PUBLIC UTILITIES COMPANY Docket No. 140025-EI

DIRECT TESTIMONY and EXHIBITS OF JEFFRY M. HOUSEHOLDER

1

Q. Please state your name, affiliation, and business address.

A. My name is Jeffry M. Householder. I am the President of Florida Public Utilities
 Company ("FPU" or "the Company"). My business address is 911 South 8th Street,
 Fernandina Beach, Florida 32034.

5 Q. Please summarize your professional experience and academic background.

I joined FPU in June 2010 in my current position. For ten years prior to joining A. 6 FPU, I provided energy, regulatory affairs, and business development consulting 7 services to natural gas utilities, natural gas marketing companies, propane gas 8 retailers, government agencies, and industrial and commercial clients. In that 9 capacity, I participated in numerous regulatory filings before the Florida Public 10 Service Commission (Commission), including several rate proceedings. Prior to 11 beginning my consulting business. I spent sixteen years in the gas and electric 12 industry in the following positions: Vice President of Marketing and Sales for TECO 13 Peoples Gas; Vice President of Regulatory Affairs and Gas Management for West 14 Florida Natural Gas Company; Vice President of Marketing and Sales at City Gas 15 Company; and Utility Administrative Officer for the City of Tallahassee Utilities. 16 Early in my career, I was a Section Manager with the Florida Department of 17 Community Affairs, responsible for administering the Florida Energy Code and 18 related construction industry regulatory standards. I was also employed as an Energy 19 Analyst in the Florida Governor's Energy Office. I received a Bachelor of Science 20 21 Degree from Florida State University in 1978 with an interdisciplinary major in

Direct Testimony of Jeffry M. Householder

- Social Science (principally Economics and Business), and additional majors in
 Government and International Relations.
- 3 Q. Have you filed testimony before the Florida Public Service Commission in prior
 4 cases?
- 5 Yes. Over the years, I have filed testimony in numerous cases. For example, I filed Α. testimony most recently in Chesapeake Utilities' 2009 rate case proceeding (Docket 6 No. 090125-GU). I also filed testimony on Chesapeake's behalf in the company's 7 2000 rate case (Docket No. 000108-GU). In 2007, I filed testimony on behalf of 8 both Sebring Gas System and St. Joe Natural Gas Company in the Conservation Cost 9 Recovery Clause proceedings (Docket No. 070004-GU). I also submitted testimony 10 on behalf of Sebring Gas System in its 2004 rate case (Docket No. 040270-GU) and 11 12 on behalf of St. Joe Natural Gas Company in its 2000 rate case (Docket No. 001447-GU). I have participated in quite a few other cases before the Commission either 13 through the filing of testimony or development of programs, tariffs, or cost studies 14 submitted for Commission review. 15
- 16

Q.

Are you sponsoring any Exhibits to your Testimony?

- A. Yes. I am sponsoring one exhibit, JMH-1, which is a year-by-year comparison of a
 residential bill for a residential typical 1,000 kWh customer on each of FPU's
 electric division systems since FPU's last rate case.
- Q. Are you familiar with the operations and management of FPU's electric
 distribution utility?
- A. Yes. As President of the Company, I am responsible for the overall management and
 direction of the electric utility and take an active role in strategic planning and

resource allocation. I am also engaged in project development and regulatory issues
 on a regular basis.

3 Q. What is the purpose of your testimony in this proceeding?

My primary purpose is to provide an overview of current FPU operations, describe 4 Α. 5 the current state of our company, address the impact that the acquisition by Chesapeake Utilities Corporation has had on FPU and introduce the witnesses in this 6 case. I will also highlight some unique aspects of our case, as well the critical factors 7 that have necessitated our filing. We have delayed filing for a rate increase as long 8 as possible, but have reached the point where further delay is not in the best interests 9 of the Company's customers or its shareholders. We take seriously our obligations to 10 provide reliable and responsive service to our customers and the rates we seek 11 support the continuation of that service obligation. I will outline our efforts to 12 13 control costs while at the same time implementing several initiatives to significantly improve system reliability and the services we offer our customers. 14

15

Q. Please provide an overview of the Company.

This year, Florida Public Utilities Company will celebrate its 90th year of operations. 16 Α. In late 2009, FPUC merged with Chesapeake Utilities Corporation (Chesapeake), 17 headquartered in Dover, Delaware. Chesapeake has operated in Florida since the late 18 19 1980's, when it acquired Central Florida Gas Company and Plant City Gas. At present, Chesapeake's principal Florida operations include regulated electric and 20 natural gas distribution utilities, an intrastate gas transmission company, a natural gas 21 22 marketing company and a propane distribution company. FPU is organized as a wholly owned subsidiary of Chesapeake. 23

FPU provides electric distribution service in two discrete Florida geographic 1 areas – several small communities and rural areas in Jackson, Calhoun and Liberty 2 counties (FPU's Northwest Division); and on Amelia Island (FPU's Northeast 3 Division). The service areas present distinct service and growth challenges. While 4 growth has been limited throughout both service areas, the counties in our Northwest 5 Division have experienced an especially difficult time during the recent economic 6 7 downturn. According to US Census data, Jackson and Liberty county populations have declined over the past several years, while Calhoun saw a minimal .04% 8 increase. The City of Fernandina Beach on Amelia Island grew 1.9% since 2010. 9 10 Construction activity has been at a virtual standstill in both Divisions although there are some signs of limited improvement on Amelia Island, where the first new 11 residential subdivision (40 homes) in several years is breaking ground. FPU has 12 13 experienced a declining usage trend over the past several years, not unlike many electric utilities in the U.S., as consumers conserve during tight economic times. 14 Both FPU Divisions are subject to storm damage and outages. The Northeast 15 Division operations also are susceptible to higher than typical levels of corrosion 16 damage given the coastal location and a greater percentage of underground service. 17 FPU's electric operation is also unique among Florida regulated electric utilities in 18 19 that it does not own generation assets and, therefore, relies entirely upon wholesale power purchases to serve its 31,087 customers. 20

21

Q. How has the merger with Chesapeake impacted FPU?

A. The merger has resulted in several substantive benefits for customers, employees and
 the communities we serve. FPU's inclusion into a larger corporate structure provides

1		greater access to lower cost capital. As other witnesses will detail, this capital has
2		been carefully deployed to replace and upgrade old and failing electric infrastructure
3		and equipment, increase storm hardening investments and generally return the
4		Company's distribution infrastructure to a reliable operating condition. In addition, a
5		more sophisticated management approach to the business is evidenced through the
6		formal and disciplined planning, budgeting, project review and performance
7		measurement processes introduced by Chesapeake. Significantly expanded resources
8		are also now available to FPU in the areas of system planning and development, IT,
9		HR, Treasury and risk management, communications and accounting.
10	Q.	Can you provide examples of Chesapeake's resources and management
11		influence benefiting customers, employees and communities?
12	A.	Yes. Let me start with the employees. While our customers are central to every
13		action we take, in Chesapeake's view the best way to take care of customers is to
14		make sure employees are treated fairly and are fully engaged in the business. There
15		is overwhelming evidence in numerous management and business studies that
16		satisfied employees are directly correlated to satisfied customers. Over the four years
17		of Chesapeake's management, a number of employee related actions have been
18		taken. We first addressed the basics - conducting market based competitive pay
19		reviews, bringing benefit packages up to industry standards and improving physical
20		work conditions through equipment replacement and facility upgrades. In the
21		Northeast Division, for example, we were operating out of a 100-year-old warehouse
22		without operable indoor plumbing. Earlier this year we moved our employees into a

wide performance based pay system. The system sets performance standards for each 1 2 employee along with Florida and corporate based annual financial, safety and 3 customer satisfaction standards. Each employee's annual merit pay increase opportunity is directly tied to individual performance. In addition, a portion of each 4 5 employee's target compensation (including our union employees represented by a 6 collective bargaining unit) is based on achievement of the annual financial, safety 7 and customer satisfaction performance targets. Finally, our employees are heavily 8 engaged in the planning and review processes that fundamentally run our business. 9 We communicate expansively at all levels in the Company to ensure that all 10 employees understand our goals and performance standards.

11

Q. How have the employee initiatives benefitted customers and communities?

12 A. One of the fundamental elements of Chesapeake's business philosophy is that it lives 13 by a set of key values. Striving to conduct business in an "Honorable" manner, making a "Personal Connection" with customers and communities and 14 15 "Relentlessly" working to find new and better solutions to support customer needs are among these values. Building on the Values, a Service Excellence process is in 16 17 place to continuously review and improve service to customers. Service Excellence 18 teams map our processes, critically review our systems, and evaluate our contact methods through the "lens of the customer". Through this effort, we have instituted 19 20 four primary Service Standards to guide our customer contact processes by which we 21 measure success.

The most important of these Service Standards is "Safety". We want each of our employees to go home every night to their families in the same condition as they

started the day. Equally important to us is the safety of our customers. We believe
 that our investments in system reliability, storm hardening, increased training
 programs and upgraded equipment discussed by witnesses Shelley and Cutshaw play
 a major role in keeping our customers and community's safe.

Our next Service Standard is "WOW". We want to give our customers the 5 opportunity to be impressed by our efforts every time they come in contact with FPU 6 employees. Through a series of employee training and empowerment actions, 7 process improvements, technology upgrades and performance measurement 8 activities we have vastly increased customer satisfaction. One measure is the 9 number of Commission received customer complaints. In 2008, there were 37 10 complaints received by the Commission; in 2013 there were 4. In addition, we 11 actively survey customers to assess our performance. Among other measurement 12 metrics, we calculate a monthly and annual Net Promoter Score - essentially 13 quantifying how many customers would recommend FPU to friends or neighbors. 14 Our scores have steadily improved over the past two years to a very solid overall 15 level. We continue to seek opportunities to keep improving. Another important 16 example of this Service Standard is our willingness to play an active role in 17 supporting the communities we serve. FPU employees are involved in numerous 18 local service and civic organizations, charitable events, local sports sponsorships, 19 20 business groups and trade associations.

21 Our third Service Standard is "Presentation". We adopted this standard after 22 studying the Disney Company service standards. It applies not only to keeping our 23 workplaces, vehicles and uniforms presentable (and safe), but also to presenting

1		customers, vendors and service partners with straight-forward and useful methods to
2		contact us and transact business. To this end, we have redesigned web sites,
3		expanded payment options, extended Contact Center hours, modified CSR authority
4		levels to support one call issue resolution, conducted a variety of community forums
5		to provide information and promote energy conservation and other programs,
6		improved our building parking, entry and customer service facilities for bill inquiries
7		and payment, and numerous other customer-centric improvements.
8		Our final standard is "Results Oriented". We want every action we take,
9		every decision we make and every activity in which we participate to have a positive
10		result. I have touched on a few of the results we are achieving in the above
11		discussion. The other witnesses in the case will provide additional indications that
12		our Results Orientation is making a difference for our customers.
13	Q.	Is the Company planning to take steps to further improve its service to
14		customers?
15	А.	Yes. One of the key initiatives when I was hired was a move to engage customers
16		and glean an understanding of what they expected from us as a utility and further as
17		a community partner. We have devoted significant resources to talking directly to
18		customers, surveying customers, setting up e-mail response capabilities and working
19		through various social media to develop that understanding. Those activities

continue today as part of our on-going effort to see through the "lens of the
 customer". As a result we have restructure policies and procedures, streamlined
 organizational structures and improved technology. This year, we implemented a
 new Outage Management System in conjunction with a new GIS/mapping system.

Direct Testimony of Jeffry M. Householder

We are working to link the systems to FPU Contact Centers and provide better 1 2 information to customer service personnel. Ultimately, we will have an automated system for customers to both report an outage and receive information about an 3 4 outage. Other witnesses in this case will outline several additional customer service 5 improvements on the horizon. New telephony equipment, better capabilities to enable customers to self-serve (mobile apps, enhanced website payment plans, Kiosk 6 7 payment centers) and an improved voice response system to reduce call wait times are in the works. Of course, we continue to work on operational service reliability as 8 9 our primary customer service initiative. As we present our case, FPU witnesses will 10 describe many of the physical system improvements we have completed and the 11 excellent reliability results achieved to date.

12 Q. Please provide an overview of FPU's case and the testimony that will be 13 presented by the Company's witnesses.

14 A. The Company's case will be presented by several FPU and Chesapeake corporate 15 witnesses as well as outside experts retained to address certain aspects of the filing. These witnesses will collectively demonstrate the Company's focus on providing 16 safe, reliable and high quality service to customers and its decreased ability to do so 17 18 under the Company's current financial condition. Our witnesses will provide detailed 19 information showing that our costs are reasonable and prudent and are being incurred 20 at a level that exceeds our revenues. We will further demonstrate that both our actual 21 and projected returns are well below the current authorized level and any level where 22 the Company could reasonably expect to attract capital and continue to provide 23 quality service to customers. Finally, our witnesses will provide a rate design that

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appropriately allocates our cost to provide service and establishes customer rates that are just and reasonable.

Several Company witnesses will describe FPU's efforts to improve service to 3 customers. Drane A. "Buddy" Shelley, Director of Electric Operations and Mark 4 Cutshaw, Director of Business Planning and Engineering will, collectively, submit 5 panel testimony that outlines the significant investments in reliability and facility 6 7 improvements since the last rate filing and planned through the test year. Their panel testimony also addresses various operational budget issues, along with the 8 Company's recent historic and future planned efforts to reduce wholesale electricity 9 purchase costs. Mariana "Guilly" Perea, Chesapeake Director of Customer Care, will 10 discuss the Company's commitment to becoming an industry-recognized customer 11 service operation. Ms. Perea also provides an overview of the focused effort we have 12 made to improve our customer service operations and the performance results to 13 date. Aleida Socarras, FPU Director of Marketing and Sales, describes the proposed 14 economic incentive program, including the tariff rate provisions we are filing. 15

Several FPU, Chesapeake corporate and outside experts will present 16 testimony on the Company's financial condition and proposed rate relief. Robert 17 Canfield, Vice President of Christensen and Associates, will describe the forecast 18 methodologies used to develop the FPU billing determinants and inflation factor. 19 Cheryl Martin, FPU's Director of Regulatory Affairs, will address the overall need 20 21 for rate relief and sponsor the principal financial information that supports the proposed revenue requirement increase. Ms. Martin is specifically responsible for the 22 information provided in the Minimum Filing Requirements (MFR) Schedules A, B, 23

Direct Testimony of Jeffry M. Householder

1		C, D, F and G. Matt Kim, Chesapeake's Vice President and Corporate Controller
2		will describe the Company's capital structure, related cost of capital, income tax
3		expense and various corporate cost allocations. Mr. Kim also provides supporting
4		testimony for several related financial MFR schedules. Paul Moul, will discuss the
5		Company's cost of common equity. Finally, Company witness Mark Cutshaw will
6		describe the Company's Cost of Service analysis and rate design within the panel
7		testimony offered by he and Buddy Shelley.
8	Q.	What is the specific rate relief that FPU is requesting in its filing?
9	A.	FPU is requesting a permanent increase in its electric rates and charges in the amount
10		of \$5,852,171. This increase equates to an overall 6.79% increase in total revenues.
11	Q.	Is FPU requesting interim rate relief?
12	А.	Yes. FPU also seeks an interim increase in its electric rates and charges in the
13		amount of \$2,433,314 based on deficiency in revenues for the historic year ended
14		September 30, 2013.
15	Q.	Why is it imperative that FPU receive rate relief at this time?
16	A.	Simply stated, the rates approved in the Company's 2008 rate case are no longer
17		adequate to support the costs to provide quality service to customers. The Company
18		has made significant investments in the infrastructure improvements, equipment and
19		facilities and maintenance necessary to operate a safe, reliable electric system. We
20		have also invested in improvements to our Customer Care operation, upgraded our
21		system planning capabilities and ensured that our employee compensation and
22		benefits are competitive. We have made these improvements in the face of flat to
23		declining customer usage and revenues, because we feel a strong obligation to meet

the service and reliability expectations of our customers. The costs of providing service have continued to increase over the seven-year interim since the Company's last rate case while revenues have not kept pace. The resulting negative impact on our electric financial returns has been predictable. In spite of the cost savings measures FPU has implemented, we have now reached the point where, without rate relief, we will be forced to delay important future capital investments and reduce maintenance actions that are critical to system reliability and efficiency.

8 Q. What are some of the actions the Company has taken to control costs and defer 9 the need for this rate case?

As other witnesses describe in greater detail, FPU has taken several steps to control 10 Α. costs. We have implemented a number of process and organizational modifications 11 12 that have enable us to continue to provide safe, reliable service without adding additional operational positions in either Division. We restructured our union 13 agreements to make it easier for employees to cross division lines and now 14 frequently share internal resources between divisions. As a result we are able to 15 provide better service and reduce overtime and outside contractor costs. Last year, 16 we established a System Planning and Engineering Unit that provides services to all 17 Florida operations (electric, natural gas and propane). As examples, large project 18 engineering and permitting and administration of the GIS/mapping system used by 19 electric and natural gas operations are handled by the System Planning Unit. As a 20 result, we have been able to share costs and reduce expenses. We have also had 21 success in reducing maintenance costs through our investments to increase 22 reliability. The replacement of old, high maintenance equipment has greatly 23

improved our reliability metrics and reduced maintenance requirements. In spite of
 these efforts, however, the Company's costs continue to rise and further efforts to
 reduce costs would likely be detrimental to the Company's service quality and
 reliability performance.

Cost management alone is not enough to return the system to a sound 5 financial footing. The return on equity has dropped each year since the prior rate case 6 in 2008. Since 2010 it has been dramatically below the bottom of the Commission 7 authorized range. The "Great Recession" stopped growth in our service areas, 8 consumers appropriately reacted to the economy as well as the increasing electric 9 wholesale prices by conserving, our operating costs continued to increase, and FPU 10 invested heavily in system improvements following the Chesapeake acquisition. We 11 have delayed seeking rate relief as long as possible; however, we no longer have that 12 option. 13

Q. What is FPU's projected return on equity for the test year if relief is notgranted?

A. The projected return on equity for the test year if relief is not granted will be a negative 1.46% in the year ending September 30, 2015. The projected overall rate of return is expected to be 1.27% for this same period. A rate of return at this low level is not in the best interest of the Company's customers. We will clearly be well below the 11.25% cost of common equity demonstrated as reasonable for FPU by Mr. Moul, to say nothing of the expectations of the Company's shareholders who provide the capital required to support system integrity and service to our customers.

Direct Testimony of Jeffry M. Householder

Q. You describe above the impact of the recent economic turndown. Does FPU play a role in the economic recovery and development of the communities you serve?

I believe we have an important role to play. We work closely with economic 4 Α. development teams in each of the areas we serve. It is clear that the ability to provide 5 reliable, competitively priced electricity is one of the fundamental concerns of both 6 individuals and corporations evaluating sites for residence or development. From a 7 business perspective, economic growth brings additional customers and revenue. It 8 also promotes the more efficient use of existing distribution resources. Ultimately, 9 growth helps spread costs and minimize future rate increase pressures. Aleida 10 11 Socarras will testify to FPU's current level of economic development support and describe our interest in expanding support for local and regional development efforts. 12 We have watched with admiration the economic development actions of other 13 Florida utilities in close proximity to our service areas (Gulf Power and Florida 14 Power and Light). While our resources are more limited, it is appropriate that we 15 support both regional and local efforts to grow the economies of the areas we serve. 16 In this filing, we are seeking approval of an Economic Development Rider. Ms. 17 Socarras will provide greater detail on the Rider. It is our intent to promote 18

additional economic development and job growth through certain rate discounts
 offered to businesses either relocating or expanding in FPU's service areas.

21 Q. FPU's request includes testimony that suggests that fuel rate relief for 22 customers may be expected in the near term. Please explain.

Direct Testimony of Jeffry M. Householder

As witnesses Cheryl Martin and Mark Cutshaw will explain in more detail in their 1 A. testimony, the Company is very conscious of the economic environment within 2 which we are making this request for an increase. While the revenue increase is 3 paramount to our ability to continue to provide safe, reliable service to our 4 5 customers, we do recognize that any rate increase can result in a hardship to 6 customers. Over the past several years, we have diligently pursued other avenues by which we might achieve overall bill savings for customers. The most critical focus 7 8 has been on reducing the cost of wholesale purchased power. FPU's base rates are 9 among the lowest for Florida utilities. Our wholesale power costs have, however, been among the highest over the past five years. We have made significant progress 10 11 in that area by negotiating an amendment to our existing purchase power agreement with Gulf Power and by entering into an agreement to purchase renewable power 12 from the Rayonier Performance Fibers QF cogeneration plant on Amelia Island. We 13 also make periodic as available power purchases from the Rock Tenn QF 14 cogeneration plant also on Amelia Island. Each of these actions has produced 15 significant savings for our customers. Other options are under consideration. 16

17It is FPU's intent to file in May 2014 a proposed purchase power agreement18to acquire power from Eight Flags Energy, LLC, a Chesapeake affiliate. Eight Flags19is in the final stage of developing20The FERC certified QF21would sell22are anticipated to be significantly lower than FPU's current wholesale power23purchase pricing. In addition, the



22 possible.

23

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- 1 Q. Does this conclude your direct testimony?
- 2 A. Yes.

FLORIDA PUBLIC UTILITIES COMPANY Year By Year Comparison Of Electric Residential Bill (1,000 kwh customer) Period Of 2009 - Current (Proposed Rates) DOCKET NO.: 140025-EI

NORTHEAST RESIDENTIAL TYPICAL BILL FOR 1,000 KWH'S							
Residential (RS)							
	2009	2010	2011	2012	2013	2014	Proposed
Customer Charge	\$12.00	\$12.00	\$12.00	\$12.00	\$12.00	\$12.00	\$16.00
Base Rate Energy Charges (\$/KWH)	\$0.01958	\$0.01958	\$0.01958	\$0.01958	\$0.01958	\$0.01958	\$0.02170
Base Rate Demand Charges (\$/KW)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Purchased Power Cost Recovery Clause (\$/KWH)	\$0.09438	\$0.09615	\$0.09630	\$0.09311	\$0.09786	\$0.08975	\$0.08975
Energy Conservation Cost Recovery Clause (\$/KWH)	\$0.00078	\$0.00080	\$0.00115	\$0.00115	\$0.00155	\$0.00100	\$0.00100
Gross Reciepts Tax	\$3.25	\$3.30	\$3.31	\$3.23	\$3.36	\$3.14	\$3.29
Total Monthly Bill	\$129.99	\$131.83	\$132.34	\$129.07	\$134.35	\$125.47	\$131.74
Base Revenue % Increase		0.0%	0.0%	0.0%	0.0%	0.0%	19.4%
Total % Increase		1.4%	0.4%	-2.5%	4.1%	-6.6%	5.0%
Units	1,000	1,000	1,000	1,000	1,000	1,000	1,000
NORTHWEST RESIDENTIAL TYPICAL BILL FOR 1,000 KWH'S							
Residential (RS)							
	2009	2010	2011	2012	2013	2014	Proposed
Customer Charge	\$12.00	\$12.00	\$12.00	\$12.00	\$12.00	\$12.00	\$16.00
Base Rate Energy Charges (\$/KWH)	\$0.01958	\$0.01958	\$0.01958	\$0.01958	\$0.01958	\$0.01958	\$0.02170

\$0.00

\$0.10093

\$0.00078

\$3.42

\$136.71

1,000

Base Revenue % Increase

Total % Increase

Units

\$0.00

\$0.11927

\$0.00080

\$3.89

\$155.54

0.0%

13.8%

1,000

\$0.00

\$0,10136

\$0.00115

\$3.44

\$137.53

0.0%

-11.6%

1,000

\$0.00

\$0.09854

\$0.00115

\$3.37

\$134.64

0.0%

-2.1%

1,000

\$0.00

\$0.09883

\$0.00155

\$3.38

\$135.34

0.0%

0.5%

1,000

\$0.00

\$0.09740

\$0.00100

\$3.33

\$133.31

0.0%

-1.5%

1,000

\$0.00

\$0.09740

\$0.00100

\$3.49

\$139.59

19.4%

4.7%

1,000

Base Rate Demand Charges (\$/KW)

Gross Reciepts Tax

Total Monthly Bill

Purchased Power Cost Recovery Clause (\$/KWH)

Energy Conservation Cost Recovery Clause (\$/KWH)

Exhibit No. Docket No. 140025-EI Exhibit JMH-1 Page 1 of 1

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FLORIDA PUBLIC UTILITIES COMPANY Docket No. 140025-EI

DIRECT TESTIMONY and EXHIBITS OF CHERYL M. MARTIN

Direct Testimony of Cheryl Martin

1 2

Q. Please state your name, affiliation, business address, and summarize your academic background and professional experience.

3 A. My name is Cheryl Martin. I am the Director of Regulatory Affairs for Florida 4 Public Utilities Company (FPU) including the Florida Division of Chesapeake 5 Utilities (Central Florida Gas or CFG), Peninsula Pipeline, and Eight Flags 6 Energy, LLC (Eight Flags). FPU has its administrative offices at 1641 7 Worthington Road, Suite 220, West Palm Beach, Florida 33409. I have been 8 employed by FPU since 1985 and performed numerous accounting functions until 9 I was promoted to Corporate Accounting Manager in 1995 with responsibilities 10 for managing the Corporate Accounting Department including regulatory 11 accounting (fuel, PGA, conservation, rate cases, surveillance reports, reporting), 12 tax accounting, external reports, and special projects. In January 2002, I was 13 promoted to the position of Controller where my responsibilities included those 14 above with additional responsibilities in the purchasing and general accounting 15 areas and Security and Exchange Commission (SEC) filings. I was promoted to 16 my current position in August 2011. My current responsibilities include directing the regulatory affairs for the Company in Florida including regulatory analysis, 17 18 and reporting and filings before the Florida Public Service Commission (FPSC) 19 for FPU, FPU-Indiantown, FPU-Fort Meade, Central Florida Gas, and Peninsula 20 Pipeline Company. I graduated from Florida State University in 1984 with a B.S. 21 in Accounting. I am also a Certified Public Accountant in Florida.

Q. Have you filed testimony before the Florida Public Service Commission in prior cases?

24 A. Yes, on several occasions. Among the dockets in which I have participated most

Direct Testimony of Cheryl Martin

1 recently, I testified in the Company's 2007 rate case in Docket No. 070304-EI, as 2 well as the 2003 rate case in Docket No. 030438-EI, the 1993 rate case in Docket 3 No. 930400-EI, and our 1988 rate case in Docket No. 881056-EI. I also provided 4 testimony in the 2008 rate case for our Natural Gas Division in Docket No. 5 080366-GU, as well as the 2004 Natural Gas rate case in Docket No. 040216-GU 6 and the 1990 and 1994 rate cases, addressed in Dockets Nos. 900151-GU, and 7 940620-GU, respectively. I have also filed testimony on numerous occasions in 8 the Fuel and Purchased Power Cost Recovery proceeding, as well as in the 9 Conservation Cost Recovery clause dockets and the annual Purchased Gas 10 Adjustment proceedings. In addition, I have also been involved in the 11 development of other regulatory filings in Florida on behalf of FPU and other 12 Chesapeake companies.

13

14 Q. Do you have any exhibits to which you will refer in your testimony?

- 15 A. Yes. A summary of those exhibits follows:
- 16 <u>Exhibit CMM-1</u> provides a list of the MFRs that were prepared under my
 17 supervision and direction.
- 18 <u>Exhibit CMM-2</u> provides the detail for the account and amortization of the
 19 Regulatory Asset-Pensions.
- <u>Exhibit CMM-3</u> provides the detail for the account and amortization of the
 Regulatory Asset Litigation Costs/Gulf Refund.
- <u>Exhibit CMM-4</u> provides the detail for the account and amortization of the
 Regulatory Asset -Tax Step Up (A new regulatory asset requested in this
 proceeding).

- 3 -

Direct Testimony of Cheryl Martin

- <u>Exhibit CMM-5</u> provides the detail for the account and amortization of the
 Regulatory Liability –Tax Gain.
- <u>Exhibit CMM-6</u> provides the detail for the account and amortization of the
 Regulatory Liability Post Retirement Benefit.
- 5 <u>Exhibit CMM-7</u> provides the detail for the account and amortization of the
- 6 Regulatory Asset General Liability Claim and the related General Liability
- 7 Reserve (A new regulatory asset and reserve being requested in this proceeding).
- 8 <u>Exhibit CMM-8</u> provides the Company's current and former Paid Time Off
 9 Policies.
- 10

11 Q. Are you sponsoring any MFRs in this case?

- A. Yes. I am sponsoring the MFRs listed in Exhibit CMM-1. I have reviewed and
 support the analysis and schedules listed in this exhibit. To the best of my
 knowledge, these MFRs are true and correct.
- 15

16 Q. What is the purpose of your testimony in this proceeding?

17 I am providing the financial information that supports the proposed increase in A. 18 revenue requirements for FPU, electric operations. I am specifically responsible 19 for the information provided in the Minimum Filing Requirements (MFR) 20 Schedules A, B, C, D, F and G, as indicated in Exhibit CMM-1. Supporting 21 information and additional testimony for these schedules has also been provided 22 by the Corporate Office of Chesapeake Utilities Corporation (CUC) under the 23 direction of the Corporate Vice President, Matt Kim, as well as the Director of 24 Electric Operations, Drane A. "Buddy" Shelley, and Director of Business

1 Planning and Engineering, Mark Cutshaw. The President of Florida Public 2 Utilities Company, Jeffry Householder, has also included testimony in support of 3 this proceeding. The Company's Director of Sales and Marketing, Aleida 4 Socarras, our Director of Customer Care, Mariana "Guilly" Perea and our Cost of 5 Capital and Billing Determinant experts, Paul Moul, and Robert Camfield, 6 respectively, have likewise provided information that I have utilized in the development of these schedules. With regard to the MFR E Schedules, Mark 7 8 Cutshaw is specifically responsible for the information provided therein.

9

10 Q. Why is FPU seeking a rate increase in its base rates at this time?

11 A. The last rate increase proceeding was initiated seven years ago and was based on 12 a 2006 historic year and 2008 forecasted test year. Since that time, the Company 13 has been acquired by Chesapeake Utilities Corporation, a transaction 14 consummated in 2009. Prior to the merger, the Company did not have adequate 15 capital resources to make necessary reliability improvements to the electric 16 systems or facilities in its service territories. In stark contrast, as a new subsidiary 17 of Chesapeake, the Company has undertaken significant reliability improvements 18to its electric system, and capital expenditures have increased since the last rate 19 proceeding. Also as a result of the merger, the Company has experienced 20 decreases in certain expenditures since its last rate proceeding due to specific 21 measures taken by the Company to consolidate functions within the electric 22 operations. Some of these costs savings measures have been offset by increases 23 in costs including expanded safety measures, increased communication to our 24 employees and customers, and enhanced customer care initiatives. Our

- 5 -

1 projections indicate that we can expect many costs to continue to increase; and for the most part, these costs are beyond our control. The Company is committed to 2 3 providing customers, reliable service and superior customer service, while also 4 ensuring our employees are adequately trained, operate in a safe environment, and 5 are adequately compensated with competitive pay and benefits. Another 6 contributing factor is the inflationary impacts on new and replacement utility 7 plant, as well as operating expenses. Cost increases continue to contribute to the 8 declining rate of return. The Company believes the proposed September 2015 test 9 year will accurately reflect the economic conditions in which the consolidated 10 electric division will be operating during the first twelve months the new rates 11 will be in effect, and as such, this period is appropriate for rate setting purposes. The Company has not been able to achieve its allowed rate of return in the last 3 12 years. It has therefore become necessary for the Company to seek a rate increase 13 at this time to allow the Company the opportunity to earn a fair rate of return on 14 15 its investment in utility plant and working capital. Earning a fair rate of return 16 will enable the Company to continue providing a high quality of service and to 17 maintain its financial integrity, which are in the best interest of its customers.

- 18
- 19

Revenue Requirement

20 Q.

Q. What is the revenue increase requested by FPU in this proceeding?

A. FPU is requesting a permanent increase in the electric rates and charges for its
 consolidated electric operations in the amount of \$5,852,171 in order to cover the
 deficiencies in revenue for the projected test year ending September 30, 2015. In
 accordance with Rule 25-6.140, F.A.C., Test Year Notification, we have notified

- 6 -

25	А.	FPU is seeking Interim Rate Relief because as of September 30, 2013 the
24		you seeking Interim Rate Relief at this time?
22 23	Q.	You are also requesting that the Commission grant interim relief. Why are
21		Interim Revenue Requirement
20		projected rate base is \$60,596,169 and is provided in MFR Schedule B-1.
19		charges. The required rate of return is 7.18% as shown on Schedule D-1a. The
18		required increase amounts to an additional \$5,852,171 in annual electric rates and
17		the additional revenue required to realize a fair rate of return on rate base. This
16		operating income is then expanded using the revenue expansion factor to arrive at
15		and charges and projected rate base and operating expenses. Any deficiency in
14		operating income, shown on MFR Schedule C-1 using our existing billing rates
13		income is then compared to the projected year ended September 30, 2015
12		of return to arrive at the operating income required. This required operating
11		is determined by multiplying the projected test year rate base by the required rate
10	2.53	summarized on MFR Schedule A-1. In summary, the 2015 revenue requirement
9	A.	The derivation of the revenue requirement and projected revenue deficiency is
8	(S))	2015 test year?
7	0.	How did you derive the projected revenue requirement for the September 30.
6		revenues for the instoric year ended September 50, 2015.
4		consolidated operations in the amount of $52,433,314$ based on deficiency in
3		PPU is also requesting an interim increase in the electric rates and charges for its
2		2015 as the projected test year for our petition to increase our rates and charges.
1		the FPSC that we have selected the twelve month period ending September 30,

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1 Company is not earning a sufficient return on its investment to allow shareholders 2 the opportunity to earn a fair rate of return. Capital investments, including 3 reliability improvements, have increased without significant offsetting customer 4 growth. Expenses have increased, and the current trends in the housing markets. 5 appliance efficiency, and overall economy have presented further pressures that 6 negatively impact our earnings. For several years, the Company has been, and is, 7 currently below the low point of our allowable return. Without rate relief, the 8 Company is expected to continue to earn a return well below its allowable rate of 9 return. If that continues, this will jeopardize our ability to provide sufficient, 10 consistent reliable service to our customers. With the length of the rate case 11 process, interim rates will mitigate our negative earnings posture through the 12 pendency of the rate case and until final rates can be put in place.

13

14 Q. How did you derive the interim revenue requirement?

15 Α. The derivation of the revenue requirement for interim relief is summarized in 16 MFR Schedule G-1. In summary, the interim revenue requirement is determined 17 by multiplying the historic year ended September 30, 2013 rate base by the 18 required rate of return using the last authorized rate of return (low-point 19 authorized common equity rate) to arrive at the operating income required. This 20 required operating income is then compared to the actual year ended September 21 30, 2013 operating income. Any deficiency in operating income is then expanded 22 using the revenue expansion factor to arrive at the additional revenue required on 23 an interim basis until final rates can be reviewed and authorized. The required 24 rate of return for interim purposes is shown on MFR Schedule G-19a. The

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interim rate base for the historic year ended September 30, 2013 is shown on
 MFR Schedule G-2.

3

4 We have made the appropriate net operating income (NOI) adjustments in this 5 filing to reflect the findings in the Company's last rate case, including elimination 6 of fuel and conservation costs and revenues; elimination of shared facilities with 7 non-regulated operations, and interest synchronization. We have removed any 8 item that belonged in a prior period, or was out of period, as appropriate in the 9 historic year net operating income schedules, and consistent with Commission 10practice. See explanations in the NOI section of this testimony for additional 11 details on those adjustments.

12

13 We are asking therefore that the Commission allow us to collect appropriate 14 interim rates pending the effective date of the final order in this proceeding. We 15 recognize that, in accordance with Section 366.071, F.S., any approved interim 16 increase will be subject to refund with interest upon the outcome of these 17 proceedings. We therefore request that the Commission allow the Company to 18 secure the requested amount through corporate undertaking, in lieu of a bond. 19 FPU, through its parent Chesapeake, has sufficient liquidity, ownership equity, 20 profitability, and interest coverage to guarantee any potential refund as reflected 21 by our financial statements, which are incorporated in the MFR Schedules F-1 and F-2. 22

- 23
- 24

1		Rate Base
2	Q.	What is the amount of rate base included in the projected test year
3		September 30, 2015, as a basis for determination of revenue requirement?
4	А.	As set forth in MFR Schedule B-1, Rate Base for the projected test year is
5		\$60,596,169. The Rate Base is comprised of two main sections, Net Plant and
6		Working Capital.
7		
8	Q.	What was the basis for projecting the Rate Base?
9	A.	The Company did a detailed analysis and projection of capital projects,
10		retirements, and other components for the projected years ending September 30,
11		2014, and September 30, 2015, to project Net Plant. The Company utilized
12		experts in the division, including the Director of Electric Operations, Drane
13		(Buddy) Shelley, and Director of Business Planning and Engineering, Mark
14		Cutshaw, as well as input from other key employees to determine the projects,
15		amounts and timing of items to be included in Net Plant projections. The
16		Company has planned capital projects required by storm hardening, reliability,
17		infrastructure replacement, and other key projects; all have been incorporated into
18		these projections. Working Capital was projected using both trend factors
19		applied to the historic year September 30, 2013 thirteen month average balances
20		or year end balances as appropriate, and direct projections for certain balance
21		sheet accounts that do not lend themselves to projections based on trend factors.
22		
23	Q.	What is the amount of FPUC's capital additions for the historic year ending

24 September 30, 2013, and the capital budget for the two projected years

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1		ending September 30, 2014 and 2015, respectively?
2	А.	The capital additions for the twelve months ending September 2013 were
3		\$6,936,887. The capital budget for periods ending September 30, 2014 and 2015
4		are \$6,706,924 and \$3,195,398 respectively.
5		
6	Q.	Please explain how the Capital Budget forecasts were developed for this rate
7		proceeding?
8	A.	For all utility plant accounts and construction work in progress (CWIP), actual
9		account balances were used through February 2014. For the remainder of 2014
10		through September 2015, plant accounts were projected based on anticipated
11		changes in timing, projects and amounts. The original internal 2014 FPUC capital
12		budgets were developed during the latter half of the previous year, using detailed
13		analysis of planned projects at the time of the budget development. Detailed
14		analysis of this original plan was completed during the early part of 2014 by
15		division directors and managers, and the capital forecasts were updated with
16		known and planned changes.
17		
18	Q.	Why did the Company's Capital Budget forecast change from the internal
19		budget used for financial reporting?
20	А.	The budget that is currently used in financial reporting was prepared well before
21		the rate proceeding was compiled. The Company used the internal budget
22		forecasts for capital projections as a starting point for the forecast for this rate
23		proceeding. It was updated with more timely information and expectations. A
24		more thorough review of the capital projects was completed by key management

personnel responsible for capital projects, including Drane "Buddy" Shelley and
 Mark Cutshaw. Their panel testimony includes more details regarding the
 projected capital projects for the two projected years reflected in this rate
 proceeding.

- 5
- Q. Are the capital projects and related forecasts included in this rate proceeding
 the best estimate for what will be expected during the two projected years
 ending September 30, 2015?
- 9 A. Yes, the forecasts used in rate base for net plant are the most up to date estimates
 10 of what is expected and planned. The Company prepared detailed projections for
 11 expected projects and retirements, and the projections used in this rate proceeding
 12 reflect our best estimate for the plant that will be in service or under construction
 13 for the two projected years.
- 14

15 Q. Are the capital projects planned for the two projected years necessary?

16 Yes, as further explained in the panel testimony of our witnesses Mark Cutshaw Α. 17 and Buddy Shelley, the planned projects consist of replacing and/or upgrading 18 aging/unreliable underground conductors, relay control schemes at substations, 19 transmission circuit breakers, substation buss, wooden poles, distribution 20 regulators/reclosures and the relocation of inaccessible distribution lines to 21 The planned capital projects are necessary for system reliability, roadways. 22 improvements and replacement.

- 23
- Q. Is it appropriate to include the construction work in progress (CWIP)
 planned for the projected test year in rate base?

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1 Α. Yes, the Company should be allowed to earn a fair return on capital projects 2 under construction. Costs associated with these projects are all prudently incurred 3 and necessary, and therefore, should be included in rate base. Historically, the 4 Commission has allowed construction work in progress to be included in rate base 5 for FPU. These projects are not subject to the Allowance for Funds Used during 6 Construction and accordingly, will not receive duplicate recovery on these 7 projects while in construction. In its previous rate case in Docket 070304-EI, the 8 Company had included, for full recovery in rate base, a transformer that was 9 ordered during the historic year, 2006; but, it had not been delivered by December 10 2007. The Company proposed that, for the purposes of rate setting, it was 11 appropriate that the full 13-month average remain in the 2008 average rate base 12 and be allowed for recovery. The Company also received recovery for CWIP 13 during the projected test year. The Commission agreed and accepted our proposal. 14 If full recovery of CWIP had not been allowed, it would have accelerated the need 15 for the Company to seek further rate relief sooner than otherwise necessary, 16 thereby increasing the overall cost to the customers associated with rate case 17 costs. With this filing, we also believe it is appropriate for the Commission to 18 allow us to recover costs associated with ongoing construction; because, these 19 projects are critical to maintaining and improving our system reliability and 20 ability to meet our customers' needs.

Q. What was the basis for the trend factors used for certain working capital items?

A. MFR Schedule C-7 contains a listing of the projection factors used. The most
 commonly used trend factors include Inflation, Payroll Growth, Customer
1	Growth, and Inflation & Customer Growth. The payroll trend factor is based on
2	historical data, the experience of the Company's Human Resources Director, and
3	her best estimate of expected payroll increases for both 2014 and 2015. The
4	factors for customer growth, unit (kWh) growth and revenues are based on
5	detailed analysis and the results from revenue related projections used within this
6	rate proceeding. The methodology used to determine the billing determinant and
7	revenue factors as well as the inflation factors are explained in greater detail in the
8	testimony of Robert Camfield.

9 Trend factors were used that were consistent with those used in expense
10 projections and in our prior rate proceedings.

11

12 Q. How were the relative trend factors applied to working capital?

13 A. The Company reviewed each balance sheet item, and when appropriate utilized a 14 trend factor applied to the thirteen month average balance when it was necessary 15 to reflect fluctuations that occur due to payment timing and seasonality. Some 16 accounts were trended using the balance that existed at year end, when those 17 accounts do not fluctuate with payment timing and seasonality. This basis 18 produced a better projection. The Company performed analysis of all working 19 capital components; reviewed historical methodology used for these same 20 components, reviewed expense items related to these components, and relied upon 21 internal expertise to determine the most appropriate factor to project the working 22 capital components. Customer growth was used in trending the balance sheet 23 accounts where the transactions were directly or indirectly associated with billing 24 determinants. Inflation was used to trend accounts directly impacted by

1		anticipated cost of living increases. Payroll was used to trend all payroll related
2		accounts. Some accounts utilized a combination of trend factors such as Account
3		1420-Accounts Receivable, when changes not only are impacted by customers,
4		but also the inflationary impacts to costs.
5		
6	Q.	What items included in working capital were projected using a direct method
7		and what is a summary of the basis for those projections?
8	А.	Some working capital accounts were projected using a method outside of a pure
9		trend. Several accounts were directly projected using historical data, known or
10		expected changes, or separate detailed analysis. The details of these projections
11		are summarized below:
12		
13		Account 1240/1430-A/R Other Investments: The balance of this account does
14		not typically fluctuate year to year or month to month and is not expected to
15		change in the next two projected years. The historic year-end amount was used to
16		project this account.
17		
18		Account 1310-Cash: This account was projected using a combination of trend
19		factor and direct estimate. Since this account is materially impacted by accounts
20		receivables and fuel related purchases, the customer growth factor was applied to
21		the historic September 2013 13-month average balance of Depository Cash to
22		arrive at the projected 13-month average balances for September 2014 and
23		September 2015, respectively. The individual months for the projected years were
24		then trended based on the monthly balance fluctuations of the historic year to

1	account for seasonality. Part of this account, Account 1312-General
2	Disbursements - Cash, was forecast to remain at the normal level of outstanding
3	checks to be funded by FPU's parent company, Chesapeake Utilities Corporation.
4	
5	Account 1350-Petty Cash: The balance of this account does not historically
6	fluctuate, nor is it expected to fluctuate in the two projected years. Accordingly,
7	this account was projected to remain at \$8,000 per month.
8	
9	Account 1430-Miscellaneous Accounts Receivable: The monthly balance of this
10	account does not typically fluctuate from year to year and is not expected to
11	materially change in the two projected years. The historic amounts were used for
12	the projection.
13	
14	Account 1730-Unbilled Revenues: A detailed analysis and forecast of unbilled
15	revenues was prepared by our witness Robert Camfield for the projected years.
16	Management reviewed and supports this estimate, and accordingly, this was used
17	to project the related working capital component.
18	
19	Account 1823-Other Regulatory Assets Pension and Other Post-Retirement
20	Benefits (OPRB): The projected years were computed by using the actual
21	monthly balances from October 2013 through February 2014. We then adjusted
22	each subsequent month's balance by the monthly amortization of \$23,064,
23	authorized by the Florida Public Service Commission to commence in November
24	2009, and to continue through the remaining life of the asset. The Company

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1	received authorization from the Commission by Order PSC-08-0134-PAA-PU to
2	create a regulatory asset related to a valuation adjustment on pension and retiree
3	medical expense in accordance with FASB 158 requirements that existed due to
4	the merger between FPU and Chesapeake Utilities Corporation. Company
5	witness Matt Kim provides additional details on the pension expense projection in
6	his testimony. See Exhibit CMM-2 for details on the account and amortization
7	amounts reflected in the MFR.
8	
9	Account 1823-Other Regulatory Assets Tax Step-up: Since the merger, FPU's
10	statutory rate increased to 35 percent. This increase in the federal statutory rate
11	increased FPU's effective income tax rate to 38.575 percent from 37.63 percent.
12	Since FPU had a net deferred tax liability associated with its plant assets at the
13	time of the merger, this resulted in a deficiency in the deferred tax reserve. The
14	South Georgia method is one of the methods of the tax normalization accounting,
15	which allows utilities to amortize the deficiency over the remaining lives of the
16	property that gave rise to the deficiency. The tax step-up currently in regulatory
17	assets, including tax gross up is \$248,666. See Exhibit CMM-4 for details on the
18	amortization amounts reflected in the MFR.
19	
20	Account 1823-Other Regulatory Assets Deferred Litigation: The Company
21	requested deferral treatment for the NW litigation costs in 2012. The
22	Commission granted the Company's request for this deferral by PSC Order No.
23	12-0600-PAA-EI and Order No. 13-0599-PAA-EI. This account reflects the

24 actual amounts being amortized during the projected periods.

1

2 Specifically, in August 2012, FPU requested approval to establish a regulatory 3 asset to defer the litigation expenses associated with ongoing litigation with the 4 City of Marianna. The basis and reasons for that litigation are detailed in full in 5 prior Commission Dockets Nos. 100459-EI, 110041-EI, 120227-EI, and 130233-6 EI. On November 5, 2012, the Commission approved our request and permitted 7 the Company to amortize the accumulated litigation costs, \$1,869,657, over a 5-8 year period beginning January 2013. In March 2013, FPU and the City of 9 Marianna reached a settlement resolving the aforementioned litigation. With the 10 litigation resolved, Gulf began charging the lower capacity payments based on the 11 amendment to our purchased power agreement that was approved in Docket No. 12 110041-EI. Gulf also refunded to FPUC the difference between the higher 13 capacity payments from the original agreement and the lower capacity payments 14 set forth in the approved amendment.

15

On November 13, 2013, the Commission issued Order No. PSC-13-0599-PAA-EI, allowing FPUC to apply the refund of \$1,766,624 to the regulatory asset and amortize the net remaining amount over the existing five year period. The Regulatory Asset – Litigation reflects the appropriate amount in accordance with the Commission Order. See Exhibit CMM-3 for the account and amortization amounts reflected in this rate proceeding.

22

Account 1860-Deferred Rate Case: The projection for this account was based on
 detailed estimates based on expected expenditures necessary to prepare this rate

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proceeding. The total accumulated rate case expense was then amortized over
 five years. MFR Schedule C-10 and additional testimony contained within this
 document, includes more details on the rate case expense.

4

5 Account 228.1-Storm Reserve: The projected balance of this account was forecast 6 to increase by monthly accruals of \$10,135 over the historic year, and adjusted for 7 estimated storm costs based on historical activity and inflationary impacts to 8 This amount is consistent with our prior rate proceedings, See expected costs. 9 Docket No. 070300-EI. Conditions related to storm activity has not materially 10 changed from our last rate proceeding to warrant a change in the storm reserve at 11 this time. The reserve, with current accruals, is sufficient to provide recovery for 12 storm costs over the next five years.

13

Account 2282-Accrued Liability Insurance: This account was projected based on detailed analysis of historical activity, known claims, and to project the impacts from a requested general liability reserve. I will further address the requested General Liability expense and reserve in the NOI section of my testimony. Our witness Matt Kim also addresses details associated with this in his testimony. See Exhibit CMM-7 for the amortization reflected in this proceeding.

20

Account 2283-Accrued Pension & Post Retirement Medical, Account 2283 Accrued Pension & Post Retirement Medical Allocated and Account 2283 Accrued Retiree Fees, Claims & Contributions: These accounts were projected
 based on a detailed estimate provided by Matt Kim on expected Pension and Post

1	retirement expenses. Matt Kim's testimony includes additional details
2	surrounding the related expense accounts.
3	
4	Account 2370-Interest Accrued: The Company currently accrues interest on its
5	mortgage bond at \$60,533 (allocated @ 24% to electric) per month and makes
6	semiannual payments on the accumulated balance in May and November of each
7	year. The Company projected the monthly balances in the test year to reflect this
8	same historic year amount.
9	
10	Account 2410-Tax Collections Payable: The balance of this account typically
11	does not fluctuate from zero. Tax payments generally match monthly accruals.
12	The Company appropriately projected this account to consistently maintain an
13	expected zero balance.
14	
15	Account 2420-Misc. Current & Accrued Liabilities: With very few exceptions,
16	this account has maintained a zero balance throughout the historic year. The
17	Company appropriately projected this account to consistently maintain an
18	expected zero balance.
19	
20	Account 2520-Customer Advances For Construction: This account contains
21	contracts with customers with an expiration date. The forecast reflects the
22	diminishing balance due to expected refunds at the contract expiration date, with
23	no additional contracts projected.

24

Direct Testimony of Cheryl Martin

1	Account 2540-Regulatory Liability: This account contains the actual amount of a
2	deferred gain, and the associated amortized amount authorized by the Florida
3	Public Service Commission in Order No. PSC-12-0574-PAA-PU, issued October
4	24, 2012. By that Order, FPU received approval to record a tax liability
5	associated with vehicle depreciation as a regulatory liability and amortize that
6	liability over a 34-month period beginning January 1, 2012, through October 31,
7	2014. See Exhibit CMM-5 for the account and amortization amounts reflected in
8	this rate proceeding.

This account also contains an additional regulatory liability associated with a one-10 time gain FPU incurred due to a change made to the Company's Post-Retirement 11 Benefits. The merger between FPU and CUC prompted a continued effort to 12 conform the benefits offered to FPU's employees to those offered to CUC's 13 employees. This change reduced FPU's obligation under the plan. 14 By Commission Order No. PSC-13-0594-PAA-PU, FPU was allowed to recognize 15 the one-time gain and amortize it also over the 34-month period beginning 16 January 1, 2012 and ending October 31, 2014. See Exhibit CMM-6 for the 17 account and the amortization amount reflected in this rate proceeding. 18

19

9

Q. Is working capital as projected appropriate for computing the projected test year rate base for the period ending September 30, 2015?

A. Yes, the working capital as projected is appropriate for inclusion into rate base for
 the period ending September 30, 2015. The Company performed analysis of
 working capital accounts, reviewed historical methodology used for these same

- 21 -

- components, and reviewed expense items related to these accounts to determine
 the most appropriate factor to use to project the working capital.
- 3

4 Q. Please elaborate with more information to understand what is included in 5 Net Plant.

- 6 A. The Company has included costs of significant reliability improvements to the 7 infrastructure of its electric operations made since the last rate proceeding or will 8 be made during the projected test year and prior year. In addition, the Company 9 was operating out of facilities in its Northeast (NE) division, which were not only 10 inadequate in terms of space, but were also in need of substantial repairs. In 11 particular, the warehouse was deteriorating and was not sufficient to allow the 12 Company to properly serve our customers, as further discussed in the panel 13 testimony of witnesses Cutshaw and Shelley. There was not sufficient space in 14 the administrative building or the warehouse to sufficiently serve the customers in 15 this area or provide employees with adequate working facilities. The Company 16 therefore made a prudent decision to build a new facility, which included the warehouse complex. This facility was prudently constructed, is centrally located, 17 18 allows for efficient communications between personnel, and is adequate to serve its customers. To be clear, the Company has removed the old warehouse from 19 20 rate base for purposes of rate base determination.
- 21

The old administrative building located in the NE division is currently being used for Florida Common purposes, and associated costs are allocated among the Florida business units, because they share in the benefits of the Common services

1		and functions. This building is allocated to the Florida business units based on
2		the level of investment by Business Unit; electric receives 16.7% of this
3		allocation. This percentage is a fair estimate for the benefit the electric utility
4		receives from this facility, and as such, is allocated appropriately.
5		
6		Details of these and specific larger projects embedded in the rate base projections
7		have been included in the MFRs, as well as the testimony provided by witnesses
8		Cutshaw and Shelley.
9		
10	Q.	What are the items that are included in net plant that have been allocated
11		from Corporate to the Electric operating unit?
12	А.	The eCIS plus is a corporate wide billing system project. This is an upgrade from
13		the current billing system. eCIS plus is being allocated from the Company's
14		Corporate CWIP to each business unit's CWIP, based on their respective number
15		of customers. This project is expected to enhance the options available to
16		customers as well as provide additional analysis to the Company. See Mariana
17		Perea's testimony for more details regarding the improvements made to customer
18		service including those anticipated in the near future.
19		
20	Q.	What are the items that are included in net plant that have been allocated
21		from Florida Common to the Electric operating unit?
22	А.	The Company determined that certain Plant Assets were categorized as Florida
23		Common due to their shared utilizations between multiple regulated and/ or non-
24		regulated utilities. These assets are detailed on Schedule B-8 under Common

Plant.

2

1

3 Q. What is the basis for the allocation from Common Plant to the Utility?

A. Many common plant accounts, with the exception of Computer Equipment and
Software and the Florida Common office, were allocated based on the utility's
share of non-Common, total consolidated plant (exclusive of Computer
Equipment and Software). Common's Computer Equipment and Software
accounts were allocated to the electric utility based on the utility's share of total
consolidated customers. The Florida NE Common office was allocated based on
net investments.

11

12 Q. How does the electric division benefit from these assets?

A. These assets are necessary to the electric division in the day-to-day operations of the utility, enabling the Company to effectively and efficiently function in a number of areas, ranging from internal communications to customer care to maintenance issues. They are essential to the electric division, and the overall Company, in the performance of its duties and service to its customers. Shared resources provide benefits to the electric customers through efficient utilization of assets.

20

Q. Please explain the item and nature for all adjustments included in rate base for the historic and projected years included in the MFR filing?

A. The Company has removed plant and its reserve for a portion of the assets used
 for non-utility operations, consistent with the treatment approved in Docket

Direct Testimony of Cheryl Martin

1 070304-EI. The adjustment to net plant, for the historic test year, decreased rate 2 base by \$222,737. For the period ending September 30, 2014, rate base was 3 decreased by \$507,448, and for the period ending September 30, 2015, rate base 4 was decreased by \$407,936.

5

In our last rate case Order, Order PSC-08-0327-FOF-EI, the Commission eliminated fuel and conservation under-recoveries and employee receivables. An adjustment was made to rate base to remove the net under-recoveries, which were \$227,971 in the historic year, \$590,782 at September 30, 2014, and \$250,042 for the projected year ending September 30, 2015. The projected amounts of fuel under and over recoveries were based on detailed analysis of the expected fuel cost recovery in the projected years.

13

In that same Order PSC-08-0327-FOF-EI, the Commission also eliminated Non-Utility (Employee) Receivables from working capital. Working capital was increased in the historic year because the employee receivable included in the actual 13-month average balance sheet at September 30, 2013 was a credit of \$4,248.

19

The Commission likewise removed one-half of deferred rate case expenses. Consistent with the Commission's decision, we removed one-half of the projected deferred rate case expenses. The reduction to projected rate base was \$148,077 in the September 30, 2014 test year and \$346,028 in the September 30, 2015 test year. There was no adjustment necessary to the historic test year for this item

1

since there was no rate case expense being amortized.

2

3 The historic test year included other adjustments to record amortization of 4 regulatory assets and liabilities that were established by Commission Orders in 5 2012 and 2013. These adjustments were not necessary in the projected years 6 because the assets and liabilities were forecast for the September 30, 2014 and 7 2015 years using the adjusted amounts. For instance, in the historic test year, a 8 regulatory asset was established by Order No. PSC-12-0600-PAA-EI for recovery 9 of litigation costs with the City of Marianna. The Commission later approved a 10 settlement whereby the Company was allowed to substantially reduce that asset 11 by the amount of proceeds of a refund from Gulf Power, as set forth in Order No. 12 PSC-13-0599-PAA-EI. The 13-month average of the costs less the amount 13 approved by the settlement and the approved amortization resulted in an average 14 balance of \$470,288. However, the actual net average balance recorded in 15 working capital for this asset was \$377,922. Therefore, an increase of \$92,306 was made to rate base for 2013 to reflect the authorized amount and amortization 16 17 in the Commission orders.

18

19 Commission Order PSC-13-0594-PAA-PU issued on November 4, 2013, 20 established a regulatory liability for the one-time gain realized as a result of the 21 change in its post retirement benefits and approved the Company to amortize the 22 regulatory liability over a 34-month period beginning January 1, 2012 and ending 23 October 31, 2014. For the thirteen month average as of September 30, 2013, the 24 books reflected a balance of (\$258,659). Based on this order, the balance should

1		have been (\$144,545). Therefore, rate base was increased by \$114,114 for 2013
2		to reflect the Commission order.
3		
4		The final adjustment was to properly reflect the regulatory liability - tax gain and
5		related amortization established in Commission Order PSC-12-0574-PAA-PU.
6		The 13-month average balance included in the historic test year working capital
7		balance was (\$416,777). The balances based on the Commission Order resulted
8		in an average of (\$519,927). Therefore, rate base was reduced by \$103,150.
9		
10		No other adjustments were made to rate base.
11		
12		Revenues and Billing Determinants
13		
13 14	Q.	What was the method for determining the projected test year billing
13 14 15	Q.	What was the method for determining the projected test year billing determinants?
13 14 15 16	Q. A.	What was the method for determining the projected test year billing determinants? The billing determinants and operating revenues have been projected using a test
13 14 15 16 17	Q. A.	What was the method for determining the projected test year billing determinants? The billing determinants and operating revenues have been projected using a test year ended September 30, 2015. To project operating revenues for 2015 the
13 14 15 16 17 18	Q. A.	What was the method for determining the projected test year billing determinants? The billing determinants and operating revenues have been projected using a test year ended September 30, 2015. To project operating revenues for 2015 the Company used current rates multiplied by the projected 2015 weather-normalized
 13 14 15 16 17 18 19 	Q. A.	What was the method for determining the projected test year billing determinants? The billing determinants and operating revenues have been projected using a test year ended September 30, 2015. To project operating revenues for 2015 the Company used current rates multiplied by the projected 2015 weather-normalized billing determinants (number of customers and usage). The Company also
 13 14 15 16 17 18 19 20 	Q.	What was the method for determining the projected test year billing determinants? The billing determinants and operating revenues have been projected using a test year ended September 30, 2015. To project operating revenues for 2015 the Company used current rates multiplied by the projected 2015 weather-normalized billing determinants (number of customers and usage). The Company also included the impact of the energy efficient appliances, economic conditions and
 13 14 15 16 17 18 19 20 21 	Q.	What was the method for determining the projected test year billing determinants? The billing determinants and operating revenues have been projected using a test year ended September 30, 2015. To project operating revenues for 2015 the Company used current rates multiplied by the projected 2015 weather-normalized billing determinants (number of customers and usage). The Company also included the impact of the energy efficient appliances, economic conditions and projected base revenue increases on customer's consumption. Also, despite some
 13 14 15 16 17 18 19 20 21 22 	Q.	What was the method for determining the projected test year billing determinants? The billing determinants and operating revenues have been projected using a test year ended September 30, 2015. To project operating revenues for 2015 the Company used current rates multiplied by the projected 2015 weather-normalized billing determinants (number of customers and usage). The Company also included the impact of the energy efficient appliances, economic conditions and projected base revenue increases on customer's consumption. Also, despite some customer growth in our Northeast (NE) division, the Northwest (NW) division
 13 14 15 16 17 18 19 20 21 22 23 	Q.	What was the method for determining the projected test year billing determinants? The billing determinants and operating revenues have been projected using a test year ended September 30, 2015. To project operating revenues for 2015 the Company used current rates multiplied by the projected 2015 weather-normalized billing determinants (number of customers and usage). The Company also included the impact of the energy efficient appliances, economic conditions and projected base revenue increases on customer's consumption. Also, despite some customer growth in our Northeast (NE) division, the Northwest (NW) division continues to struggle with the economic downturn that the nation as a whole has

1		have the same prospect for customer growth that our NE division anticipates;
2		therefore, recovery has been slower. Robert Camfield further addresses this issue
3		in his testimony. Additional information with regard to the billing determinant
4		forecasts may also be found in Schedule F-5. Projected operating revenues for
5		2015 are shown on MFR Schedule C-5.
6		
7	Q.	Does the Company feel that the billing determinants and revenue forecast
8		used in this MFR filing are appropriate for the two projected years?
9	А.	Yes, the Company has reviewed the analysis, results and testimony provided by
10		Robert Camfield. After careful consideration, FPU has concluded that the results
11		are appropriate and fairly represent the revenues and billing determinants
12		expected for the two projected years including the projected test year ending
13		September 30, 2015.
14		
15		NOI and Operating Expenses
16	~	
17	Q.	Does the historic test year accurately reflect net operating income?
18	А.	Yes, the Company has included all adjustments to remove items that did not belong
19		("out of period") in the historic year, and accordingly the MFR Schedule C-1 for
20		the period ending September 30, 2013 reflects the appropriate historic year net
21		operating income. "Out of period" refers to adjustments on the Company's books in
22		the historic year that belong in another period. Other adjustments were required to
23		the historic year to remove items that do not belong to the electric divisions, or were
24		required in past rate proceeding.

1		
2	Q.	Please explain the items and basis for any adjustments made to operating
3		income for the historic year included in MFR Schedules C-2 and C-3.
4	A.	Fuel and Conservation:
5		Consistent with the prior rate proceeding, the fuel and conservation revenues and
6		expenses have been eliminated from both the historic and projected years. These
7		items are handled in separate dockets outside of the base rate proceeding and are
8		appropriate for review and approval within those separate proceedings.
9		
10		Gross Receipts and Franchise tax:
11		Gross Receipts tax and Franchise tax revenue and expenses have also been
12		eliminated from the historic and projected test years. Although they are not handled
13		in separate dockets, it is appropriate to remove them. They are a direct pass-
14		through for revenues and expenses and they are excluded from setting base rates.
15		
16		Unbilled Revenues:
17		Unbilled revenues were decreased by \$122,438 due to a correction made in
18		December 2013 that impacted the period January 2012 through December 2013.
19		The error involved the use of an improper input in the computation of unbilled
20		revenues; but, the issue was subsequently corrected. This reduced amount reflects
21		the portion of the adjustment made in December 2013 that belonged in the historic
22		year ending September 30, 2013.
23		

24 Marianna Litigation Expenses:

1 Adjustments were made to correct O&M and amortization expense associated with 2 the Marianna litigation. This is relevant to litigation initiated on March 2, 2011, 3 when the City of Marianna filed a complaint against FPU in the Circuit Court in 4 Jackson County, Florida. Further details regarding this issue are also included in 5 the panel testimony of witnesses Cutshaw and Shelley, as well as in the 6 Commission Docket No. 100459-EI. In summary, the City of Marianna alleged 7 that FPU breached its franchise agreement. The City of Marianna was seeking 8 judgment allowing it to exercise its option under the franchise agreement to 9 purchase FPU's property (consisting of the electric distribution assets) within the 10 City of Marianna. Prior to the scheduled trial date, FPU and the City of Marianna 11 reached an agreement in principle to resolve their dispute, which resulted in the 12 City of Marianna dismissing its legal action with prejudice on February 11, 2013. 13 Subsequently, FPU and the City of Marianna entered into a settlement agreement, 14 which contemplated, among other items, the City of Marianna proceeding with a 15 referendum on the purchase of FPU's facilities within the City of Marianna. On 16 April 19, 2013, the referendum took place, and the citizens of the City of Marianna 17 voted, by a wide margin, to reject the purchase of FPU's facilities by the City of 18 Total litigation expense associated with the City of Marianna was Marianna. 19 approximately \$1,871,000. As previously noted in my testimony, In August 2012, 20 the Company sought Commission approval to establish a regulatory asset to defer 21 the litigation expenses associated with the ongoing litigation with the City of 22 Marianna and amortize it over a five (5) year period beginning January 2013. Upon 23 receiving approval for treatment as a regulatory asset and approval to offset these 24 costs with the refund from Gulf Power Company, by Order No. PSC-12-0600-

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1	PAA-EI and Order No. PSC-13-0599-PAA-EI, respectively, the Con	npany reversed
2	expenses from a prior period of \$1,319,358 in the actual histori	ic year ending
3	September 30, 2013. Thus, the prior period expense reversal was e	liminated from
4	the historic year appropriately. Also, in January 2013, the Co	ompany began
5	amortizing the regulatory asset pertaining to the Marianna litigation	at \$31,161 per
6	month for a total of \$280,449 in the historic year. Since the Comm	ission allowed
7	the refund from Gulf Power to offset the regulatory asset related to	the Marianna
8	litigation, the amortization should have been lower and recorded a	t just \$15,455.
9	The amortization expense was reduced by \$264,994 to correct the	e historic year
10	results to reflect the actual amortization authorized by the Commi	ssion. Exhibit
11 12	CMM-3 details the regulatory asset and related amortization.	
13	Pension and Post Retirement Benefit:	
14	In December 2012, the Company adjusted on its books, pension and p	post-retirement
15	benefit expense true-ups and cost capitalization for the years 2010 the	ough 2012. Of
16	these adjustments, only three months were relevant to the historic	year, and the
17	remaining months and years were adjusted out of this period. Adjust	stments to NOI
18	are listed below:	
19	Pension true-up and cost capitalization	\$39,226
20	Post-retirement true-up	\$76,134
21		
22	Depreciation Expense:	
23	The Company has removed depreciation expense of \$10,768 for a	portion of the
24	assets used for non-utility operations from the historic year, which is	also consistent

1	with the treatment used in our 2007 rate case in Docket 070304-EI.
2	
3	Transformer:
4	Expenses have been reduced by \$46,610 for costs related to a transformer that
5	should have been capitalized during the historic year period. This entry was
6	subsequently corrected on the Company's books in December 2013.
7	
8	Income Tax Gain:
9	Amortization expense has been adjusted to eliminate \$246,285 for prior period
10	amortization related to an income tax liability allocated to the electric operations.
11	After an internal audit of FPU records, it was determined that an income tax
12	liability that originated on the Company's books prior to its merger with
13	Chesapeake Utilities Corporation was no longer collectable by the Internal Revenue
14	Service. The tax liability related to depreciation on company vehicles and the tax
15	liability had outlived the applicable statute of limitations set forth by IRS Code and
16	as such was no longer deemed a tax-related liability, and therefore could be
17	excluded from the deferred tax liability account. FPU sought and received approval
18	from the Commission, by Order No. PSC-12-0574-PAA-PU, to record a tax
19	liability associated with the vehicle depreciation as a regulatory liability and to
20	amortize that liability over a thirty four-month period beginning January 2012
21	through October 2014. Upon approval by the Commission, the amortization gain
22	true-up of this regulatory liability (\$301,015) was recorded on the Company books
23	in November 2012 for the period January 2012 - November 2012. However, only
24	two months were relevant to the historic year, and the remaining months were

- 1 adjusted out of this period.
- 2
- 3 Paid Time Off:

4 In 2013, Chesapeake Utilities Corporation also made a change to the Paid Time Off 5 (PTO) Policy for employees in FPU to align them with the Company wide PTO 6 policy. The old PTO policy that originated with FPU prior to the merger 7 accumulated the subsequent years change in total vacation pay as a liability and 8 expense. The policy, because of the way the liability was created, resulted in pre 9 accrual of future vacation pay changes. If an employee left the company on January 1st of the current year, they were entitled to the entire current calendar 10 11 year's PTO pay as a payout. Accordingly, GAAP required the Company to record 12 any change in the overall future liability prior to the related actual PTO or the actual 13 payout year. The change in pay or additional weeks was then booked as an 14 additional liability in the year preceding the actual payout. The new policy requires 15 employees to accrue PTO as they work during the calendar year. Now, whenever an 16 employee leaves the Company, they are only entitled to a PTO payout for the 17 amount of PTO they have accrued during the current calendar year. A one-time 18 reversal of the total accumulated PTO liability on the books in the historic year 19 period was booked in the 2013 calendar year. The accumulation of this liability 20 occurred over the last several decades and as such, the one-time reversal that 21 occurred during the historic year relates to prior period expenses and does not 22 belong in the historic year. The historic year has been adjusted to eliminate the 23 impact of this change for \$141,687 on the electric division's books. My Exhibit 24 CMM-8 sets forth the new and old PTO policies.

1

2

Post Retirement Benefits:

3	During 2012, CUC modified the benefits offered to its FPU employees under the
4	post-retirement health and life plan. This caused a one-time gain on the Company's
5	books. FPU sought permission from the Commission to establish a regulatory
6	liability and amortize this liability over a thirty four month period beginning
7	January 1, 2012 and ending October 31, 2014. In November 2013, the Commission
8	approved this request by Order No. PSC-13-0594-PAA-PU. Since the authorized
9	amortization was not reflected in the historic year, an adjustment of \$91,291 was
10	made to NOI so that the historic year accurately reflects this amortization.
11	
12	Vehicle Depreciation:
13	The depreciation on vehicles was calculated at the incorrect rate for the historic year
14	ending September 30, 2013. An adjustment was made to NOI for \$41,739 for the
15	difference in the actual calculation versus what was recorded on the Company's
16	books for the historic year ending September 30, 2013. Because depreciation
17	expense on vehicles is allocated to FERC accounts following the related payroll
18	expense, this change is reflected in O&M instead of depreciation expense. This
19	entry was subsequently corrected on the Company's books in March 2014.
20	
21	PSC Assessment:
22	Taxes other than income (TOTI) expense for PSC Assessment was increased by,
23	\$2,120, to account for the difference between accruals and actual payments on the
24	Company's books.

1		
2		Adjustments - Income Tax Impact:
3		The effective income tax rate on the adjustments described above has been
4		appropriately included as an additional adjustment to expense in the historic year
5		ending September 30, 2013.
6		
7		For reference, MFR Schedules C-2 and C-3 include a summary of these adjustments
8		and amounts.
9		
10	Q.	Have you calculated the appropriate adjustment in income taxes to reflect the
11		synchronized interest expense related to the adjusted rate base?
12	А.	Yes. The NOI has been adjusted to reflect the tax effect of synchronizing interest
13		expense to rate base. Consistent with prior Commission practice, the synchronized
14		or calculated interest expense is computed by multiplying the jurisdictional adjusted
15		rate base by the weighted cost of debt included in the cost of capital. This
16		adjustment ensures that the calculated revenue requirement reflects the appropriate
17		tax deduction for the interest component of the revenue requirement calculation.
18		
19	Q.	How did you project Operating and Maintenance (O&M) expenses for the
20		projected test year ending September 30, 2015?
21	А.	The expenses reflected in this filing were projected separately for the business unit
22		and corporate costs allocated to the business unit.
23		

1		O&M expenses for the corporate office of Chesapeake Utilities Corporation (CPK)
2		allocated to the electric utility were projected by Matt Kim. Additional details
3		regarding those projections and related allocations to the Business Unit are included
4		in his testimony.
5		
6		O&M expenses for the business unit were projected by the Florida office. Business
7		unit expenses were projected using the historic year as a starting point, making all
8		necessary adjustments as reflected in this rate proceeding for the historic year and
9		either trending those forward with an appropriate trend factor, or directly projecting
10		the expense using the expertise of internal managers or known items impacting
11		certain expenses as a basis for the projection.
12		
13		Final projected O&M amounts were reviewed by internal managers and analysts
14		and were determined to be a good estimate for expected costs during the projected
15		test year.
16		
17	Q.	Please explain in more detail the basis for projecting the business unit expenses
18		included in the MFR filing.
19	А.	The business unit O&M expenses for the historic year ending September 30, 2013,
20		provide the basis for most of the business unit expense items in the projected test
21		year ending September 30, 2015. Each FERC account was separated into its
22		payroll and non-payroll components for the historic year. All historic adjustments
23		were made to the payroll and non-payroll components to exclude "out of period"

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items or other items as reflected in the historic year adjustments described in this
 testimony and shown on MFR Schedule C-2.

3

4 Some historic year amounts were then adjusted to normalize the expenses for the 5 purpose of trending historic year accounts to the projected years. Normalization 6 adjustments only impacted the projected years' amounts and were not included for 7 purposes of establishing the historic year expenses included in the NOI for the 8 period ending September 30, 2013. To normalize, expenses were re-classified to 9 their appropriate FERC account to reflect a more accurate expense projection by 10 FERC. This was just a transfer between accounts and did not change the overall 11 expense level.

12

13 Then the adjusted historic year expenses plus or minus the "normalization" amounts 14 were multiplied by one of several trend factors. Trend factors have been applied 15 that are appropriate for each account and consistent with prior rate proceedings.

16

17 Some historic year items that were trended did not reflect the annual amount 18 expected; estimates have been adjusted for increases and decreases to the trended 19 amounts (Over and Under), as shown on MFR Schedule C-7 page 9.

20

Some expense items have been projected based on direct cost estimates provided by
 our internal management. Examples of direct cost estimates would include: pension,
 general liability, economic development, rate case and tree trimming.

24

1		The application of trend factors, including over and under items plus the direct
2		projections, produced reasonable and expected results in O&M amounts for the
3		projected test year.
4		
5	Q.	Please explain the items and the basis for any normalization adjustments made
6		to operating expenses for the purpose of trending O&M expenses for the
7		projected test year?
8	А.	Normalization adjustments were made to the historic year in order to arrive at the
9		appropriate expense level by FERC account for projection purposes. We re-
10		classed expenses recorded on the Company's books from corporate Administrative
11		and General (A&G) to non-corporate/business unit Distribution and A&G to ensure
12		they were properly classified and aligned by FERC. These adjustments had no
13		impact to NOI. Below are descriptions of the normalization adjustments made to
14		the historic year for purposes of trending projected year expenses:
15		
16		• Payroll not classified to correct FERC-\$351,834
17		• Electric General Managers payroll and other expenses-\$102,398
18		• IT related costs-\$54,567
19		• System Planning department-\$34,350
20		• Facilities Expenses-\$81,365
21		• Advertising expenses -\$28,750
22		
23	Q.	Please explain the basis of the trend factors used to project O&M expenses
24		for the projected test year.

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1 A. MFR Schedule C-7 contains a listing of the projection factors used. The most 2 commonly used trend factors include Inflation, Payroll Growth, Customer 3 Growth, Inflation & Customer Growth, and Payroll Growth & Customer Growth. 4 The payroll trend factor is based on historical data, the experience and expertise 5 of the Company's Human Resources Director, and her best estimate of expected 6 payroll increases for both 2014 and 2015. The factors for customer growth, unit 7 (kWh) growth and revenues are based on detailed analysis and the results from 8 revenue related projections used within this rate proceeding. The methodology 9 used to determine the billing determinant and revenue factors as well as the 10 inflation factors are explained in greater detail in the testimony of Robert 11 Camfield.

12

Q. How did the Company determine the appropriate trend factor for each expense projection?

15 A. All expenses were divided into two components, payroll (if applicable) and non-16 payroll. The payroll expenses for each account used either the Payroll or Payroll 17 and Customer growth trend factors. The payroll factor was used on payroll 18 accounts, like 560-Supervision and Engineering and 920-A&G Salaries. All other 19 payroll components used the Payroll and Customer growth factor because the 20 Company expects payroll to increase by not only the expected rate of pay, but 21 also the expected overall number of personnel, as more customers are added. Although it is not a direct correlation, personnel will fluctuate overall by the 22 23 number of customers the Company serves. The non-payroll component was 24 based on the type of expense and most appropriate trend factor for the account.

- 1 This is consistent with historically approved trend factors used in prior rate 2 proceedings, and resulted in expected levels of expenses.
- 3
- 4 Q. Can you explain the basis for the projected expenses outside of those based
 5 on historical data trended to the projected test year?
- 6 A. Operation and Maintenance over and under adjustments, as well as direct 7 projections, were made to certain accounts outside of trending historical data 8 when management determined that a trend would not adequately reflect expected 9 results. A detailed listing of the over and under adjustments as well as direct 10 projections has been included in MFR Schedule C-7. The Company utilized 11 internal experts to project certain expenses shown as Direct.
- 12

13 Q. Can you summarize the items that were projected on a Direct Basis?

- A. The pension expense of \$280,219 was projected by the corporate office of
 Chesapeake Utilities Corporation. All other employee benefit expenses were
 trended based on payroll and customer growth factor.
- 17
- 18 Corporate O&M expenses, including pension expense, are reflected as Direct and 19 were projected by the corporate office of Chesapeake Utilities Corporation, which 20 is further explained in the testimony of our witness Matt Kim.
- 21

The projected regulatory Commission expense (i.e., rate case expense) was based on specific forecasts from consultants, attorneys, and in-house review of appropriate, anticipated costs. FPU estimates the incremental expenses related to

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this rate case to be \$770,721. The Company is requesting to recover these
expenses at a rate of \$154,144 per year over a five-year amortization period,
which is consistent with the Commission's decision in previous FPU rate cases.
NOI has been adjusted by \$154,144 for the projected test year. Detailed specifics
of these costs are explained later in this testimony and can be found on MFR
Schedule C-10.

8 Depreciation & amortization expenses for the year ended September 30, 2015, are 9 projected to be \$3,704,295. The detailed projected plant and the applicable 10 depreciation rates approved during the Company's last depreciation study per 11 Order PSC-12-0065-PAA-EI were used as a basis for depreciation expense. 12 Depreciation expense was adjusted for a portion of non-electric usage for the 13 office structures in Fernandina Beach. The depreciation expenses are shown by 14 plant sub-account on MFR Schedule B-9.

15

Amortization expense includes the remaining amortization of regulatory assets 16 and liabilities approved by the Commission as well as those we are requesting 17 within this rate proceeding; thus, amortization of the tax regulatory asset for the 18 South Georgia-Tax Step Up (Federal tax rate change from 34% to 35%) and for 19 the General Liability Claim are included. Matt Kim provides additional details on 20 these new, requested regulatory tax assets in his testimony as well as additional 21 details contained within this testimony. The amortization is listed below as well 22 as on MFR Schedule C-19. 23

24

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1	Regulatory Asset-Litigation	\$ 20,607
2	Regulatory Liability-Pension	\$ (7,608)
3	Regulatory Liability-Tax Gain	\$(27,365)
4	South Georgia – Tax Step up	\$ 13,584
5	Regulatory Asset-General Liability	\$ 50,000

6

7 Total income taxes for the test year ended September 30, 2015 are projected using 8 the projected taxable operating income less calculated interest expenses less 9 deductions multiplied by the current state and federal tax rates. Timing 10 differences were estimated by the corporate office of Chesapeake Utilities 11 Corporation to determine the deferred tax amounts, as elaborated upon in Matt 12 Kim's testimony. The difference between total income taxes and deferred taxes is 13 current income taxes. These calculations are shown on MFR Schedules C-22 and 14 C-23.

15

The 2015 projected investment tax credits are calculated from the Investment Tax Credit (ITC) amortization schedule for the electric utility division. There is no ITC amortization remaining for the projected test year and accordingly the projection is zero. Annual ITC balances and amortization details appear in schedule B-23.

21

Q. What was the basis for the storm reserve and expense included in the test
year?

24 A. The Company has included a storm accrual expense of \$10,135 a month, or

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1 \$121,620 a year for a total storm reserve of \$2,900,000, which was initially 2 approved in Commission Order PSC-08-0327-FOF-EI. The Company does not 3 anticipate any requirements for an increase or decrease in the annual storm 4 expense and perceives the reserve, with current accruals, is adequate to cover any 5 future expected storms.

- 6
- 7

Q. What is the basis for the rate case expense included in the projected test 8 year?

9 A. The Company has projected rate case expense based on specific forecasts 10 including the cost to use consultants to assist in preparation and support of a rate 11 case and the cost for representation and consultation by an attorney. The 12 Company is not staffed at a level to allow for preparation of rate proceedings, 13 MFRs or the additional rate case related work load required after the MFRs are 14 filed. Internally, the work load has increased since our last electric rate case was 15 filed without an offsetting increase in staff within the Company. We now require 16 additional resources beyond the level required in our last electric rate case. Much 17 of our accounting staff that had previously worked on the rate proceedings is no 18 longer with the Company; thus, the overall experience level of staff members as it 19 relates to this type of regulatory proceeding has declined as compared to our 2007 20 rate case. The Company does not have the expertise in all areas to help facilitate 21 the preparation of a rate case; therefore, we hired the expertise and extra 22 The Company also had to utilize assistance to assist us with this process. 23 temporary accounting staff and consultants to assist in the extra rate case work 24 beyond the normal work load of the regulatory department. MFR Schedule C-10

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1 includes more details on these expenses. All costs expected to be incurred are 2 prudent, and should be allowed for full recovery in this rate proceeding.

3

4 The Company included a 5-year amortization period for the Company's rate case 5 expense. Use of the 5-year amortization period will allow the Company to spread 6 the rate case expense over a slightly longer period of time, which will therefore 7 reduce the impact on customers' bills. The Commission has allowed the 8 Company to use a 5-year amortization period in the past. Specifically, in Order 9 No. 22224, issued in Docket No. 881056-EI, on November 27, 1989, the 10 Commission authorized the Company to use a 5-year amortization period for rate 11 Therein, the Commission recognized that it is appropriate to case expense. 12 amortize rate case expense over the period of time between rate case proceedings and then concluded that a 5-year period was appropriate for FPU. It is likewise 13 14 reasonable to use a 5-year amortization period in this proceeding as well, in view 15 of the fact that the time span between the Company's most recent prior rate case 16 proceeding and this filing extends more than 6 years.

- 17

What is the basis for the general liability expense and reserve included in the 18 Q. 19 projected test year?

The Company has incurred a recent claim in its electric operations that is 20 A. 21 expected to reach the cap of the self-insurance portion of our general liability 22 account. The Company is requesting that this claim be allowed as a regulatory 23 asset and be amortized over five years beginning with the test year. In addition, 24 the Company is requesting establishment of a self-insurance reserve, similar to the

1		one already in place and approved by the Commission for FPUC Natural Gas, to
2		cover future general liability claims, and is proposing to accrue \$50,000 per year
3		to cover large claims, and \$20,000 of smaller claims on an annual basis for the
4		basis of the self-insurance reserve. This expense has been reflected in O&M
5		expenses as a direct projection. The worker's compensation and general liability
6		components of this account have been projected by the corporate office and
7		details regarding the current liability claim are reflected in the testimony of Matt
8		Kim.
9		
10		The self-insurance component of this account has been projected based on our
11		claim history. Due to an increase in claims, we have projected an increase in the
12		reserve of \$250,000 over a five year period, effective October 2014, to amortize
13		an existing claim and establish a reserve for future claims. We have included
14		expenses of \$120,000 in our projected test year, which accounts for some large
15		claims in auto or general liability of \$250,000 over five years, plus \$20,000 per
16		year for smaller claims.
17		
18	Q.	What is basis for Economic Development expenses included in the projected
19		test year?
20	А.	The Company has been involved and has participated in economic development
21		activities in the areas it serves for many years. The Company is currently
22		developing a more robust, detailed program to guide our economic development
23		efforts, which involves new business assistance, community involvement,
24		customer retention, education, and local chamber involvement. The Company's

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1 Marketing Director expects that expenses will increase due to this enhanced 2 program, as fully explained in the testimony of Company witness Aleida 3 Socarras. The Company has directly projected economic development expenses of 4 \$50,000 less the prior expenses of \$28,750. Therefore, we have adjusted the 5 projected test year by \$21,250 for our economic development efforts. In addition, 6 the Company is requesting approval of a new economic tariff to promote new 7 business in its electric operations. Both our panel witnesses Cutshaw and Shelley, 8 as well as witness Socarras, provide additional details on the economic 9 development costs and tariffs being proposed in this rate proceeding.

- 10
- Q. Are there any other direct or over and under adjustments included in the
 projected test year and if so, what is the basis for this expense?

Yes. Over and under adjustments were made to the projected test year for 13 A. operational costs for which the historic year was not reflective as a sole basis of 14 15 future costs or savings. The reorganization of the Electric Operations with one 16 Director overseeing the NW and NE Divisions resulted in savings of 17 approximately \$73,000 and this expense was removed. Tree trimming, pole 18 attachment audits, industry association dues, legal and consulting as well as 19 transportation depreciation were also adjusted to reflect a typical year. Due to 20 new hires, organizational changes, or revised employee allocations made during 21 the historic year, expenses were adjusted to reflect costs for a full year. Details of 22 all of the Over and Under adjustments made to the historic year are provided on 23 MFR Schedule C7.

24

Direct Testimony of Cheryl Martin

Q. What was the basis for the projection of Taxes Other Than Income ("TOTI") included in the projected test year? A. The TOTI taxes were projected using trend factors applied to historic year

expenses as appropriate or most reflective of future expected expense levels.
Payroll taxes were trended based on payroll and customer growth. The regulatory
assessment fee, gross receipts tax and franchise fees were calculated based on
projected revenues. Property taxes were increased by inflation and plant growth.
These calculations are shown on MFR Schedule C-20.

9

Q. Does the Company feel that the expenses projected for the test year ending
 September 30, 2015 adequately reflect actual expected ongoing expenses?

A. Yes, the Company reviewed the results of its projections and concluded that the expenses projected reflect expected ongoing normal expenditures in the twelve month period ending September 30, 2015. The Company reviewed results and compared them to prior projections, historical results, known changes, and anticipated changes. To the best of our knowledge and based on our review, the expenses reflected in this rate proceeding are the most accurate and up-to-date expectations for ongoing expenses.

19

Q. What is the basis for the Corporate Expenses allocated to the Business unit
 included in the test year?

A. The Corporate expenses are directly projected by the corporate office ofChesapeake Utilities Corporation and are addressed in the testimony of Matt Kim.

24

Q. How does the company allocate costs for corporate charges across the different utility services?

3 Whenever it is possible and practical, corporate expenses are directly assigned to A. 4 the business unit incurring such cost. Corporate expenses that cannot be directly 5 assigned are allocated among Chesapeake Utilities Corporation's business units that 6 receive benefit from such functions and services. Chesapeake Utilities Corporation 7 utilizes various methodologies in allocation of costs, depending on the type of 8 expense. These methodologies are designed to reflect the relative size and benefit 9 of each business unit receiving the shared functions and services and may include 10 consideration of direct payroll, profitability, adjusted gross plant, investment and 11 customers, among others, in determining the allocation basis. While Chesapeake 12 Utilities Corporation utilizes different methodologies depending upon the type of 13 expense, it uses the consistent methodology among all of its business units in 14 allocating the same type of expense. The allocation methodologies are described in 15 greater detail in Matt Kim's testimony. Chesapeake Utilities Corporation reviews 16 and updates the allocation basis at least annually at the beginning of each fiscal 17 year.

18

19 Q. How does the Company allocate costs for Business Unit charges?

A. Business unit charges are directly assigned to the business unit incurring the cost
when feasible. Some expenses incurred by the FPU management and employees
are allocated among only the Florida business units, allocating to those specific
business units receiving the shared functions and services. As such, FPU utilizes
various methodologies in allocation of costs, depending on the type of expense.

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1 These methodologies may include customers, time studies/managers expert opinion, 2 plant, and investment, among others, in determining the allocation basis and are 3 consistent with prior approved methods authorized in prior rate proceedings for 4 FPU. FPU management reviews and updates the allocation basis at least annually at 5 the beginning of each year or as material changes warrant. The allocation basis used 6 distributes expenses to the appropriate specific business units.

7

8 What is the reason for the increase to Administrative & General (A & G) 0. 9 expenses for the projected test year over and above the inflation and customer 10 growth since the last rate proceeding?

There are several reasons for the increase to A & G expenses. First, in the projected 11 Α. 2015 test year, \$66,156 of common depreciation expense was included in Account 12 13 In the benchmark year, those charges were included in Account 403-921. Depreciation expense. Also, the 2015 projected year included rent expense of 14 15 \$124,609 that was not included in the benchmark year. The increase in rent 16 expense is offset by reductions to rate base, depreciation expense, and taxes other than income that would have been included if the West Palm Beach corporate office 17 Likewise, the 2015 projected year included an increase to 18 was not sold. administrative and general insurance expense of \$120,000 to establish a general 19 liability reserve and to amortize a 2014 claim over five years. This reserve is in lieu 20 of purchased insurance and reduces the volatility associated with periodic claims. 21 Technology cost also increased by approximately \$350,000. 22 The remaining increase relates to additional travel costs and expanded corporate functions and 23 services not previously available to FPU. Travel costs have increased because of 24
Direct Testimony of Cheryl Martin

1 centralization of the Florida staff, additional training available to employees and 2 increased focus in customer service and employee satisfaction, which require 3 managers to travel to all locations within Florida. The transfer of certain A & G 4 functions to the corporate office in Delaware for increased quality and efficiency 5 has also necessitated additional travel. Since the merger with Chesapeake in 2009, 6 FPU has benefited from certain corporate functions, such as corporate 7 communications and business development, which were not previously available to 8 FPU. Better company-wide training, communications and website contents provide 9 our employees with information necessary to provide superior customer service and increase customer engagement for higher satisfaction. See Matt Kim's testimony 10 11 for additional information on A&G expenses and the reason for the variance.

12

13 Q. What is the reason for the increase in customer related expenses?

A. Customer-related expenses increased due to new customer service initiatives which
 included more customer service personnel, better customer systems, and an increase
 in service monitoring and education. This is appropriate because these initiatives
 allow us to better serve our customers. All costs have been prudently incurred and
 directly benefit the customers we serve. The testimony of Mariana Perea provides
 details on the customer service initiatives.

20

21 Q. What is the reason for the increase in marketing expenses?

A. Marketing expenses increased because of an increase in community awareness and
 notification campaigns and events which were designed to increase customers'
 awareness of changes taking place and what they may expect. The campaign to

explain Time-Of-Use rates is an example of the type of campaigns that occurred in
 the historic year to better educate the customers on how to reduce their bill. The
 projected test year included costs for similar types of campaigns in addition to
 informing customers of purchased power rate changes that occur each year.

5

Q. What was the reason for the decrease in total transmission and distribution expense in the projected test year compared to the prior rate proceeding benchmarked to the same period?

9 Α. These costs decreased primarily because the overall reliability of these systems was significantly improved as a result of Chesapeake's system improvement initiatives. 10 11 We also centralized certain operating functions, which further contributed to the 12 efficiency of these systems. As a direct result of these system improvements, the 13 Company was able to significantly reduce the costs in this area over the prior rate 14 case in today's terms; most notably, maintenance costs are down compared to the benchmark period. Despite savings, some costs increased over the bench mark 15 16 period due to other Company efforts aimed at upgrading the overall quality and 17 efficiency of our electric operations. Some of these efforts produced increased 18 costs in the short term, but are expected to lead to lower costs, and increased efficiencies, in the long term. Among these efforts, some of which are ongoing, is 19 our effort to assess fuel supply alternatives that will lead to lower fuel and 20 21 purchased power costs for the Company and its ratepayers. Another significant 22 factor impacting cost increases has been the actual inflationary impact on goods and 23 services, as further outlined below. Meter expenses and other reliability-related 24 operating costs also increased over the bench mark period, because we upgraded

Direct Testimony of Cheryl Martin

1		meters and other similar equipment, which led to similar additional expenses.
2		Moreover, the Company has invested time and effort on ongoing training, employee
3		development, safety enhancements, and improved communication, thereby adding
4		to the increase in some costs over the prior rate proceeding but resulting in better
5		service to our customers. As a result, customers directly benefit through better
6		service, more knowledgeable and trained personnel and a more reliable system.
7		
8		Also, as noted, the actual impact of inflation on payroll and goods was higher than
9		the CPI-U factor would indicate; thus, a portion of the variance is attributable to an
10		artificially low expectation on the true inflationary impact on costs. Management
11		continually strives to improve the efficiency and effectiveness of our electric
12		system, and to provide superb customer support and service at a prudent and
13		reasonable cost to our customers.
13 14		reasonable cost to our customers.
13 14 15	Q.	reasonable cost to our customers. Is the O&M Compound multiplier factor which includes customer growth and
13 14 15 16	Q.	reasonable cost to our customers. Is the O&M Compound multiplier factor which includes customer growth and inflation, appropriate to use for analysis of cost increases since the last rate
13 14 15 16 17	Q.	reasonable cost to our customers. Is the O&M Compound multiplier factor which includes customer growth and inflation, appropriate to use for analysis of cost increases since the last rate proceeding?
13 14 15 16 17 18	Q. A.	reasonable cost to our customers. Is the O&M Compound multiplier factor which includes customer growth and inflation, appropriate to use for analysis of cost increases since the last rate proceeding? No, although the factor generally considers the impact on costs due to inflation and
 13 14 15 16 17 18 19 	Q. A.	reasonable cost to our customers. Is the O&M Compound multiplier factor which includes customer growth and inflation, appropriate to use for analysis of cost increases since the last rate proceeding? No, although the factor generally considers the impact on costs due to inflation and customer growth, the economic conditions that existed in a few of the years during
 13 14 15 16 17 18 19 20 	Q. A.	reasonable cost to our customers. Is the O&M Compound multiplier factor which includes customer growth and inflation, appropriate to use for analysis of cost increases since the last rate proceeding? No, although the factor generally considers the impact on costs due to inflation and customer growth, the economic conditions that existed in a few of the years during the benchmark period are not appropriate for measuring the true cost of inflation on
 13 14 15 16 17 18 19 20 21 	Q. A.	reasonable cost to our customers. Is the O&M Compound multiplier factor which includes customer growth and inflation, appropriate to use for analysis of cost increases since the last rate proceeding? No, although the factor generally considers the impact on costs due to inflation and customer growth, the economic conditions that existed in a few of the years during the benchmark period are not appropriate for measuring the true cost of inflation on goods and services during the same period. There were several abnormal years in
 13 14 15 16 17 18 19 20 21 22 	Q. A.	reasonable cost to our customers. Is the O&M Compound multiplier factor which includes customer growth and inflation, appropriate to use for analysis of cost increases since the last rate proceeding? No, although the factor generally considers the impact on costs due to inflation and customer growth, the economic conditions that existed in a few of the years during the benchmark period are not appropriate for measuring the true cost of inflation on goods and services during the same period. There were several abnormal years in terms of inflation that impacted the CPI-U factor. Despite having a computed
 13 14 15 16 17 18 19 20 21 22 23 	Q. A.	reasonable cost to our customers. Is the O&M Compound multiplier factor which includes customer growth and inflation, appropriate to use for analysis of cost increases since the last rate proceeding? No, although the factor generally considers the impact on costs due to inflation and customer growth, the economic conditions that existed in a few of the years during the benchmark period are not appropriate for measuring the true cost of inflation on goods and services during the same period. There were several abnormal years in terms of inflation that impacted the CPI-U factor. Despite having a computed inflation factor based on CPI-U that was negative in year 2008 to 2009; actual cost

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1		inflation. The economic downturn and CPI-U factor was impacted by an unusual									
2		housing market and high unemployment. The Company did not experience those									
3		same decreases in payroll or in the cost of materials and supplies purchased during									
4		the benchmark period. A portion of the variance in costs compared to the bench									
5		mark periods is attributable to actual cost increases not matching the inflation factor									
6		shown in the CPI-U factors.									
7											
8	Q.	Have there been any new positions included in the projected test year over the									
9		historic year?									
10	А.	We did not include any new positions in the projected test year, but we did include									
11		adjustments (over and under) for the promotions of two Assistant Operations									
12		Managers to Operations Managers in February 2014 which resulted from the									
13		reorganization of the Electric Operations to establish one Director overseeing both									
14		the NW and NE Divisions.									
15											
16	Q.	Have there been any positions eliminated in the projected test year compared									
17		to the historic year?									
18	А.	Yes, the Company removed a portion of one position that will be allocated to									
19		other business units in Florida due to a change in job responsibilities. The "over									
20		and above" adjustment removes the portion of the payroll and related benefits that									
21		does not belong in electric operations.									
22											
23	Q.	Are the payroll expenses incurred by the Company fair, appropriate and									
24		reasonable and appropriate for recovery in this rate proceeding?									

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1 A. Yes, FPU strives to be an employer of choice. Our goal is to attract and retain top 2 talent. Customers benefit from our ability to employ and retain this talent through 3 their abilities to perform the work that directly benefits our customers as well as 4 indirectly benefits through optimal work efficiency and performance. We 5 participate in annual compensation surveys to compare our salary ranges with the 6 industry. We strive to pay Job Market Value to ensure we are able to compete in 7 attracting top talent. In assessing what Job Market Value is for employees, we 8 review a variety of annual compensation studies including the AGA (American 9 Gas Association) Study; Payscale, Compdata Survey and other industry related 10 studies/benchmarks. The Company also prepares detailed compensation studies 11 on a periodic basis. For 2014, we have hired outside consultants (THEaster and 12 Associates) to conduct a company-wide salary survey and revise and update job 13 descriptions. The current salary ranges that are in place were based on a detailed 14 study that was completed in 2011, which has been updated annually to reflect 15 inflationary payroll impacts to those same ranges. In addition to paying 16 competitive base salaries, an Incentive Performance Plan rewards employees for 17 reaching individual and Company annual goals. This portion of pay is considered 18 as part of normal compensation and was considered in establishing the appropriate salary ranges for positions. Making a portion of "pay" part of an 19 20 incentive plan based on achieving goals is effective in ensuring that our 21 employees meet the highest of standards in performance.

22

Additionally, union contracts determine pay increases for our union employees.
 All contracts have been prudently and fairly negotiated; however, these do impact

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1	the total payroll and benefits the Company is required to compensate union
2	employees.
3	
4	Total compensation includes reasonable and standard benefits for our full time
5	employees including:
6	• 401(k) Savings Plan that matches \$1 for \$1 up to 6% of base salary.
7	• Short Term Disability (At no cost to the employee, they receive 60% of
8	pay for extended illnesses after 7 days through Cigna).
9	• Long Term Disability (At no cost to employee, they receive 60% of base
10	pay for extended illnesses after 90 days through Cigna).
11	• PTO days ranging from 14 – 29 per year depending on years of service.
12	• 10 Sick Days per year accrued.
13	Tuition Reimbursement.
14	• Medical and Dental Benefits. Company pays a portion of the premiums.
15	
16	Payroll as projected is fair, reasonable and appropriate for purposes of

18

17

Q. Are the maintenance expense amounts included in the test year appropriate
for the purposes of setting base rates?

determining projected year expenses.

A. Yes, overall maintenance expense levels are appropriate as projected in the test year; however, some of the specific periodic projects and amounts in maintenance accounts may vary from year to year. The projected test year reflects ongoing expense levels necessary to operate its system in a reliable, safe, and properly

1 maintained manner. The Company, when feasible, takes the approach of 2 spreading out required periodic maintenance projects over a period of time. This 3 approach does not unduly burden the customers or the Company resources; yet, 4 maintains the system in a safe and efficient manner.

- 5
- 6 Q. Are the expenses reflected in the projected test year prudent and reasonable?

A. Our expenses are prudently incurred. We have only sought cost recovery of
expenses necessary to provide consistent reliable service to our customers. To
that end, FPU has effectively and efficiently managed and controlled costs. In
fact, since the merger, the Company's efficiencies have resulted in reduction of
certain costs in certain areas enabling us to expand provided services and benefits
to customers thereby keeping rates stable for as long as possible.

13

Does the net operating income used in the rate proceeding projection equal 14 Q. 15 the company's budget that is used for financial reporting and if not, why? 16 No, the Company prepared the current internal net operating income budget for A. the projected calendar years 2014 and 2015 during the summer of 2013, while the 17 18 rate proceeding projections were based on more current expectations. Although 19 the Company considered the items in the internal budget for purposes of the projections for this rate proceeding, a historic actual expense forward projection 20 21 was used for the business unit forecast. Actual expenses were adjusted for out of 22 period items and normalized for re-classifications between FERC accounts. 23 These normalized and adjusted expenses were trended when appropriate and 24 adjusted to reflect known items over or under those projections. The corporate

1		forecast was prepared using the budget as a starting point and adjusted as
2		appropriate to reflect current expectations. Matt Kim's testimony includes more
3		details regarding that forecast. In addition, the internal budget is not budgeted to
4		the same level of FERC detail that was performed in this rate proceeding forecast.
5		
6		Also, since the internal budget was prepared in the summer of 2013, it did not
7		include certain expenses pertinent to this rate proceeding. The key differences
8		between the internal budget prepared in the summer of 2013, compared to the
9		updated forecast reflected in this rate proceeding are as follows:
10		Amortization associated with the regulatory asset-pension \$274,000
11		Rate case amortization \$154,000
12		Amortization of general liability regulatory asset \$ 50,000
13		Accrual of general liability expense (establishment of reserve) \$ 70,000
14		
15		Revenues were projected for the rate proceeding on a much more detailed basis
16		than the internal budget with more extensive analysis to determine the appropriate
17		billing determinants. The revenues used in this rate proceeding are the best
18		forecast for expected revenues in the projected test year. Robert Camfield's
19		testimony includes additional information regarding these projections.
20		
21	Q.	Are the revenues and expenses as projected in the test year ending
22		September 30, 2015 appropriate for rate setting purposes?
23	А.	Yes, the revenues and expenses reflect the prudently incurred expenses and
24		expected revenues at current rates for the projected test year. The projected test

- year revenues and expenses reflected in the MFR Schedule Cs are appropriate for
 rate setting purposes.
- 3
- 4 <u>Cost of Capital</u>
- 5

6

Q.

_

Please explain the basis for the projections included in MFR, Schedules D to compute the overall rate of return.

7 Α. The Corporate offices of Chesapeake Utilities Corporation provided projections of 8 the Chesapeake Utilities Corporation's overall capital structure for the projected 9 years ending September 30, 2014 and 2015 included in MFR Schedule D-1 for 10 common equity, long term debt, short term debt, and deferred taxes. Witness Kim's 11 testimony includes and explains the methodology used to project these cost of 12 capital components. Schedule D-1b discusses the reason for the specific equity 13 adjustment included in Schedule D-1 which will be also be discussed further 14 testimony provided by Matt Kim and Paul Moul. Schedule D-4a details the long 15 term debt by issuance for both FPU and Chesapeake. Schedule D-3 includes the 16 test year and projected short term debt along with a narrative of Chesapeake's 17 policies on short term financing. The Company policy on the timing of entrance 18 into capital markets is outlined in Schedule D-8. Customer Deposits for FPU 19 electric were projected based on the historical year-end balance at September 30, 20 2013 and applying the customer growth rate to those balances. The cost rate was 21 based on the historical year average cost rate, applied to the projected balance of 22 customer deposits. The interest rates for customer deposits are paid in accordance 23 with the rules and regulations required. Schedule D-6 in the MFRs contains the 24 forecast for customer deposits. Deferred taxes for FPU electric were projected

Direct Testimony of Cheryl Martin

1 based on separate projections of each timing difference. A detailed projection was 2 made for deferred taxes based on the timing differences expected. Depreciation 3 expense was computed for tax purposes based on the specific capital projections 4 included in this filing as part of the deferred tax estimate. This projection of 5 deferred taxes is discussed further in witness Kim's testimony. The Company hired 6 an expert in Cost of Capital analyses, witness Paul Moul, to assist with developing 7 the overall capital structure and cost rates utilized in our MFR D Schedules, and he 8 has also provided additional supporting testimony regarding our cost of capital.

9

10 Q. Please discuss the long term debt schedule included in the filing.

A. Schedule D-4a is broken in to two segments, FPU's debt and Chesapeake's debt.
FPU's debt was originally issued by FPU before the merger with Chesapeake and
the FPU debt has only been allocated to the original FPU divisions. The remainder
of Chesapeake corporate debt was allocated to the electric operations based on the
pro-rated overall percentage of Chesapeake debt to equity less the directly assigned
FPU debt. This methodology is discussed further in witnesses Matt Kim's and Paul
Moul's testimonies.

18

19 Q. What is the capital structure of the Company?

A. As discussed in depth by witness Moul, the projected capital structure of the company consists of 46.45% equity, 28.2% long term debt, and 5.19% short term debt. The rest of the capital structure is composed of direct components of the electric division. The overall weighted average cost of capital for the projected test year is 7.18%.

1		
2	Q.	How do the ratios compare with other electric utilities?
3	А.	The 7.18% weighted average cost rate is comparable to other utilities in the State of
4		Florida. The Common Equity ratio is also comparable to other major electric
5		utilities in the state of Florida. Witness Moul also provides additional explanation
6		regarding the ratios and cost rates.
7		
8	Q.	Has the merger with Chesapeake had an impact on FPU's overall cost of debt?
9	А.	Yes. For instance, the debt rate in the 2006 rate case was 8.03%. In the current
10		projections for 2015, the Chesapeake debt rate is 4.89%. The overall weighted cost
11		of capital has decreased from 8.18% in 2006 to 7.18% in the projected test year.
12		
13	Q.	Let's discuss the basis for your projections of the various capital components.
14		Are there any capital components that you have excluded from this filing that
15		were included in the last rate case?
16	А.	Yes, the Company no longer has preferred stock, which amounted to \$600,000 in
17		2006 and was .0049% of the capital structure.
18		
18 19	Q.	Please explain how the projected amounts for deferred taxes and income tax
18 19 20	Q.	Please explain how the projected amounts for deferred taxes and income tax credits were derived?
18 19 20 21	Q. A.	Please explain how the projected amounts for deferred taxes and income tax credits were derived? Witness Kim's testimony discusses these components in more detail. In summary
 18 19 20 21 22 	Q. A.	Please explain how the projected amounts for deferred taxes and income tax credits were derived? Witness Kim's testimony discusses these components in more detail. In summary detailed projections were made for expected deferred taxes using expected timing
 18 19 20 21 22 23 	Q.	Please explain how the projected amounts for deferred taxes and income tax credits were derived? Witness Kim's testimony discusses these components in more detail. In summary detailed projections were made for expected deferred taxes using expected timing differences including depreciation expense for tax purposes. ITC has been fully

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1		
2	Q.	How did you determine the amount reflected for customer deposits?
3	А.	Average customer deposits for the historic year ended September 30, 2013 was
4		trended by customer growth expected for the two projected years to estimate the
5		customer deposits included in the capital structure.
6		
7	Q.	Is this consistent with the methodology approved by the Commission for FPU
8		in the Company's 2007 rate case?
9	А.	Yes, the Company used this same forecast basis for customer deposits in the prior
10		rate case.
11		
12		Consolidated Fuel Rates and Impact to Fuel from Generation Project
13	Q.	Please explain the need to consolidate Fuel rates for 2015 and the relative
14		fairness issue related to this base rate proceeding.
15	A.	The Company has transmission assets embedded in its base rates for the
16		Consolidated Electric Division, but similar assets to serve the customers located
17		in the NW division are owned by Gulf Power Company and the related rates are
18		passed on to our NW division thru the fuel rates charged to just those customers.
19		The Company had originally requested the consolidation of its fuel rates for these
20		divisions in conjunction with the consolidation of base rates in our prior
21		proceedings; however, the Commission approved the consolidation of base rates
22		but not fuel rates. Accordingly, the Company recently requested a special
23		allocation in the Fuel Clause to deal with the transmission related costs, and the

1 fuel rates; but, required that the Company consider and address consolidation of 2 fuel rates in the 2015 Fuel Clause. The Company may, consequently, request that 3 the Commission allow the Company to consolidate its fuel rates in through the 4 upcoming Fuel Clause for the calendar year 2015. In the mean time, the Commission approved the allocation methodology currently used for the fuel rates 5 6 for 2014 which addresses the fairness issue and customers are being billed the 7 appropriate fuel rates. While the Company intends to address fuel rate 8 consolidation in the context of Docket No. 140001-EI, as directed by the 9 Commission, the Company does offer an alternative approach that could be considered in this proceeding. This alternative would remove the subject 10 transmission assets entirely from rate base now, and allow recovery of these 11 assets, along with expenses and return on assets, through the Fuel Clause in a 12 manner consistent with the approved allocation of transmission related expenses 13 14 for 2014.

15

Q. The Company expects to realize savings to its customers from a Power
 Generation Project in its NE division. What is the estimated savings to
 customers as a result of this project?

A. The Company is taking a number of measures to mitigate cost pressures and
improve electricity services to retail consumers in the Northeast and Northwest
Division. These changes include both tactical and strategic actions. An example
of strategic actions is our newly formed power generation subsidiary, Eight Flags
Energy LLC (Eight Flags), in the Northeast Division. As discussed in Mark
Cutshaw's testimony, Eight Flags is expected to begin with a

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2

3

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consumers.

Because of its inherent technical efficiency and proximity on the Amelia Island, 4 5 the Eight Flags project will also result in improved reliability and reduced 6 environmental emissions. As addressed in the panel testimony of witnesses Cutshaw and Shelley, Eight Flags Energy is expected to provide net benefits of 7 during the initial two years of operation, 2016 8 9 and 2017, respectively. Over its initial ten years of operation, 2016-2025, the Company's Eight Flags cogeneration plant is expected to provide a total of direct 10 11 net benefits of , stated on a nominal and discounted 12 basis respectively.

Q. Is there anything that the Company can suggest to help bridge the gap between the base rate increases expected in 2015 as a result of this base rate proceeding, and the fuel cost decrease expected to begin in 2016?

One option that the Company will explore is to seek Commission approval in the 16 A. Fuel Clause proceeding to allow the Company to under recover fuel costs in 2015 17 in order to offset some of the base rate increase. The Company would then 18 19 recover the under-recovery in fuel over a three-year period when savings are expected to be realized as a result of the new generation project. This will 20 provide relief from rate shock to our customers, and phase in the increase and 21 22 decrease associated with the base rate increase, and fuel cost decrease, respectively. In other words, to avoid potential rate shock of a requested 6.79% 23 increase on total revenues for the requested base rate change in 2015, and the 24

Direct Testimony of Cheryl Martin

23		continue to earn a return well below its allowable rate of return. If that continues,
22		low point of our allowable return. Without rate relief, the Company is expected to
21	А.	As is clearly demonstrated, the Company has been, and is, currently below the
19 20	Q.	Please summarize your testimony.
18		Summary
17		
16		associated with the new Lighting tariffs.
15		change to fuel rates and a related exhibit which computes the new fuel rates
14		witnesses Cutshaw and Shelley includes additional details surrounding this
13		fuel rates for these rate classes be combined as well. The panel testimony of
12		requested in this base rate proceeding, which, if approved, would necessitate that
11	А.	Yes, but only as a result of the consolidation of Outdoor and Streetlight tariffs
10		this rate proceeding?
9	Q.	Are there any changes to the fuel rates required or requested at the time of
8		
7		customers.
6		year period thus reducing the volatility associated with changing overall rates to
5		corresponding decrease in fuel costs. This gap could be collected over a three
4		2015. Customers would have a "one year gap" of base revenue increase without
3		to this fuel cost decrease, and offset some of the increase in the bridge year of
2		rate change in 2016 and beyond, the Company may request a phased-in approach

1 our customers.

- 2 3 FPU is requesting a permanent increase in the electric rates and charges in the 4 amount of \$5,852,171 in order to cover the deficiencies in revenues for the 5 projected September 30, 2015 test year. This required revenue is based on a rate 6 of return equal to 7.18% and a projected rate base of \$60,596,169. 7 8 Florida Public Utilities Company is also requesting interim rate relief in the 9 amount of \$2,433,314 in annual electric rates and charges. Stated in percentage 10 terms, we seek an interim increase in revenues equal to 14.91% on base rates and 11 charges. The interim rate increase is based on a weighted average cost of capital 12 equal to 6.37% and a September 30, 2013 year end rate base of \$54,511,326. 13 14 Furthermore, the Company has appropriately, fairly, and prudently projected the 15 September 30, 2015 test year Net Operating Income, Rate Base and Cost of 16 Capital; and as such, it should be used as a basis to determine the revenue 17 requirement. 18 19 Q. Does this conclude your testimony?
- 20 A. Yes.

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	Exhibit CMM-1
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MFR'S Sponsored by Cheryl Martin

MFR Number	Title
A 1	Full Designed to Incorporate Incorporate Advanced
A-1	Full Revenue Requirements increase Requested
A-2	Full Revenue Requirements Bill Comparison-Typical Monthly Bills
A-3	summary of Tarins
A-4	Interim Revenue Requirements increase Requested
A-5	Adjusted Pate Pase
B-1	Adjusted kate Base
B-2	Rate Base Adjustments
B-3	13 Month Average Balance Sheet-System Basis
D-4	i wo Year Historical Balance Sneet
B-5	Detail changes in Rate Base
0-0	Districtional Separation Factors-Rate Base
	Mant Balances by Account and Sub-Account
D-0	Monthly Plant Balances lest tear-15 Months
B-9	Merthy Description Reserve Balances by Account and Sub-Account
B-10	Monthly Reserve Balances Test Year-13 Months
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MFR'S Sponsored by Cheryl Martin

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Amortization - Regulatory Asset - Pension and Other Post Retirement Benefits Order No. PSC-08-0134-PAA-PU Docket No. 080029-PU

BALANCE SHEET

		Amount			Amount
Pension:		7,519,327.00	OPRB:		87,360.00
	Electric	2,706,958.00		Electric	31,450.00
	Natural Gas	4,812,369.00		Natural Gas	55,910.00
Amortization:	9.88 years		Amortization:	11.3 years	
(Electric Only)	Annually	273,984.00	(Electric Only)	Annually	2,783.00
Pada na 1925- na sidelo.	Monthly	22,832.00		Monthly	232.00

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	Sept 2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sep 2013	13-mo total	13 month avg
Pension	4,875,288	4,852,456	4,829,624	4,806,792	6,111,229	6,088,397	6,065,565	6.042.733	6.019.901	5 997 069	5 979 599	5 906 767	5 882 020	73 4/00 35.0	
FAS 158-Pension adj. OCI				1,327,269			0.8			(44 638)		3,500,707	(22 210)	1 260 212	
Amortization Booked	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22 832)	(22 832)	(22,813)	(296 816)	
Balance 1781-1823	4,852,456	4,829,624	4,806,792	6,111,229	6,088,397	6,065,565	6,042,733	6,019,901	5,997,069	5,929,599	5,906,767	5,883,935	5,838,784	74,372,854	5,720,989
OPRB	408,035	407,803	407,571	407,339	41,892	42,559	42,327	42,095	41.863	41.632	41 400	41 168	40 936	2 006 621	
FAS 158-OPRB adj. OCI				(365,215)	899							41,100	40,550	(364 316)	
Amortization Booked	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(3.015)	
Balance 1781-1823	407,803	407,571	407,339	41,892	42,559	42,327	42,095	41,863	41,632	41,400	41,168	40,936	40,704	1,639,289	126,099
TOTALS															
Pension & OPRB	5,283,323	5,260,259	5,237,195	5,214,131	6,153,121	6,130,956	6,107,893	6.084.829	6.061.765	6.038 701	5 970 999	5 947 935	5 974 871	75 415 079	
FAS 158-adj. OCI		5	τ.	962,054	899		0.0	10 D	0.0.0	(44 638)		3,347,233	(22 210)	205 006	1
Amortization Booked	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23.064)	(23.064)	(23.064)	(299 831)	
	5,260,259	5,237,195	5,214,131	6,153,121	6,130,955	6,107,893	6,084,829	6,061,765	6,038,701	5,970,999	5,947,935	5,924,871	5,879,488	76,012,144	5,847,088
PRIOR YEAR							_								
	Sept 2013	Oct 2013	Nov 2013	Dec 2013	Jan 2014	Feb 2014	Mar 2014	Apr 2014	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	13-mo total	13 month avg
Pension	5 883 935	5 838 784	5 8 15 953	5 793 121	2 022 060	2 000 127	20772005	2011 132					100 Ber 2015 D	1000 mm 1000 mm	

1. Contraction of the second se															
Pension	5,883,935	5,838,784	5,815,953	5,793,121	3,022,969	3,000,137	2,977,305	2,954,473	2,931,641	2,908,809	2.885.977	2.863.145	2 840 313	49 716 560	
FAS 158-Pension adj. OCI	(22,319)			(2,747,320)							S. S.			(2 760 620)	
Amortization Booked	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22.832)	(22.832)	(22 832)	(2,769,639)	
Balance 1781-1823	5,838,784	5,815,953	5,793,121	3,022,969	3,000,137	2,977,305	2,954,473	2,931,641	2,908,809	2,885,977	2,863,145	2,840,313	2,817,481	46,650,105	3,588,470
OPRB	40,936	40,704	40,472	40,240	(5,439)	(5.671)	(5.903)	(6 135)	(6 367)	(6 599)	/6 9311	(7.053)	12 2041	105.051	
FAS 158-OPRB adj. OCI				(45.447)	22222	41111111	1-11	(otreat	(0,507)	10,5551	10,0311	(7,002)	[7,234]	105,051	
Amortization Booked	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(222)	(222)	(222)	(45,447)	
Balance 1781-1823	40,704	40,472	40,240	(5,439)	(5,671)	(5,903)	(6,135)	(6,367)	(6,599)	(6,831)	(7,062)	(7,294)	(7,526)	56,589	4,35
TOTALS															
Pension & OPRB	5,924,871	5,879,488	5,856,424	5,833,361	3,017,530	2.994.466	2 971 402	2 948 338	2 925 274	2 907 210	2 870 146	2 856 082	2 833 010	40.031.011	
FAS 158-adj. OCI	(22,319)			(2 792 767)			2,012,102	6,540,550	2,323,614	2,302,210	2,879,140	2,850,082	2,833,019	49,821,611	
Amortization Booked	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23.064)	(23.064)	(23.064)	(23.064)	(23.064)	122 0641	122.0641	(2,815,086)	304
	5,879,488	5,856,424	5,833,361	3,017,530	2,994,466	2,971,402	2,948,338	2,925,274	2,902,210	2,879,146	2,856,082	2,833,019	2,809,955	46,706,695	3,592,82

PROJECTED TEST YEAR															
	Sept 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015	13-mo total	13 month avg
Pension	2,840,313	2,840,313	2,794,649	2,771,817	2,748,985	2,726,153	2,703,321	2,680,489	2,657,657	2.634.825	2.611.993	2 589 161	2 566 329	35 166 007	
FAS 158-Pension adj. OCI											STORAGE CO.	2,000,101	2,500,525	55,100,007	
Amortization Booked	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22.832)	(22.832)	(22 832)	(296 815)	
Balance 1781-1823	2,817,481	2,817,481	2,771,817	2,748,985	2,726,153	2,703,321	2,680,489	2,657,657	2,634,825	2,611,993	2,589,161	2,566,329	2,543,497	34,869,192	2,682,24
OPRB FAS 158-OPRB adl. OCI	(7,294)	(7,294)	(7,758)	(7,990)	(8,222)	(8,454)	(8,686)	(8,918)	(9,150)	(9,382)	(9,613)	(9,845)	(10,077)	(112,683)	
Amortization Booked	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(3.015)	
Balance 1781-1823	(7,526)	(7,526)	(7,990)	(8,222)	(8,454)	(8,686)	(8,918)	(9,150)	(9,382)	(9,613)	(9,845)	(10,077)	(10,309)	(115,698)	(8,900
TOTALS														32	
Pension & OPRB	2,833,019	2,833,019	2,786,891	2,763,827	2,740,763	2,717,699	2.694.635	2.671.572	2 648 508	2 625 444	2 602 380	2 579 216	2 556 252	100 100 100	
FAS 158-adj. OCI									-,,	2,020,111	2,002,500	2,313,314	2,330,232	33,033,324	3
Amortization Booked	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23.064)	(23.064)	(23.064)	(23.064)	(799 831)	
	2,809,955	2,809,955	2,763,827	2,740,763	2,717,699	2,694,635	2,671,572	2,648,508	2,625,444	2,602,380	2,579,316	2,556,252	2,533,188	34,753,494	2,673,346

Amortization - Regulatory Asset - Pension and Other Post Retirement Benefits Order No. PSC-08-0134-PAA-PU Docket No. 080029-PU Exhibit NO.____ DOCKET NO. 140025-EI WITNESS: CHERYL M. MARTIN EXHIBIT NO. CMM-2 PAGE 2 of 2

INCOME STATEMENT

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HISTORIC YEAR													
	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sep 2013	13-mo total
Amortization Expense - Pension	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(273,984)
Amortization Expense - OPRB	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(2.783)
Total	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(276,767)
PRIOR YEAR													
	Oct 2013	Nov 2013	Dec 2013	Jan 2014	Feb 2014	Mar 2014	Apr 2014	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	13-mo total
Amortization Expense - Pension	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	{22,832}	(22,832)	(22,832)	(22,832)	(273,984)
Amortization Expense - OPRB	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(2,783)
Total	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(276,767)
PROJECTED TEST YEAR													
	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015	13-mo total
Amortization Expense - Pension	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(22,832)	(273,984)
Amortization Expense - OPRB	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(2.783)
Total	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(23,064)	(276,767)

Regulatory Asset - Litigation / Gulf Refund Order No. PSC-12-0600-PAA-EI Docket No. 120227-EI and

٦

Order No. PSC-13-0599-PAA-EI

Regulatory Asset	1,869,656.79
Gulf Power Refund - Amendment 1	1,766,623.88
	103,032.91
Annual Amortization	20,606.58
Monthly Amortization	1,717.22

Exhibit NO.____ DOCKET NO. 140025-EI WITNESS: CHERYL M. MARTIN EXHIBIT NO. CMM-3 PAGE 1 of 1

(1,766,624) (1,766,624) (22,966,112)

46,372

48,089

(1,766,624)

56,674

736,764

BALANCE SHEET HISTORIC YEAR

Docket No. 130233-EI

Per Books	Sept 2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sep 2013	13-mo total	13 month avg.
Marianna Litigation				1,424,271	1,598,389	1,666,717	1,661,760	1,674,879	1,674,879	1,674,879	1.674.879	1,869,657	1,869,657	16 789 968	1 291 536
Amortization Booked				12	(26,640)	(54,438)	(82,150)	(110,093)	(138,035)	(165,978)	(193,921)	(225,538)	(280,449)	(1,277,242)	(98,249)
Balance 1772-1823	·			1,424,271	1,571,749	1,612,280	1,579,610	1,564,786	1,536,844	1,508,901	1,480,959	1,644,119	1,589,209	15,512,727	1,193,287
Adjusted Balance Sheet															
Marianna Litigation				1,424,271	1,598,389	1,666,717	1,661,760	1,674,879	1,674,879	1,674,879	1,674,879	1,869,657	1.869.657	16,789,968	1,291,536
Amortization Ordered					(1,717)	(3,434)	(5,151)	(6,868)	(8,585)	(10.302)	(12.019)	(13,736)	(15.453)	(77 265)	(5 943)
Gulf Power Refund								(1,766,624)	(1,766,624)	(1.766.624)	(1.766.624)	(1.765.624)	(1.766.624)	(10 599 744)	(815 365)
Adjst'dBalance 1772-1823		(÷)	-	1,424,271	1,596,672	1,663,283	1,656,609	(98,613)	(100,330)	(102,047)	(103,764)	89,297	87,580	6.112.959	470.228
														Adjustment	(723.059)
PRIOR YEAR Adjusted Balance Sheet	Sept 2013	Oct 2013	Nov 2013	Dec 2013	Jan 2014	Feb 2014	Mar 2014	Apr 2014	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	13-mo total	13 month avg.
Marianna Litigation	1,869,657	1,869,657	1,869,657	1,869,657	1,869,657	1,869,657	1,869,657	1,869,657	1.869.657	1.869.657	1.869.657	1 869 657	1 869 657	24 305 543	1 869 657
Amortization Ordered	(15,453)	(17,170)	(18,887)	(20,604)	(22,321)	(24,038)	(25,755)	(27.472)	(29.189)	(30,906)	(32 623)	(34 340)	(36.057)	(334 815)	(25 755)
Gulf Power Refund	(1,766,624)	(1,766,624)	(1,766,624)	(1,766,624)	(1,766,624)	(1.766.624)	(1.766.624)	(1.766.624)	(1 766 624)	(1 766 624)	(1 766 624)	(1 755 524)	(11 766 634)	(334,813)	(25,755)
Balance 1772-1823	87,580	85,863	84,146	82,429	80,712	78,995	77,278	75,561	73,844	72,127	70,410	68,693	66,976	1,004,616	77,278
PROJECTED TEST YEAR															
Adjusted Balance Sheet	Sept 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015	13-mo total	13 month avg.
Marianna Litigation	1,869,657	1,869,657	1,869,657	1,869,657	1,869,657	1,869,657	1,869,657	1,869,657	1,869,657	1,869,657	1,869,657	1,869,657	1.869.657	24,305,543	1.869.657
Amortization Ordered	(36,057)	(37,774)	(39,491)	(41,208)	(42,925)	(44,642)	(46,359)	(48,076)	(49,793)	(51,510)	(53,227)	(54 944)	(56 661)	(602 667)	(46 359)
Gulf Power Refund	(1,766,624)	(1,766,624)	(1,766,624)	(1,766,624)	(1,766,624)	(1.766.624)	(1.766.624)	(1.766.624)	(1 766 624)	(1 766 624)	(1 766 624)	(1 766 624)	(1 766 674)	(22,056,112)	(1 766 674)

56,674

(1,766,624)

54,957

(1,766,624)

53,240

(1,766,624)

51,523

(1,766,624)

49,806

INCOME STATEMENT

Balance 1772-1823

65,259

66,976

63,542

61,825

60,108

HISTORIC YEAR													
	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sep 2013	13-mo total
Amortization Expense per Books				26,640	27,798	27,712	27,943	27,942	27,943	27,943	31,617	54,911	280,449
Arnortization Expense per Order	<u></u>			1,717	1,717	1,717	1,717	1,717	1,717	1,717	1,717	1,717	15,453
Adjustment												1	(264,996
PRIOR YEAR													
Amortization Expense per Order	1,717	1,717	1,717	1,717	1,717	1,717	1,717	1,717	1,717	1,717	1,717	1,717	20,604
PROJECTED TEST YEAR													
Amortization Expense per Order	1,717	1,717	1,717	1,717	1,717	1,717	1,717	1,717	1,717	1,717	1,717	1,717	20,604

58,391

Florida Public Utilities Amortization - Regulatory Asset - South Georgia Method

.

353,307

(1,132)

352,175

(1,132)

351,043

(1,132)

349,911

(1,132)

348,779

(1,132)

347,647

Amortization

Exhibit NO. DOCKET NO. 140025-EI WITNESS: CHERYL M. MARTIN EXHIBIT NO. CMM-4 PAGE 1 of 1

HISTORIC YEAR															
	Sept 2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sep 2013	13-mo total	13 month avg.
South Georgia Method	248,666	248,666	248,666	248,666	248,666	248,666	248,666	248,666	248,666	248,666	248,666	248,666	248,666	3,232,658	248,666
Balance 1752-1823	248,666	248,666	248,666	248,666	248,666	248,666	248,666	248,666	248,666	248,666	248,666	248,666	248,666	3,232,658	248,666
PRIOR YEAR															
	Sept 2013	Oct 2013	Nov 2013	Dec 2013	Jan 2014	Feb 2014	Mar 2014	Apr 2014	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	13-mo total	13 month avg.
South Georgia Method Amortization	248,666	353,307	353,307	353,307	353,307	353,307	353,307	353,307	353,307	353,307	353,307	353,307	353,307	4,488,350	345,258
Balance 1752-1823	248,666	353,307	353,307	353,307	353,307	353,307	353,307	353,307	353,307	353,307	353,307	353,307	353,307	4,488,350	345,258
PROJECTED TEST YEAR															
Adjusted Balance Sheet	Sept 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015	13-mo total	13 month avg.
South Georgia Method	353,307	353,307	352,175	351,043	349,911	348,779	347,647	346,515	345,383	344,251	343,119	341,987	340,855	4,518,279	347,560

(1,132)

346,515

(1,132)

345,383

(1,132)

344,251

(1,132)

343,119

(1,132)

341,987

(1,132)

340,855

(1,132)

339,723

(13,584)

4,504,695 346,515

(1,045)

Regulatory Liability-Tax Gain		
Depreciation on Vehicles	Regulatory Liability Amount	\$ (930,395.00
Order NO. PSC-12-0574-PAA-PU		
Docket No. 120189-PU	Amortization Period: Monthly	\$ (27,365.00
Issued: October 24, 2012	(34 Months)	

Exhibit NO. _____ DOCKET NO. 140025-EI WITNESS: CHERYL M MARTIN EXHIBIT NO. CMM-5 PAGE 1 OF 1

Income Statement-Amortization (4070)

Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sep 2013	Total	MFR Schedule
	(301,015.00)	(27,365.00)	(27,365.00)	(27,365,00)	(27.365.00)	(27.365.00)	(27.365.00)	(27.365.00)	(27.365.00)	(27 365 00)	(27 365 00)	(574 665 00)	C-3
(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365,00)	(27.365.00)	(27,365,00)	(27,365,00)	(328 380 00)	C-2
(27,365.00)	273,650.00	-	-		-	-	-	- Indentif	- 10-10-02-0-01	- 120 10001001	- (27,505.00)	246,285.00	C-2
	Oct 2012 (27,365.00) (27,365.00)	Oct 2012 Nov 2012 (301,015.00) (27,365.00) (27,365.00) (27,365.00) 273,550.00	Oct 2012 Nov 2012 Dec 2012 (301,015.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) 273,655.00	Oct 2012 Nov 2012 Dec 2012 Jan 2013 (301,015.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) 27,365.00 (27,365.00) (27,365.00)	Oct 2012 Nov 2012 Dec 2012 Jan 2013 Feb 2013 (301,015.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) 27,365.00 (27,365.00) (27,365.00) (27,365.00)	Oct 2012 Nov 2012 Dec 2012 Jan 2013 Feb 2013 Mar 2013 (301,015.00) (27,365.00)	Oct 2012 Nov 2012 Dec 2012 Jan 2013 Feb 2013 Mar 2013 Apr 2013 (301,015.00) (27,365.00)	Oct 2012 Nov 2012 Dec 2012 Jan 2013 Feb 2013 Mar 2013 Apr 2013 May 2013 (301,015.00) (27,365.00) <	Oct 2012 Nov 2012 Dec 2012 Jan 2013 Feb 2013 Mar 2013 Apr 2013 May 2013 Jun 2013 (301,015,00) (27,365,00)	Oct 2012 Nov 2012 Dec 2012 Jan 2013 Feb 2013 Mar 2013 Apr 2013 May 2013 Jun 2013 Jul 2013 (301,015.00) (27,365.00) (27	Oct 2012 Nov 2012 Dec 2012 Jan 2013 Feb 2013 Mar 2013 Apr 2013 Jun 2013 Jul 2013 Aug 2013 (301,015.00) (27,365.00) (27	Oct 2012 Nov 2012 Dec 2012 Jan 2013 Feb 2013 Mar 2013 Apr 2013 Mar 2013 Jul 2013 Jul 2013 Aug 2013 Sep 2013 (301,015.00) (27,365.0	Oct 2012 Nov 2012 Dec 2012 Jan 2013 Feb 2013 Mar 2013 Apr 2013 Mary 2013 Jul 2013 Aug 2013 Sep 2013 Total (301,015.00) (27,365.00)

Oct 2013	Nov 2013	Dec 2013	Jan 2014	Feb 2014	Mar 2014	Apr 2014	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Total	MFR Schedule
(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(328,380.00)	
(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(27,365.00)	(328,380.00)	C-2
	Oct 2013 (27,365.00) (27,365.00)	Oct 2013 Nev 2013 (27,365.00) (27,365.00) (27,365.00) (27,365.00)	Oct 2013 Nov 2013 Dec 2013 (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00)	Oct 2013 Nov 2013 Dec 2013 Jan 2014 (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00)	Oct 2013 Nov 2013 Dec 2013 Jan 2014 Feb 2014 (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00)	Oct 2013 Nov 2013 Dec 2013 Jan 2014 Feb 2014 Mar 2014 (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00) (27,365.00)	Oct 2013 Nov 2013 Dec 2013 Jan 2014 Feb 2014 Mar 2014 Apr 2014 (27,365.00)	Oct 2013 Nov 2013 Dec 2013 Jan 2014 Feb 2014 Mar 2014 Apr 2014 May 2014 (27,365.00) <t< td=""><td>Oct 2013 Nov 2013 Dec 2013 Jan 2014 Feb 2014 Mar 2014 Apr 2014 May 2014 Jun 2014 (27,365.00) (</td><td>Oct 2013 Nov 2013 Dec 2013 Jan 2014 Feb 2014 Mar 2014 Apr 2014 May 2014 Jun 2014 Jul 2014 (27,365.00) (27,</td><td>Oct 2013 Nov 2013 Dec 2013 Jan 2014 Feb 2014 Mar 2014 Apr 2014 May 2014 Jun 2014 Jul 2014 Aug 2014 (27,365.00) (27,365</td><td>Oct 2013 Nov 2013 Dec 2013 Jan 2014 Feb 2014 Mar 2014 Apr 2014 May 2014 Jul 2014 Aug 2014 Sep 2014 (27,365.00) (27,365</td><td>Oct 2013 Nov 2013 Dec 2013 Jan 2014 Feb 2014 Mar 2014 Apr 2014 Jun 2014 Jul 2014 Aug 2014 Sep 2014 Total (27,365.00)<!--</td--></td></t<>	Oct 2013 Nov 2013 Dec 2013 Jan 2014 Feb 2014 Mar 2014 Apr 2014 May 2014 Jun 2014 (27,365.00) (Oct 2013 Nov 2013 Dec 2013 Jan 2014 Feb 2014 Mar 2014 Apr 2014 May 2014 Jun 2014 Jul 2014 (27,365.00) (27,	Oct 2013 Nov 2013 Dec 2013 Jan 2014 Feb 2014 Mar 2014 Apr 2014 May 2014 Jun 2014 Jul 2014 Aug 2014 (27,365.00) (27,365	Oct 2013 Nov 2013 Dec 2013 Jan 2014 Feb 2014 Mar 2014 Apr 2014 May 2014 Jul 2014 Aug 2014 Sep 2014 (27,365.00) (27,365	Oct 2013 Nov 2013 Dec 2013 Jan 2014 Feb 2014 Mar 2014 Apr 2014 Jun 2014 Jul 2014 Aug 2014 Sep 2014 Total (27,365.00) </td

PROJECTED TEST YEAR														
	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015	Total	MFR Schedule
Amortization	(27,365.00)			÷.		×	4	3 -	-	12	£1	2	(27,365.00)	
Total Amortization	(27,365.00)												(27,365.00)	C-2, C-19

Regulatory Liability - Post Retirement Benefit Order No. PSC-13-0594-PAA-PU Docket No. 130185-PU

Exhibit NO. DOCKET NO. 140025-EI WITNESS: CHERYL M. MARTIN EXHIBIT NO. CMM-6 PAGE 1 of 1

BALANCE SHEET

HISTORIC YEAR															
Per Books	Sept 2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sep 2013	13-mo total	13 month avg.
Post Retirement Benefit Amortization Booked				(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(2,586,590)	(198,968)
Balance 2809-2540	12		÷	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(2,586,590)	(198,968)
Adjusted Balance Sheet															
Post Retirement Benefit	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(3,362,567)	(258,659)
Amortization Ordered	68,468	76,076	83,684	91,290	98,898	106,506	114,114	121,722	129,330	136,938	144,546	152,154	159,760	1,483,486	114,114
	0.000		÷	(167,369)	(159,761)	(152,153)	(144,545)	(136,937)	(129,329)	(121,721)	(114,113)	(106,505)	(98,899)	(1,879,081)	(144,545)
PRIOR YEAR	Sept 2013	Oct 2013	Nov 2013	Dec 2013	Jan 2014	Feb 2014	Mar 2014	Apr 2014	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	13-mo total	13 month avg.
Adjusted Balance Sheet	Sept 2013	Oct 2013	Nov 2013	Dec 2013	Jan 2014	Feb 2014	Mar 2014	Apr 2014	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	13-mo total	13 month avg.
Post Retirement Benefit	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(3,362,567)	(258,659)
Amortization Ordered	159,760	167,368	174,975	182,583	190,190	197,798	205,406	213,013	220,621	228,229	235,836	243,444	251,051	2,670,274	205,406
	(98,899)	(91,291)	(83,684)	(76,076)	(68,469)	(60,861)	(53,253)	(45,646)	(38,038)	(30,430)	(22,823)	(15,215)	(7,608)	(692,293)	(53,253)
PROJECTED TEST YEAR															
Adjusted Balance Sheet	Sept 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015	13-mo total	13 month avg.
Post Retirement Benefit	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(258,659)	(3,362,567)	(258,659)
Amortization Ordered	251,051	258,659	258,659	258,659	258,659	258,659	258,659	258,659	258,659	258,659	258,659	258,659	258,659	3,354,959	258,074
	(7,608)			2		· ·			1.52				-	(7,608)	(585)

INCOME STATEMENT

HISTORIC YEAR										11		100.000	
	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sep 2013	13-mo total
Amortization Expense per Books		-	-			140	-	-			2		LANGE STREET
Amortization Expense per Order	7,608	7,608	7,606	7,608	7,608	7,608	7,608	7,608	7,608	7,608	7,608	7,606	91,292
Adjustment													91,292
PRIOR YEAR													
Amortization Expense per Order	7,608	7,607	7,608	7,607	7,608	7,608	7,607	7,608	7,608	7,607	7,608	7,607	91,291
PROJECTED TEST YEAR													
Amortization Expense per Order	7,608			8	-	-	9	-	2		20	12	7,608

Florida Public Utilities Company	
General Liability	

Type	Period	Amount
Regulatory Asset-General Liability Claim	5 years	\$ 250,000.00
Amortization	Annually	\$ 50,000.00
	Monthly	\$ 4,167.00
General Liability Reserve - Large Claims	5 years	250,000.00
	Annually	\$ 50,000.00
	Monthly	\$ 4,167.00
General Liability Reserve - Small Claims	Annually	20,000.00
	Monthly	1,666.00
	Total Annually	\$ 120,000.00
	Total Monthly	\$ 10,000.00

Exhibit NO.____ DOCKET NO. 140025-EI WITNESS: CHERYL M MARTIN EXHIBIT NO. CMM-7 PAGE 1 OF 1

Income Statement (9250):

HISTORIC YEAR														
	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sep 2013	Total	MFR Schedule
Total Expense	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	C-7
PRIOR YEAR	Oct 2013	Nov 2013	Der 2013	lan 2014	Fab 2014	Mar 2014	Aur 2014	Mar 2014					2017	
			Deckors	3411 2014	160 2014	Wai 2014	Apr 2014	May 2014	Jun 2014	JUI 2014	Aug 2014	Sep 2014	Total	MFR Schedule
Accrual-Small Claims	1,666.00	1,666.00	1,666.00	1,666.00	1,666.00	1,666.00	1,666.00	1,666.00	1.666.00	1.666.00	1.666.00	1 674 00	20 000 00	
Amortization of Regulatory Asset	4,167.00	4,167.00	4,167.00	4,167.00	4,167.00	4,167.00	4,167.00	4,167.00	4,167.00	4,167.00	4,167.00	4,163.00	50.000.00	
Total Expense	5,833.00	5,833.00	5,833.00	5,833.00	5,833.00	5,833.00	5,833.00	5,833.00	5,833.00	5,833.00	5,833.00	5,837.00	70,000.00	C-7

PROJECTED TEST YEAR														
	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015	Total	MFR Schedule
Accrual-Small Claims	1,666.00	1,666.00	1,666.00	1,666.00	1.666.00	1.666.00	1.666.00	1,666,00	1 666 00	1 665 00	1 666 00	1 674 00	20.000.00	
Accrual-Large Claims	4,167.00	4,167.00	4,167.00	4,167.00	4,167.00	4.167.00	4,167.00	4,167.00	4.167.00	4 167 00	4 167 00	4 163 00	50,000,00	
Amortization of Regulatory Asset	4,167.00	4,167.00	4,167.00	4,167.00	4,167.00	4,167.00	4,167.00	4,167.00	4,167.00	4,167,00	4,167.00	4,163.00	50 000 00	
Total Expense	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	120,000,00	C-7

Florida Public Utilities Company Docket No. 140025-EI Witness: Cheryl M. Martin Exhibit No. CMM-8 Page 1 of 3

PTO PLAN (Paid Time Off)

All incumbent employees are offered an annual choice between two "time off" plans. <u>All new non-union employees</u> <u>hired after December 31, 2006, or union employees hired after their respective union contract date within 2007, will be on the PTO Plan.</u>

Every December incumbent employees are eligible to switch to the PTO plan, effective the following January 1^{sh} of the following year. Once an employee has made a decision to participate in the PTO plan, they cannot switch back.

The first plan is the same vacation, personal days, and sick time plan that we currently have in effect, with no changes. The 8 holidays, plus the two personal days (i.e. floating holidays) will also remain unchanged, as will funeral leave and jury duty.

The second is a PTO (Paid Time Off) plan. With the PTO plan, employees are offered a specific number of PTO days per year in place of the current vacation, personal days, and sick time plans. The 8 major holidays that we have now remained unchanged and outside of PTO, as is funeral leave and jury duty. The two personal days (i.e. floating holidays) available in the first plan are included in the PTO days listed below. Employees earn a new allotment of PTO time every January 1st, and will be earned according to the below guideline:

- a. 17 days after 1 year of service
- b. 22 days after 5 years of service
- c. 27 days after 15 years of service
- d. 32 days after 25 years of service

PTO days can be used for any purpose, including caring for sick family members if needed. All PTO days need to be scheduled in advance with the employees immediate supervisor, with the exception of time needed due to legitimate illness or non work related injury of the employee or one of their family members, or if they have a personal hardship, either of which requires a call to the supervisor before the start of each work day. Department Managers will keep track of PTO time taken (tracked in hours) that are scheduled in advance (i.e. vacation and/or personal days) and unscheduled hours (sick time due to illness or injury). Department managers will have discretion to limit scheduling of PTO during peak season timeframes or to limit the number of employees off at any one time.

Unused PTO days, up to 5 days per year, are accumulated or "banked" for future years use. Up to 10 weeks of unused PTO, plus the unused portion of the current year's allotment, will be paid out at retirement or termination; however this pay-out will be excluded from pension benefit calculations.

Incumbent employees, selecting the PTO plan, will keep 100% of their existing sick time bank, which will be frozen at the time that they elect the PTO plan. This bank of sick time will be available for a legitimate illness or injury and not for vacation or personal time. If an employee needs time off for an illness or injury, they will be required to utilize a minimum of 5 PTO days first (if available) before using their sick time bank, and will require a doctor's note. Employees are able to utilize a maximum of 16 weeks of banked sick time in any one calendar year after first utilizing 5 PTO days, providing that they have a doctor's note to support the medical absence.

Employees must work on their scheduled workdays before and after a holiday in order to receive holiday pay unless they are on a) paid leave of absence, b) long term disability, c) scheduled PTO, or d) have a legitimate illness or injury with a doctor's note.

Loaning or donating PTO or banked sick time from one employee to another is prohibited.

When the employee's allotment of PTO days has been exhausted, they will not have any other paid time available for the balance of the year unless they have banked sick time to be used for a legitimate illness or injury. Generally, good attendance is required as part of each employee's job performance expectations, and the use of unpaid (i.e. no work – no pay) time off beyond the PTO allowance is not acceptable unless the employee has a personal hardship.

Florida Public Utilities Company Docket No. 140025-EI Witness: Cheryl M. Martin Exhibit No. CMM-8 Page 2 of 3

In general, employees will be limited to taking no more than 3 weeks off at a time for vacation or personal reasons. However, employees will be given a one-time-only opportunity to take 4-8 weeks off at one time if they have sufficient time available to them; have requested the time off with ample notice for the department to plan for this time off; and it fits within the business needs of the department and the Company.

PTO for new employees will be as per the below guideline:

New employees who start in the first quarter of a year receive:

- a) 2 days after 90 days of service
- b) 4 days on October 1 of the year of hire
- c) 4 days on January 1 following the year of hire
- d) 4 days on April 1 following the year of hire
- e) 4 days on July 1 following the year of hire
- f) 4 days on October 1 following the year of hire
- g) 17 days on the following January, and every January 1 from that point forward, increasing with years of service as per the above guidelines.

New employees who start in the second quarter of a year receive:

- a) 2 days after 90 days of service
- b) 4 days on January 1 following the year of hire
- c) 4 days on April 1 following the year of hire
- d) 4 days on July 1 following the year of hire
- e) 4 days on October 1 following the year of hire
- f) 17 days on the following January, and every January 1 from that point forward, increasing with years of service as per the above guidelines.

New employees who start in the third quarter of a year receive:

- a) 2 days after 90 days of service
- b) 4 days on April 1 following the year of hire
- c) 4 days on July 1 following the year of hire
- d) 4 days on October 1 following the year of hire
- e) 17 days on the following January, and every January 1 from that point forward, increasing with years of service as per the above guidelines.

New employees who start in the fourth quarter of a year receive:

- a) 2 days after 90 days of service
- b) 4 days on July 1 following the year of hire
- c) 4 days on October 1 following the year of hire
- d) 17 days on the following January, and every January 1 from that point forward, increasing with years of service as per the above guidelines.



Florida Public Utilities Company Docket No. 140025-EI Witness: Cheryl M. Martin Exhibit No. CMM-8 Page 3 of 3

Policy No .: Supersedes: Approved by:

HR-2013-1 Effective Date: January 1, 2014 PTO Plan eff: 1/1/07 Devon Moormann

PAID TIME OFF

Paid Time Off (PTO) is a benefit provided to eligible Chesapeake and FPU employees. Employees accrue PTO based upon tenure with the Company and are able to use available PTO to schedule paid absences from work.

New employees who are eligible for benefits begin accruing PTO hours on their date of hire. However, new hires are not permitted to utilize their PTO time during the three-month introductory period of employment. PTO is paid out at the employee's regular rate of pay and cannot be carried over into the next year. Thus, unused PTO time will be lost if not taken. An exception will be made if the employee was unable to use accrued PTO because of business demands. In this case, the employee may request and receive a payout of 8-40 PTO hours with the approval of the Department Manager and the Human Resources Department.

PTO Requests

All requests for PTO from exempt or non-exempt employees must be approved by the Department Manager. Every effort will be made to accommodate employee requests, but the manager's first priority will be the needs of the department. In order to ensure appropriate coverage, managers may request a projected PTO plan from each employee in the department. Employees are strongly encouraged to schedule five (5) consecutive working days off each year.

PTO Accrual Schedule

Full-time employees accrue PTO hours each pay period based upon the employee's anniversary date. Part-time employees who are eligible for benefits accrue at pro-rated amounts. The accrual rates are determined as follows:

Years of Service	PTO Days Per Year
< 5 Years	14
5 - 14 Years	19
15 - 24 Years	24
Over 25 Years	29

*PTO balances appear each pay period on employee pay stubs.

PTO time advanced to the employee (prior to being accrued) must be repaid upon voluntary or involuntary separation from the Company. This balance will be deducted from the employee's final paycheck.



REDACTED

FLORIDA PUBLIC UTILITIES COMPANY

Docket No. 140025-EI

DIRECT TESTIMONY and EXHIBITS

OF

P. MARK CUTSHAW

AND

DRANE A. (BUDDY) SHELLEY

Direct Testimony of P. Mark Cutshaw and Drane A. (Buddy) Shelley

Q. Please state your name, affiliation, business address and summarize your professional experience and academic background.

3 A. My name is P. Mark Cutshaw. I am the Director of System Planning and Engineering for Florida Public Utilities Company (FPU or Company). My business office address is 911 4 South 8th Street, Fernandina Beach, Florida 32034. I joined FPU in May 1991 as Division 5 6 Manager in the Marianna (Northwest Florida) Division. In January 2006, I became the 7 General Manager of our Northeast Florida Division, and in 2013, I moved into my current 8 position of Director of System Planning and Engineering. I graduated from Auburn University in 1982 with a B.S. in Electrical Engineering and began my career with 9 10 Mississippi Power Company in June 1982. I spent 9 years with Mississippi Power Company 11 and held positions of increasing responsibility that involved budgeting, as well as operations 12 and maintenance activities at various Company locations. Since joining FPU, my 13 responsibilities have included all aspects of budgeting, customer service, operations and 14 maintenance in both the Northeast and Northwest Florida Divisions. My responsibilities 15 also included involvement with Cost of Service Studies and Rate Design in other rate 16 proceedings before the Commission as well as other regulatory issues.

17 Q. Have you filed testimony before the Florida Public Service Commission in prior 18 cases?

A. Yes. Most recently, I provided testimony in the Commission's Fuel and Purchased
Power Cost Recovery Proceeding in 2013. I also testified in the Company's 2007 rate case
in Docket No. 070304-EI as part of a panel with Don Myers. Likewise, I participated in the
2003 rate case filing (Docket No. 030438-EI), wherein the Commission authorized the
1 | P a g e

Direct Testimony of P. Mark Cutshaw and Drane A. (Buddy) Shelley

Company to consolidate the base rates of the Company's Northeast (Fernandina) and Northwest (Marianna) divisions. I have been involved with numerous other filings, audits and data requests before the FPSC, including filing testimony on several prior occasions in the Fuel and Purchased Power Cost Recovery proceeding, as well as the preparation and support of the Company's cost of service studies for the 1993 rate case (Docket 930400-EI) and presentation of the Company's storm hardening and hurricane preparedness activities.

Q. Are you familiar with the operations and management of the Northeast and Northwest Florida divisions?

9 A. Yes. Having worked directly in both divisions and now as the Director of System
10 Planning and Engineering for the Company, I am very familiar with all aspects of the
11 operations and management. I have also been responsible for collecting the information
12 necessary to support this important part of our filing.

Q. Please state your name, affiliation, business address and summarize your professional experience and academic background.

A. My name is Drane A. (Buddy) Shelley. I am Director, Electric Operations for Florida
Public Utilities Company (FPU). My business office address is 911 South 8th Street,
Fernandina Beach, Florida 32034. I joined FPU in December, 2006 as Operations Manager
in the Marianna (Northwest Florida) Division. In February, 2009, I was promoted to General
Manager of the Northwest Florida Division, and in 2013, I moved into my current position
of Director, Electric Operations. I graduated from Murray State University in 1976 with a
B.S. in Electrical Engineering Technology and began my career with Big Rivers Electric

Direct Testimony of P. Mark Cutshaw and Drane A. (Buddy) Shelley

1	Company in May, 1976. I spent 15 years with Big Rivers Electric Company and held
2	positions of increasing responsibility that involved substation, transmission, distribution and
3	power plant electrical design, as well as operations and maintenance activities. After
4	leaving Big Rivers, I worked 14 years for three (3) different Engineering Consultant Firms
5	providing services to several Electric Utility Companies including IOU's, Municipals, and
6	Cooperatives. Since joining FPU, my responsibilities have included all aspects of budgeting,
7	customer service, operations and maintenance in both the Northeast and Northwest Florida
8	Divisions.
9	Q. Have you filed testimony before the Florida Public Service Commission in prior
10	cases?
11	A. No.
11 12	A. No.Q. Are you familiar with the operations and management of the Northeast and
11 12 13	 A. No. Q. Are you familiar with the operations and management of the Northeast and Northwest Florida divisions?
11 12 13 14	 A. No. Q. Are you familiar with the operations and management of the Northeast and Northwest Florida divisions? A. Yes. Having worked directly in both divisions and now as the Director, Electric
11 12 13 14 15	 A. No. Q. Are you familiar with the operations and management of the Northeast and Northwest Florida divisions? A. Yes. Having worked directly in both divisions and now as the Director, Electric Operations for the Company, I am very familiar with all aspects of the operations and
11 12 13 14 15 16	 A. No. Q. Are you familiar with the operations and management of the Northeast and Northwest Florida divisions? A. Yes. Having worked directly in both divisions and now as the Director, Electric Operations for the Company, I am very familiar with all aspects of the operations and management. I have also been responsible for collecting the information necessary to
11 12 13 14 15 16 17	 A. No. Q. Are you familiar with the operations and management of the Northeast and Northwest Florida divisions? A. Yes. Having worked directly in both divisions and now as the Director, Electric Operations for the Company, I am very familiar with all aspects of the operations and management. I have also been responsible for collecting the information necessary to support this important part of our filing.
11 12 13 14 15 16 17 18	 A. No. Q. Are you familiar with the operations and management of the Northeast and Northwest Florida divisions? A. Yes. Having worked directly in both divisions and now as the Director, Electric Operations for the Company, I am very familiar with all aspects of the operations and management. I have also been responsible for collecting the information necessary to support this important part of our filing. Q. What is the purpose of your panel testimony in this proceeding?
11 12 13 14 15 16 17 18 19	 A. No. Q. Are you familiar with the operations and management of the Northeast and Northwest Florida divisions? A. Yes. Having worked directly in both divisions and now as the Director, Electric Operations for the Company, I am very familiar with all aspects of the operations and management. I have also been responsible for collecting the information necessary to support this important part of our filing. Q. What is the purpose of your panel testimony in this proceeding? A. We will provide information in Section I relating to the important projects that our

21 reliability of our electric system. We will also explain the rationale behind these projects and 3 | P a g e

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1 support the appropriateness of the associated investment dollars and expenses to be included 2 in new base rates. In that context, we will address our Pole Replacement Plan and our Storm 3 Hardening Plan. We will also address in Section II several other capital projects undertaken 4 by the Company in recent years but will focus on one particular critical project. These additional projects are designed to support customer growth, improve customer service and 5 6 provide significant fuel savings for FPU's customers. We will discuss our new operations 7 center in Section III and describe our purchase power partners in Section IV and explain 8 how we are working to lower customer fuel clause expenses. In Sections V and VI, we will 9 address the Company's proposed cost of service methodology, including certain changes 10 that the Company is seeking in conjunction with this rate case filing; the Company's rate 11 design methodology, including a proposed step rate increase, as well as the benefits of 12 consolidation of the Company's fuel rates, which the Company intends to propose for 13 further Commission consideration later this year in the context of the Commission's fuel 14 cost recovery proceedings. Finally, in Section VII, we will describe some of the positive 15 impacts that the acquisition by Chesapeake Utilities Corporation has had on the Company's 16 ability to improve reliability, improve safety, and provide savings for customers.

17

Q.

Do you have any exhibits to which you will refer in your testimony?

A. Yes. We have 9 exhibits. Exhibit MC/DS-1 is a list of the MFRs that we sponsor.
Exhibit MC/DS-2 is a list of capital projects that relate to reliability improvement efforts.
Exhibit MC/DS-3 is a copy of our 2013 Storm Hardening and Reliability Report. Exhibit
MC/DS-4 is a compilation of metrics related to FPU electric system reliability. Exhibit
MC/DS-5 is a list of on-going and projected capital projects. Exhibit MC/DS-6 is a

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compilation of safety statistics. Exhibit MC/DS-7 is a list of the proposed lighting rates to be included in this proceeding. Exhibit MC/DS-8 is the determination of the purchase power adjustment changes that will be required with the consolidation of the outdoor and street lighting rates. Finally, Exhibit MC/DS-9 will include information regarding the purchased power adjustment benefits that customers will receive based upon a proposed cogeneration project. We have reviewed and support the preparation of each of these exhibits.

8

Q.

Are you sponsoring any MFRs in this case?

9 A. Yes. We are sponsoring the MFRs listed in Exhibit MC/DS-1. To the best of our
10 knowledge, these MFRs are true and correct.

11 Q. Please describe who will be responsible for the different aspects of the 12 testimony.

A. Yes. P. Mark Cutshaw will be the primary witness responsible for defending the
majority of the testimony. Drane A. (Buddy) Shelley will provide additional support to the
testimony with particular focus on the operations activities and construction work.

16 Q. Please describe FPU's distribution system and your service area.

A. The service area is divided into the Northeast and Northwest Florida Divisions with a total of just over 31,000 customers. The Northeast Florida Division is located in Nassau County with the service area being confined to Amelia Island. The Northwest Florida Division is located in portions of Jackson, Calhoun and Liberty Counties with the majority of the customer base being located in Jackson County.

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Q. Would you describe FPUC's distribution system and service area for the two divisions as being similar?

A. No. The Northeast Florida division is located on Amelia Island with a total service territory of approximately 40 square miles. Customer density is very heavy with a similar mix of overhead and underground distribution facilities. The proximity to the beach and a large city helps stabilize the resort and vacation areas of the island while two large paper mills provide excellent job opportunities and additional stability to the area. While the economy did have an impact on this area the recovery seems to be making some progress.

9 The Northwest Florida division is located in a more rural, inland area with a total service 10 territory of approximately 300 square miles. Customer density is relatively sparse, similar to 11 what you would expect in a rural area, with the service provided predominantly by an 12 overhead distribution system. The rural, more inland service territory with fewer industrial 13 customers makes this area slightly more susceptible to economic downturns and is not 14 showing the recovery being experienced in the Northeast Florida division.

15

Ia. CAPITAL PROJECTS RELATING TO RELIABILITY IMPROVEMENTS

16 Q. Please identify the various capital projects to which you have referred that 17 relate to improving reliability on the FPU electric system.

18 A. The capital improvement projects relating to improving reliability can be categorized 19 as follows: replacement of aging/unreliable underground conductors, replacement and 20 upgrade of relay and control schemes at substations, replacement/upgrade of transmission 21 circuit breakers at two substations, upgrade of a substation buss at one substation,
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replacement of wood distribution poles, relocation of distribution lines that had been inaccessible to roadways, replacement of insulators along a coastal highway, replacement/upgrade/addition of distribution voltage regulators/reclosers, and replacement of wood transmission poles with concrete poles. Since 2008, and through our projected test year, we have or will have spent in excess of \$10,900,000 for reliability improvements.

6

A. <u>Replacement of Aging/Unreliable Underground Conductors</u>

7 Q. What did the projects to replace underground conductors entail?

A. In the Northeast Division there were a significant amount of underground conductors that had been installed in the 1970s. These conductors were aging poorly and needed to be replaced. The scope of these projects was to replace underground conductors on Amelia Island with a significant portion of the work being conducted on the south end of Amelia Island. The focus on the south end of the Island was due largely to construction activity that occurred in that area in the 1970's.

14 Q. What were the costs associated with these projects?

A. Over \$4.6 million was spent through the end of 2013 with total projected costs
through 2014 projected to reach over \$5.0 million. Exhibit MC/DS-2 shows the projects and
associated cost details.

18 Q. Why were these projects necessary?

A. The existing underground conductors were older technology conductors that were
 operated in a harsh environment, in areas where the groundwater was near the surface and

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1 the salt content was high. They had been installed directly in the ground with an exposed 2 concentric neutral. The concentric neutral in many cases had deteriorated and there was 3 pitting of the conductor insulation. The failure rates were extremely high, at one point 4 occurring almost daily. Reliability was suffering and customers were being adversely impacted. 5

6

Q. What benefit has the Company seen as a result of these projects?

7 A. The Company has experienced a significant reduction in underground cable failures, 8 which reduces outages, improves the reliability indicators and has a direct impact in the 9 reduction in overtime work and associated expense. Details of this type of improvement are 10 included in the Company's annual 2013 Storm Hardening and Reliability Report that was 11 submitted March 1, 2014 a summary of which is included in Exhibit MC/DS-3.

12 Q. What benefits have customers seen as a result of these projects?

13 A. Customers have benefitted from improved reliability through reduced electric 14 outages which had significant, unwanted impacts on the daily life of our customers. Exhibit 15 MC/DS-4 shows the detail and trend of FPU reliability metrics.

16 **Q**. Could the Company have deferred these projects without risk to its levels of 17 service and service reliability?

18 A. No. As previously indicated, the Company was experiencing very frequent outages 19 in certain areas prior to these projects to replace underground conductors. There was no 20 other way to effectively remedy the situation and further delay would have exacerbated the 21 deteriorating situation. Replacement of the underground cable in these areas actually began 8 | Page

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1	around 2000 and was focused on small areas of replacement each year. The cable failures				
2	and resulting outages, however, quickly outpaced the rate of cable replacement, which was				
3	ultimately accelerated slightly in 2006. This replacement effort continued, but the outages				
4	nonetheless continued at an unacceptable level. After the merger, our new parent,				
5	Chesapeake Utilities recognized that more focus should be applied to improving reliability.				
6	As a result, the decision was made to further accelerate the cable replacement with a goal to				
7	complete the work in 2013. Although some work still remains, the majority of the work was				
8	completed by year end 2013, and the outage rate has decreased dramatically as a result.				
9	B. <u>Replacement and Upgrades of Relays and Control Schemes at Substations</u>				
10	Q. What did the projects to replace and upgrade relays and control schemes at				
11	substations entail?				
12	A. These projects primarily involved replacing existing electromechanical relays with				
13	electronic digital relays in multiple substations.				
14	Q. What were the costs associated with these projects?				
15	A. The costs were approximately \$430,000. The projects and costs are shown in Exhibit				
16	MC/DS-2.				
17	Q. Why were these projects necessary?				
18	A. The Northeast Florida division does not currently have a Supervisory Control and				
19	Data Acquisition (SCADA) System and must rely on manual control of the substations. In				
20	order to move towards the installation of a functioning SCADA system and to comply with				
	We consider the set of the set o				

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certain North American Electric Reliability Corporation (NERC) and Florida Reliability
 Coordinating Council (FRCC) compliance standards, the project began the systematic
 replacement of electromechanical relays within the substations with electronic digital relays.
 The relays could be easily integrated into a SCADA system, could also be programmed to
 comply with NERC/FRCC compliance standards and have also proved to be much more
 reliable than previous relays.

7 Q. What benefit has the Company seen as a result of these projects?

A. In addition to compliance with NERC and FRCC requirements, the Company will see two areas of benefits. First, replacing the older technology allows for more reliable and more secure substation operation. But also very importantly, the new electronic digital relays afford the opportunity for more flexible control schemes and the ability to remotely control operations and obtain additional information regarding the status and operational history of the substation.

14 Q. What benefits have customers seen as a result of these projects?

A. These projects have contributed to the improvements in the Company's reliability
measures as shown on Exhibit MC/DS-4 and will continue to provide improvement as
SCADA system controls are added.

Q. Could the Company have deferred these projects without risk to its levels of service and service reliability?

A. No. These projects were necessary both for regulatory compliance and as an integral
part of the Company's reliability improvement plan.

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- 1 C. Replacement/Upgrade of Transmission Circuit Breakers at Two Substations Q. 2 What did the projects to replace transmission circuit breakers at the referenced two substations entail? 3 4 A. Both the Amelia Island Plantation Substation and the Step-down Substation housed 5 1970's vintage switchgear which was becoming a recurring source of maintenance issues. 6 was an older technology and had reached the end of its useful life. These projects focused on 7 the replacement of the circuit breakers in the substations with modern equipment and the 8 necessary modifications to the buss configuration necessary to maximize the effectiveness of the installation. 9
- 10 Q. What were the cos

What were the costs associated with these projects?

A. The costs were approximately \$300,000 at the Amelia Island Plantation Substation
and \$1.09 million at the Step-down Substation. The projects and costs are shown in Exhibit
MC/DS-2.

14 Q. Why were these projects necessary?

A. As stated, this switchgear was old and deteriorating. In particular, with regard to the circuit breakers, the insulators were breaking down, and the hydraulic systems were wearing out which would eventually lead to breaker failures and slow systems operations. In addition, the configuration of the buss only marginally met NESC code clearance requirements and could have been dramatically impacted by wind borne debris during a hurricane.

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1 Q. What benefit has the Company seen as a result of these projects?

A. The main benefit to the Company is to improve the overall reliability and safety of the electric system by replacing outdated equipment with new technology equipment. The newer equipment operates much more quickly and reliably and avoids the possibility of misoperations or catastrophic failure.

6 Q. What benefits have customers seen as a result of these projects?

A. In general customers are benefitting from the overall improvements to reliability on
the FPU system. In particular, if one of these older breakers had failed while in service, there
would be the high likelihood of a prolonged outage to the segment of population being
served. Additionally, some of the breakers use mineral oil as the insulating medium which
could have resulted in environmental issues should a failure occur.

12 Q. Could the Company have deferred these projects without risk to its levels of 13 service and service reliability?

A. No. Any delay would have increased the risk of long interruptions of service to
customers and possible penalties for failure to maintain equipment up to code.

16

D. <u>Upgrade of a Substation Buss at one Substation</u>

17 Q. What did the projects to upgrade the substation buss entail?

A. These projects consisted of several activities at the Company's Amelia Island
Plantation substation, the largest element of which was the replacement and re-insulation of
the substation main buss. In conjunction with the replacement and re-insulation of the buss,

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the Company replaced a roof and purchased additional property around the substation for
 future reconfiguring the equipment.

3 Q. What were the costs associated with these projects?

A. Total project costs were about \$800,000. The projects and costs are shown in Exhibit
MC/DS-2.

6 Q. Why were these projects necessary?

7 A. The Amelia Island Plantation substation is located next to a water treatment plant 8 and near the Atlantic Ocean, which results in a very corrosive environment. The 12.47 KV 9 portion of the substation is metal enclosed switchgear. However, the enclosure/building has 10 not provided adequate protection from the environment. As it was, the roof over the 11 switchgear was problematic because there was no opportunity for rain to wash chemicals 12 and particulates off the enclosed insulators and buss. This raised the likelihood of a 13 flashover and subsequent catastrophic outage. Upon preparing to perform an initial test on 14 the system, FPU determined, prior to the upgrade, that even testing the insulators and buss 15 was unsafe due to the visible deterioration of the equipment. The replacement and re-16 insulation of the buss therefore significantly reduced the risks of equipment failure.

17

Q. What benefit has the Company seen as a result of these projects?

A. There have been no flashovers or equipment failures and the new equipment has
extended the life of the substation. The purchase of the additional property has also
provided easy access to the substation and will allow additional modifications to the
substation as needed in the future due to capacity increases or further modifications in
13 | P a g e

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substation design. The additional property purchase also resolved a long time issue related
 to access rights to the substation by eliminating the need to cross private property to access
 the substation.

4

Q. What benefits have customers seen as a result of these projects?

- A. Customers have not experienced outages due to failure of this equipment and have
 enjoyed overall better reliability because of this and other reliability enhancement projects.
- Q. Could the Company have deferred these projects without risk to its levels of
 service and service reliability?

9 A. No. As with other projects discussed, any delay would have increased the risks of 10 extended outages to customers and the possibility of a significant substation failure and 11 posed a serious safety concern for FPU employees required to maintain and operate the 12 switchgear.

13

E. <u>Replacement of Wood Distribution Poles</u>

14 Q. What did the distribution pole replacement project entail?

A. The Company has employed Osmose to perform extensive testing of its wood distribution pole system. This project, as of year-end of 2013, consists of the inspection of approximately 3,000 poles each year which has resulted in the inspection of a total of 21,235 (81.2%) poles since the beginning of the program in 2008. The inspection results have identified a total of 1,745 poles that required replacement. Of that number, 888 have already been replaced with 857 remaining to be replaced. The exact cost associated with the

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1	replac	eement of these poles is not available, but we estimate it to be approximately	
2	\$1,80	0,000. Previous results indicate that approximately 600 additional poles will be	
3	identi	fied as requiring replacement during the 2014 and 2015 inspection cycles. The total	
4	cost to replace the 857 pole backlog, along with the 600 additional poles we anticipate will		
5	be identified for replacement, will be approximately \$2,900,000 over the next few years.		
6	This will complete the initial eight (8) year inspection cycle.		
7	Q.	Is this a component of your approved Storm Hardening Plan?	
8	A.	Yes, it is.	
9	Q.	What were the costs associated with this project?	
9 10	Q. A.	What were the costs associated with this project? The costs for pole replacement over the life of the project are anticipated to be	
9 10 11	Q. A. approx	What were the costs associated with this project? The costs for pole replacement over the life of the project are anticipated to be ximately \$4,700,000, which equates to approximately \$580,000 per year.	
9 10 11 12	Q. A. approx Q.	What were the costs associated with this project? The costs for pole replacement over the life of the project are anticipated to be ximately \$4,700,000, which equates to approximately \$580,000 per year. Why was this project necessary?	
9 10 11 12 13	Q. A. approx Q. A.	What were the costs associated with this project? The costs for pole replacement over the life of the project are anticipated to be ximately \$4,700,000, which equates to approximately \$580,000 per year. Why was this project necessary? Damaged or rotted wooden poles are among the first casualties of weather related	
9 10 11 12 13 14	Q. A. approx Q. A. events	 What were the costs associated with this project? The costs for pole replacement over the life of the project are anticipated to be ximately \$4,700,000, which equates to approximately \$580,000 per year. Why was this project necessary? Damaged or rotted wooden poles are among the first casualties of weather related as As part of the Storm Hardening Plan, the testing program and associated replacement 	
9 10 11 12 13 14 15	Q. A. approx Q. A. events of woo	What were the costs associated with this project? The costs for pole replacement over the life of the project are anticipated to be ximately \$4,700,000, which equates to approximately \$580,000 per year. Why was this project necessary? Damaged or rotted wooden poles are among the first casualties of weather related as As part of the Storm Hardening Plan, the testing program and associated replacement of poles have demonstrated that it is imperative to replace decayed wooden poles on a	

17 Q. What benefit has the Company seen as a result of this project?

A. The Company is in compliance with its Storm Hardening Plan as approved by the
Commission. In addition, unusual increases in operations and maintenance expenses should
be avoided in future years as more of the decayed/weaker poles are identified and replaced.

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1 Q. What benefit have customers seen as a result of this project?

A. Customers have enjoyed overall better reliability due to this and other projects
described here, as well as a reduced risk of outages during significant weather events..

4 Q. Could the Company have deferred this project without risk to its levels of 5 service and service reliability?

A. No. Any delay in this project would have increased the risk of outages and hurt the
reliability of the system. Furthermore, the Company would not have been in compliance
with the Commission Storm Hardening requirements.

9 F. <u>Replacement of Wood Transmission Poles</u>

10 Q. What did the project to replace wood transmission poles entail?

- 11 A. This project entailed the replacement of 34 wood poles with concrete poles.
- 12 Q. Is this a component of your approved Storm Hardening Plan?
- 13 A. Yes, it is.
- 14 Q. What were the costs associated with this project?
- 15 A. The costs are anticipated to be approximately \$1.4 million.
- 16 Q. Why was this project necessary?
- 17 A. A detailed inspection in 2013 of the FPU 138 KV and 69 KV transmission systems
- 18 found that 34 of our 69 KV wood transmission poles needed to be replaced due to severe

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woodpecker damage or the decayed/rotted condition of the pole with the major cause of the
damage to poles being woodpecker damage. These poles are critical to the integrity of the
transmission system on the island.

4 Q. What benefit has the Company seen as a result of this project?

5 A. In addition to complying with our Commission-approved Storm Hardening Plan, the 6 replacement of these wood poles with concrete poles should avoid any unusual increases in 7 operations and maintenance expense in future years.

- 8 Q. What benefit have customers seen as a result of this project?
- 9 A. Customers will experience improved reliability as a result of this and other reliability
 10 enhancement projects.
- 11 Q. Could the company have deferred this project without risk to its levels of 12 service and service reliability?
- 13 A. No. Any delay in this project would result in increased risks to customers.
- 14 G. <u>Relocation of Distribution Lines</u>
- 15 Q. What did the project to relocate inaccessible lines entail?
- A. This project included relocating/rebuilding several lines and line segments from
 wooded rural areas to roadways primarily in the Northwest Division.
- 18 Q. What were the costs associated with this project?
- 19 A. The costs were approximately \$495,000.

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1 Q. Why was this project necessary?

A. In the Northwest Division, there are numerous distribution lines located in wooded
areas that are difficult or impossible to reach by vehicle. Part of the Company's Storm
Hardening Plan is to place facilities on public rights-of-way and/or easements. This project
was important to reliability and necessary to comply with our plan.

6 Q. What benefit has the Company seen as a result of this project?

A. Relocating these distribution lines to roadways has provided several benefits:
employees can monitor and assess the condition of these lines in a more efficient manner;
when there is maintenance to be performed or repairs/restoration to be accomplished the
employees and truck-mounted equipment can be placed right at the work location; and
safety is enhanced because employees aren't walking through woods at night during a storm
to locate and physically climb poles to repair/restore service.

13 Q. What benefits have customers seen as a result of this project?

A. As with our other projects, reliability has been improved as a result of relocating
these lines out of areas subject to vegetation issues to areas that are better maintained and
more accessible. Outages are less frequent and of shorter duration.

Q. Could the Company have deferred this project without risk to its levels of service and service reliability?

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A. No. This issue was another source of repair and maintenance issues, which
 contributed further to our reliability issues. Reliability has now been enhanced because of
 this and other projects the Company has undertaken.

4

H. Replacement of Insulators along a Coastal Highway

5 Q. What did the project to replace insulators at locations along the referenced 6 coastal highway entail?

A. The Company has overhead electric distribution facilities that are constructed along
the coastal highway designated as A1A which extends down the east side of Amelia Island
bordering the Atlantic Ocean. This project consisted of replacing insulators on this wooden
pole line.

11 Q. Does the location of this equipment in close proximity to the coast necessitate 12 more frequent or extensive maintenance and replacement?

A. Yes. The presence of fog and salt spray off the ocean create a corrosive environment.
The buildup of salt and other particulates on insulators increase the likelihood of a flashover
during foggy conditions which results in an outage.

16 Q. What were the costs associated with this project?

- 17 A. The costs were approximately \$290,000.
- 18 Q. Why was this project necessary?

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A. In addition to the corrosive environment common to all coastal areas, this is an older line with dated technology porcelain insulators. When cracks or chips occur on the glazing of the insulators, there is a higher likelihood of contamination that can cause a flashover and the resulting failure of the insulator. The replacement insulators employ newer technology insulators made of a rubber/silicone material that is more impervious to the damaging effects of the sun and salt environment.

7 Q. What benefit has the Company seen as a result of this project?

8 A. The Company should not experience an unusual increases or spikes in maintenance9 expense along this line in the future.

10 Q. What benefit have customers seen as a result of this project?

A. The customers will see fewer outages as a result of this and other reliabilityenhancement projects.

Q. Could the Company have deferred this project without risk to its levels of
 service and service reliability?

A. No. Any delay in this project would have increased the risk of faults/outages and
therefore interruptions to customer service.

- 17 I. <u>Replacement/upgrade of Distribution Regulators/Reclosers</u>
- 18 Q. What did the project to replace regulators and reclosers entail?

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A. Voltage regulators and reclosers along several distribution feeders and in certain
 substations in the Northwest Florida (Marianna) Division area were replaced.

3 Q. What were the costs associated with this project?

- 4 A. The costs were approximately \$300,000.
- 5 Q. Why was this project necessary?

6 A. The Northwest Division is relatively rural in nature and has relatively long feeders. The voltage regulators are needed to regulate voltage along these lines and the reclosers 7 serve to sectionalize the feeders as a critical part of the distribution system and are widely 8 9 deployed in the area. Since some of the equipment has been in service for a number of years, the equipment was experiencing operational glitches and overt failures, was no longer 10 reliable and had reached the end of its useful life; therefore, the replacement was critical. 11 The Company needed to replace this equipment promptly to maintain proper voltage levels, 12 13 as well as safe and reliable service to its customers.

Q. What benefit has the Company and its customers seen as a result of thisproject?

A. As with the other projects discussed, reliability is the most significant benefit. We were receiving numerous customer complaints about low voltage levels on some of the more heavily loaded feeders in the NW system which led to problems with proper appliance and equipment operation. The replacement of the old voltage regulators has dramatically reduced these complaints. The replacement and addition of new, digitally controlled reclosers has allowed us to better isolate and restore customer outages quicker. The $21 \mid P \mid P \mid g \mid e$

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- Company should not experience an unusual increase in operating and maintenance expense
 as a result of this replacement project.
- 3 Q. Could the Company have deferred this project without risk to its levels of
 4 service and service reliability?
- A. No. Any delay in this project would have resulted in increased the risks of service
 interruptions, as well as prolonged interruptions, and continued voltage level complaints
 from customers.
- 8

J. Ongoing and Planned Capital Projects Relating to Reliability Improvement

9 Q. What additional projects relating to reliability are ongoing and planned to be 10 completed in 2014/2015?

These projects include: additional distribution wooden pole replacements based on the 11 Α. 8-year replacement cycle established by the testing program, additional transmission 12 wooden pole replacements, replacement of a large 40,000 kilovolt-ampere (kVA) substation 13 transformer, upgrades of two distribution feeders, continued replacement of old voltage 14 regulators, addition of reclosers and upgrading the transmission and substation system for 15 improved reliability and in preparation for a planned additional cogeneration project. One of 16 the two distribution feeder upgrades is required by the Company's Storm Hardening Plan, 17 18 namely the upgrading of the feeder to a hospital in Marianna.

19 Q. What are the costs associated with these projects?

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A. Total project costs for this category are expected to be approximately \$9,145,500 for
 2014 and 2015. Details of the projects with descriptions and individual project costs are
 shown on Exhibit MC/DS-5.

4 Q. Why are these projects necessary?

5 A. All of these projects are necessary to continue the improvement in reliability that our 6 customers are now experiencing. The completion of these projects will lower the risk of 7 outages, facilitate the inspection and testing of power lines/equipment, expedite the 8 maintenance and repair of power lines and related equipment, allow for quicker and more 9 effective restoration operations when outages do occur and provide access to additional 10 purchased power that will be less expensive and more reliable that is currently available.

11 Q. What benefits do the Company expect to see as a result of these projects?

A. The Company will experience more efficient operations, continue to storm harden the
 distribution and transmission electric systems and should avoid large increases in
 maintenance expense in future years.

15 Q. What benefit should customers expect to see as a result of these projects?

A. The customer will realize continued improved reliability, both in terms of number
and duration of interruptions as a result of additional storm hardening of the electric system.
Customers should also realize a reduction in the overall rate of electricity as a result of these
projects.

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Q. Could the Company have deferred these projects without risk to its level of service and service reliability?

- A. No. These projects are critical to maintaining and improving service levels for our
 customers.
- 5 Q. Were all of the reliability projects you have addressed part of the Company6 plan?

A. Yes. These projects were part of a comprehensive planning process directed
towards materially improving the Company's service reliability and ensuring ongoing
compliance with our Storm Hardening Plan.

10 Q. Were your efforts successful and beneficial to your customers?

11 A. Yes, in all respects. As explained later in this testimony, overall measures of service 12 reliability have improved as a result of our attention to these areas. Moreover, the Company 13 not only adheres to its Storm Hardening Plan, which was most recently approved by this 14 Commission in Docket No. 130131-EI, but also endeavors to stay abreast of the latest 15 methods, technologies, and engineering advancements to further enhance reliability and 16 harden FPU's system against storm damage with the goal of further improving our ability to 17 provide reliable service to our customers.

18 Q. How did the Company conclude that these projects were needed?

A. Many of the projects were identified and completed based on maintenance and
 inspection activities that have been conducted both on a routine basis, as well as part of our

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Storm Hardening Plan. Examples of these include: review of reliability indicators, pole
 inspections, underground system inspections, substation inspections, vegetation
 management activities and input from employees and customers.

4

Q.

Why does the Company engage in maintenance and inspection activities?

5 Α. First of all, it has always been the Company's goal to maintain its system consistent 6 with industry safety and operating standards and in such a way that interruptions of service 7 to customers are minimized. Our employees strive, and have been successful, at operating a safe and reliable electric system. However, the hurricanes of 2004 and 2005, which 8 9 impacted most of Florida, resulted in lengthy outages for millions of electric customers. 10 Throughout Florida, storm restoration costs were much higher than ever experienced. In particular, on the FPU electric system, 2004 brought Hurricanes Bonnie, Charley, Frances, 11 12 Ivan and Jeanne and 2005 brought impacts from Hurricane/Tropical Storms Arlene and 13 Dennis. Although each storm impacted FPU's system differently, each resulted in damage 14 to the electrical systems and customer outages. From that experience, we gained valuable 15 information and lessons were learned. In particular, we determined that, as a Company, 16 there were three areas that we needed to address in order to make sure FPU was better prepared for any future such events, those areas being: (1) the frequency of facility 17 inspections; (2) the testing of physical transmission and distribution assets; and (3) 18 19 implementation of a more proactive approach overall to protection of our electric system. Having addressed those areas of concern, FPU now has a robust maintenance and inspection 20 21 plan, which encompasses its approved Storm Hardening Plan, and expects to continue its 22 successful efforts to improve reliability through projects such as these.

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1 Q. How do customers benefit from these activities?

2 A. As you can see, the importance of reliability is a recurring theme of our testimony. That is largely because it is a very important part of customer satisfaction. Outages and 3 service interruptions can be much more than just a minor inconvenience for our customers. 4 5 They can, in fact, create numerous issues for customers, ranging from food spoilage to loss 6 of critical business functions to traffic problems and similar safety concerns. A wellmaintained electric system providing consistently reliable service not only lessens the 7 8 inconveniences associated with service interruptions, but also better protects the business 9 interests and safety of our customers and our employees.

10 Q. Have you

Have you been able to document service improvements to your customers?

A. Yes, we have. As shown on Exhibit MC/DS-4 to our testimony, FPU has made dramatic improvements in reliability since 2009. The Customer Average Interruption Duration Index (CAIDI) improved from 108.81 in 2009 to 93.31 in 2013. The System Average Interruption Duration Index (SAIDI) improved from 218.40 in 2009 to 169.66 in 2013. The System Average Interruption Frequency Index (SAIFI) improved from 2.01 in 2009 to 1.82 in 2013. Finally, the L-Bar Index, which measures the Average Length of Service Interruption, improved from 116.74 in 2009 to 91.97 in 2013.

18

<u>Ib</u> OPERATING AND MAINTENANCE EXPENSES

Q. Has the Company reviewed operating and maintenance expenses to ensure all
 the prudent and justified.

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A. Yes. Shortly after the merger with Chesapeake in 2009, the new management team
 began a thorough review of internal business organizations throughout FPU. The new team
 set out to establish better defined goals and to ensure those goals were being met.

4

Q.

What types of reviews were conducted and what changes occurred?

5 A. During this review, areas such as improved safety, customer service, system reliability and employee efficiency were the underlying goals. Safety and training functions 6 7 were expanded, which provided employees with additional training and also increased the visibility of safety personnel in the daily work. During the review of the customer service 8 9 area, the Company quickly determined that the systems and personnel in place at that time 10 were not providing the level of customer service that was required. Changes were 11 implemented to upgrade the systems used for customer service, and personnel were 12 expanded to increase the level of customer service. Also, system reliability was well below 13 a reasonable standard and had to be addressed. Operation and maintenance procedures were 14 evaluated to ensure that items, such as wood pole testing, underground distribution 15 inspections, vegetation management activities, transmission system inspections, infrared 16 inspections, and the like, were sufficient. Based on the reliability indices, it was apparent that all these needed to be increased if improvement was to be achieved. Another major area 17 that needed to be addressed involved employees and how their work environment and 18 19 resources impacted their overall productivity and efficiency. During this review, areas such 20 as personal protective equipment, office and vehicle conditions, access to materials, and 21 related issues were addressed to provide employees with an environment that was conducive 22 to increased efficiency and productivity.

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1 Q. What benefits have the Company seen as a result of these changes?

A. Safety results have been improving, customer service measures have indicated an 2 3 overall improvement, our electric system reliability indices are improving, and overall, our employees are much more engaged and productive. Additionally, through the management 4 team's focus and increased engagement of all employees, the Company has reviewed cost to 5 6 ensure increases occurred only when prudent and justified. This also allowed the 7 consolidation of certain positions and functions within the operations group which has contributed to offsetting some of the cost increases related to improved customer service, 8 9 enhanced safety measures and other costs outside of the Company's control.

10 II. CAPITAL PROJECTS NOT SPECIFICALLY RELATED TO RELIABILITY 11 IMPROVEMENTS

Q. What other capital projects have been executed since the Company's last test year?

A. In addition to reliability improvement projects, the Company has invested significant amounts in projects to improve our Company's operations and provide better customer service. These projects fall into several categories including: supporting customer growth that may occur, facilitating new generation supply, installing a new customer information system, replacement of general plant items and routine maintenance of the electric system.

Q. Please describe the most significant project in the category of increasing capacity to serve new growth?

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A. We are engaged in an ongoing project to construct a new underground distribution feeder to serve areas where customer growth is anticipated in the near future. This feeder will provide a needed distribution tie between two substations for backup supply during emergency conditions or routine maintenance. This project involves the installation of approximately four (4) miles of distribution lines and associated distribution equipment.

6 Q. What are the projected costs associated with this project?

7 A. Total project costs are expected to be approximately \$1,200,000 when the job is
8 completed in 2015.

9 Q. Why are projects such as this necessary?

10 A. The Company has an obligation and a desire to serve all customers. There are 11 however, areas in the Northeast and the Northwest Divisions where existing feeders will not 12 accommodate the service requirements associated with new customers on our system. 13 Therefore, in order to serve new customers in these areas, we much undertake this and 14 similar such projects. Otherwise, we will be unable to meet our service obligations.

15 Q. What benefit does the Company expect to see as a result of these projects?

A. The Company will meet its obligations to serve new customers and realize a larger customer base on which to spread its fixed costs. Also, these projects will continue to provide more reliability to the systems and provide redundancy in areas in which it does not currently exist.

20 Q. What benefit should customers expect to see as a result of these projects?

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A. New customers will receive reliable electric service that they expect and all
 customers should benefit from a larger energy usage base among which fixed costs will be
 spread.

4 Q. Could the Company have deferred these projects without risk to its levels of 5 service and service reliability?

6 A. No. New customers will not be served if assets are not added.

7 III. OPERATIONS CENTER

8 Q. Has the Company implemented other improvements that have had an impact9 on operations?

A. Yes. In 2013, the Company opened a new operations center in Fernandina Beach,
which serves as the headquarters for the Northeast Division.

12 Q. What prompted the decision to open the new operations center?

A. Prior to 2013, operations in the Northeast Division was split between an office facility (engineering, customer service, planning) at 911 S. 8th Street and a warehouse facility (construction, maintenance, warehouse) located at 611 Lime Street. The office facility was built in the 1970's and was insufficient to efficiently serve customers and employees. The warehouse was constructed in the 1940's and had deteriorated significantly over the years. The warehouse site had originally housed a generation facility for the island, as well as, an ice plant for its customers.

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Q. What are the benefits to Company operations derived from the new operations center?

A. Combining the office, operations and warehousing groups into the new location is more efficient and promotes better communications among employees. Additionally, the old warehouse facility has significant structural issues and did not provide an environment that was conducive for employees comfort and well being. Moreover, the small multi-level facility was very difficult to move around in safely and efficiently.

8 Q. What are the direct benefits to customers of this new operations center?

9 A. In addition to more seamless customer service resulting from better employee 10 communications, the new operations center is much more centrally located to the customers 11 in the Northeast Division. As such, it provides easier access for customers, including an 12 expanded parking area, as well as a conveniently located drop box that can be accessed by 13 customers from their vehicles.

14 IV. PURCHASED POWER PARTNERS

15 Q. Does the Company own and operate any generation assets?

16 A. No, not at this time.

Q. Does the Company therefore purchase power from other entities in order to serve the two electric divisions?

A. Yes. For the Northwest Division, FPU purchases power from Gulf Power Company
 under a Commission-approved purchased power agreement. For the Northeast Division, the

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Company is currently under contract with JEA for power supply, but also has contracts with
 certain Federal Energy Regulatory Commission ("FERC") certified "qualifying facilities"
 for additional power purchases. The additional power purchases are at costs less than the
 JEA contract prices which in turn provide a savings to customers.

5

A. Savings for the Northwest Division

6 Q. When did the Company enter into its contract with Gulf Power Company for 7 power for the Northwest Division?

8 Dating back to the 1960's, the Northwest Florida division purchased its all Α. 9 requirements wholesale power from Gulf Power Company. Numerous contracts were executed through the years. Effective January 1, 1997, an eleven year agreement became 10 effective that would continue through December 31, 2007. During the course of the 11 12 contract, purchase power costs were very favorable and resulted in FPU having some of the lowest electric rates in the State of Florida. In 2006, as its then-current purchased power 13 14 contract approached expiration, FPU again selected Gulf Power for a new ten-year power supply agreement to begin January 1, 2008. Implementation of that new contract was, from 15 a customer relations perspective, very complex, because the expiring contract had been 16 17 negotiated at a time when costs related to the provision of electric energy were relatively 18 stable. As such, the expiring contract had included firm prices for the provision of electric 19 service which incorporated transmission service in that firm price. The new contract that 20 became effective in 2008 includes market-based costs, with environmental costs rolled into 21 the energy costs. Under the new arrangement, transmission services have been separated out and are provided, and priced, under a separate contract with Southern Company Services. 22

and are provided, and priced, under a separate contract with Southern Company Services. 32 | P a g e

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The 2008 contract with Gulf Power was approved by the Commission in Docket No. 1 070108-EI, wherein the Commission acknowledged the Company's representations that 2 Gulf Power has proven to be a good business partner, provides reliable service, and that the 3 new contract was the best, most cost-effective offer available to FPU. The new contract 4 5 did, however, result in a notable price increase to customers in the Northwest Division. The Company undertook significant efforts, including public relations and customer education 6 7 campaigns, as well as regulatory proposals for rate consolidation and graduated increase, in an effort to lessen the initial impact to customers. Nonetheless, the impact of the new 8 agreement for many FPU customers was hard felt, particularly because it was implemented 9 during the early stages of the country's economic downturn. 10

11 As the economic downturn continued, FPU looked for ways to provide relief to its 12 customers in both divisions. At different points between 2008 and 2009, FPU engaged in 13 some limited conversations with Gulf Power about the possibility of adjusting the contract in 14 some way that would provide benefits for both parties.

Q. How did the 2011 Amendment to the purchase power agreement with Gulf Power Company come about?

A. Subsequent to the Commission's approval of the 2008 contract with Gulf, the
Company entered into a new franchise agreement with the City of Marianna. A notable
component of the new franchise required the Company to implement Time of Use (TOU)
rates and Interruptible rates by February 17, 2011.

Not long after the Company entered into the new franchise agreement, specifically October
 28, 2009, Chesapeake Utilities Corporation and Florida Public Utilities Company
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consummated the transaction whereby Florida Public Utilities Company became a wholly owned subsidiary of Chesapeake.

3 After the acquisition by Chesapeake, FPU, now under new management, began the process of reviewing and determining how best to develop and implement the TOU and Interruptible 4 5 rates mandated by the Franchise. FPU quickly determined that, in order to develop TOU 6 and Interruptible rates that would satisfy the requirements of the Franchise and also comply with Commission regulatory requirements, changes to the 2008 contract with Gulf would be 7 8 necessary. Thus, the Company actively engaged Gulf in discussions to develop a negotiated Amendment that would provide FPU with the pricing flexibility necessary to develop TOU 9 10 and Interruptible rates that are cost-based and otherwise in compliance with regulatory requirements. As a result, the companies reached an agreement reflected by Amendment 11 12 No. 1 to the 2008 contract.

13

Q.

Has the Amendment No. 1 proven to be beneficial?

A. Yes. The Amendment has proven very beneficial to FPU and its rate payers.
Specifically, the Amendment provides, on average, annual savings of \$900,000 for FPU's
customers in the Northwest Division over the life of the contract by reducing the fuel and
purchased power charge for FPU customers.

- 18
- B. New Renewable and Cogeneration Contracts
- Q. Has the Company investigated means to reduce costs for its customers in the
 Northeast Division as well?

A. Yes. The Company has aggressively sought opportunities to engage its current base
load provider for the Northeast Division in discussions for an arrangement that would be

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more beneficial for the FPU customers. Since 2007, when purchased power rates began to increase significantly from JEA, FPU has been very assertive in challenging each cost of service study performed by JEA that resulted in an increase to the purchased power rate. These very focused and steady efforts have resulted in the mitigation of the rate of increase in purchased power cost for FPU and its customers. These same focused and steady efforts are continuing today and, in our opinion, have resulted in a reduced rate of increase to FPU and its customers.

8 During this same time period, the Company has investigated opportunities with other 9 wholesale power suppliers. During the investigation relationships were developed with 10 other suppliers, informal studies of generation and transmission capacity arrangements were 11 reviewed and contract possibilities were discussed. Although these opportunities are not 12 possible until the expiration of the JEA contract, this information does provide FPU with 13 market knowledge and information that assist with discussions with JEA.

Also, the Northeast Division provides service to two paper mills on Amelia Island that have significant on site generation capabilities which has created opportunities for some limited purchased power for FPU. Based on this potential, FPU has entered into arrangements with these alternative power providers that have thus far proven very advantageous. FPU is continuing to look at these and all other avenues for reducing purchased power costs that are available to the Company.

20 Q. What type of investigation has the Company done related to reduction of 21 purchased power cost?

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1 A. Since the merger with Chesapeake in 2009, the Company has focused many resources on how to reduce the purchased power cost and its impact on customers. As 2 previously mentioned, during this time other wholesale power providers have been 3 4 approached and opportunities explored, review of new electric generation technology has been conducted, Combined Heat and Power (CHP) partners have been identified, experts in 5 6 the area of CHP projects have been retained and parties have come together to evaluate 7 electric generation projects. These partners and experts have assisted FPU with the review and evaluation process. Ultimately, most of the projects evaluated were not prudent 8 ventures for the Company. However, the Company's review team found that certain limited 9 10 projects, one partner in particular, are viable alternative power options for the Company and provide benefits to the partners and customers. FPU is continuing to evaluate this type of 11 opportunity both inside and outside of the FPU service territory. 12

13

Q.

To what arrangements with "alternative power providers" do you refer?

A. The first very successful arrangement that I am referring to is the renewable energy 14 15 contract with Rayonier Performance Fibers, LLC, which was entered into in early 2012 and 16 approved by the Commission in Docket No. 120058-EQ. Through a cooperative effort, FPU and Rayonier were able to develop a purchased power agreement that allows Rayonier to 17 produce renewable energy and sell that energy to FPU at a cost below that of the current 18 19 wholesale power provided while still being beneficial to Rayonier. Not only did this 20 increase the amount of renewable energy in the area, it provides lower cost energy that is passed directly through to FPU customers in the form of reduced power cost. 21

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1	Secondly, FPU is also working in partnership with
2	
3	Eight Flags Energy, LLC, a subsidiary of Chesapeake Utilities
4	Corporation (Chesapeake),
5	The details of the arrangement are currently
6	being finalized and we anticipate filing with the Commission in the very near future.
7	will provide customers with a significant benefit in
8	the reduction of purchase power cost. This detail of this benefit is included in Confidential
9	Exhibit MC/DS-9.
10	
10	Q. How have these two new arrangements proven beneficial to the Company?
11	A. With regard to the first contract with Rayonier, that agreement alone is expected to
12	produce overall savings of \$1.27 million over the 10-year term of the contract, and the
13	Company has every expectation that the contract will be extended, thereby extending the
14	benefits. The expected annual energy produced will be 16,980 mWh's and an incentive is
15	provided to Rayonier to ensure this occurs in that any failure to maintain the agreed capacity
16	factor will result in reducing the overall monthly payments to Rayonier.
17	efforts are
10	underway to get this completed approved and in service by the first quarter of 2016. Once
10	underway to get uns completed, approved and in service by the first quarter of 2010. Once
19	consummated and in service, this new project is expected to produce even more significant
20	benefits for the Company and its customers.
21	
22	

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the Company's revenues and appropriately determine the allocation of contributions made by the various rate classes. Generally, in a cost of service study, costs are typically allocated to the rate classes according to the cost to serve each class. The results are, therefore, useful in helping to determine: (a) whether a rate increase is appropriate; and (b) what rate changes are necessary.

6 Q. Is FPU's cost of service study in this case consistent with the methodology used7 in past cases?

8 A. Yes. Certainly, there are other methods for allocating costs, but the methodology 9 that FPU is proposing in this proceeding provides a fair and equitable allocation of costs to 10 the rate classes, is accurate, and has been accepted by the Commission for FPU in other 11 proceedings.

Q. Please describe the fully-allocated cost of service study that was used to determine this interclass revenue allocation.

Α. The method used in this proceeding follows previous rate proceedings filed by FPU. 14 15 The method used to allocate our costs closely follows the long-held ratemaking principles and practices for cost apportionment as specified in the "Electric Utility Cost Allocation 16 17 Manual" developed by the National Associations of Regulatory Utility Commissioners 18 (NARUC) in January 1992. Once the relevant data on rate base and net operating income 19 are compiled, as the Company has done in Scheduled A-D, these costs are apportioned to 20 customer classes through a three step process called functionalization, classification and 21 allocation. I will describe these steps:

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Functionalization: The costs are identified by the function they perform or, another way of looking at it, the service provided. FPU provides three services: transmission, distribution and customer services. Since FPU purchases all of its power from a third party and delivers it to the customer, there is no production service provided by the Company.

Classification: The costs identified for each function are classified based on the manner in 5 6 which costs vary, i.e. costs will change by changes in the component of utility service 7 provided. The three (standard) cost classifications used by FPU are demand related (costs vary by KW load); energy related (costs vary by kWh's used); and customer related (costs 8 9 that are directly related to the number of customers using the service). Transmission services are treated predominantly as demand-related cost. Distribution services are 10 11 separated into demand, energy and customer related. And, customer services are either 12 demand related or customer related.

13 Allocation: Once the costs are functionalized and classified, they must be allocated to the different customer classes. This is done using allocation factors for each of the cost 14 classification categories. The allocation factors used in the FPU study are listed and 15 16 described in MFR Schedule E-13. As a summary, transmission costs are allocated according to the coincident peak plus 1/13th demand factor (a weighted combination of contribution to 17 the system peak and the average hourly demand of the class). Distribution demand costs are 18 19 allocated according to each class' non-coincident peak demands. Customer costs are 20 allocated by the number of customers and by a weighting of the specified customer-related cost, e.g. meter expense. 21

- 22
- Q. Please explain how FPU determined the increase in review by class.

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Our fundamental ratemaking objective is to apportion revenue recovery 1 A. responsibility and design rates to reflect, to the maximum extent practicable, the cost of 2 3 serving each customer and customer class. In order to determine the cost responsibility we 4 used the results of a fully-allocated embedded cost of service study conducted on the consolidated division service by FPU as provided in MFR Schedule E-1. A comparison of 5 rates of return by class for present rates is provided in Schedule E-3 along with the 6 7 percentage increase in base rates required for each class to recover the target rate of return. It is our understanding that long-held Commission policy provides that the percentage rate 8 increase for each class must be no more than 1.5 times the system average increase and that 9 10 no rate class should receive a decrease in rates. Based on the results of the Cost of Service study, the RS, GS, GSD, GSLD GSLD1, SB, Outdoor Lighting and Street Lighting were 11 12 found to match the parity percentages, as much as practical, that were accepted for FPU 13 during the Company's last rate proceeding while still achieving the targeted return.

Q. What increase in rates was indicated for each of the class of customers served by FPU based on the cost of service results?

A. The total base rate revenue recovered from each of the customer classes and the total
revenue impact on each rate class on a percentage basis is shown below:

18	Class	Base Rate Increase %	Total Rate Increase %
19	Residential	30.5%	7.0%
20	General Service	39.7%	10.6%
21	General Service Demand	49.1%	7.2%
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1	General Service Large Demand	47.6%	5.1%
2	General Service Large Demand 1	55.9%	6.5%
3	Outdoor Lighting	17.3%	12.6%
4	Street Lighting	26.8%	19.3%

5 Q. Please explain what the differences are between direct and indirect costs.

A. Direct costs can be related to labor, transportation, materials, and the like that are
specifically used and identified as related to a specific type of expense or project. Indirect
cost can be the same types of costs but are allocated to specific types of expense or project
by pre-determined allocation methodologies.

10 Q. Please describe the load data used to derive the class coincident and 11 non-coincident demands used in the cost of service study.

A. FPU is too small to have its own load research program; therefore, we rely on the
load research data collected by Gulf Power Company (Gulf). Gulf provided data for 2003,
2006 and 2010-2011 which was translated to billing determinants and load based cost of
service allocators for the 2015 test year.

16 Q. Please describe any special studies performed and how they relate to the 17 allocation methods you described above.

18 A. In order to allocate certain costs, a study was performed on distribution plant as it
19 related to poles, conductors/conduit/devices, meters, outdoor lights and street lights. The
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poles and conductor/conduit/devices were evaluated to determine the appropriate contribution to either the primary or secondary distribution systems. Meters were evaluated to determine the appropriate contribution to each rate class. Customer lights and Street lights were evaluated to determine the appropriate contribution to each class. These factors were then used as a basis for allocating costs.

6 Q. Please describe the results of your cost of service study.

7 Α. The initial results were analyzed to ensure that no rate class received an increase greater than a 1.5 times the system average and no rate class received a decrease. 8 Adjustments were made to ensure compliance with these requirements and any difference in 9 the revenue requirement was then allocated back to the other rate classes with each rate 10 11 adjusted accordingly to provide for the target revenue return. Final percent increases were 12 then determined. Every effort was made to ensure that the analysis was consistent with that employed in our last rate case proceeding and that the results achieved an appropriate level 13 14 of parity across the rate classes.

Q. Please explain why you believe the cost of service methodology for allocating costs is most appropriate for FPU?

A. This methodology has been utilized for our prior rate proceedings and has resulted in
excellent results. Data has been provided that works well with this methodology and once
again seems to have provided excellent results.

20 VI. <u>RATE DESIGN</u>

21 Q. After you determined the interclass revenue allocation, how did you design 43 | Page

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1 rates to achieve the revenue requirement?

A. The results of the cost of service study shown in Schedule E-1 include unitized costs for the customer and demand and energy charges within each specified class of service. We unitized these costs to adjust the pricing components within each class to the maximum degree possible.

6 Q. Have you restructured any rates?

7 A. Yes we have. The Residential Class rate (RS) and the Lighting Class rates (OL and
8 SL) have been restructured and will be described below.

9 Q. Please describe the rate design changes for the Residential Class.

A. The current Residential (RS) rate consists of a \$12.00 per month customer charge
with a \$0.01958 per kWh energy charge. To this we applied the percentage increase for the
residential class and included a step rate in the energy charge to determine the new rates.
The new Residential rate will now consist of a \$16.00 per month customer charge with an
energy charge of \$0.02170 per kWh for usage less than or equal to 1,000 kWh per month
and an energy charge of \$0.03420 per kWh for usage above 1,000 kWh per month.

Q. Please describe the rate design changes for the General Service Non-DemandClass.

A. The current General Service Non-Demand (GS) rate consists of an \$18.00 per month
customer charge with a \$0.01927 per kWh energy charge. To this we applied the percentage
increase for the General Service Non-Demand class to determine the new rates. The new

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General Service rate will now consist of a \$24.00 per month customer charge with an energy
 charge of \$0.02582 per kWh. The Sports Field rate in this class will be eliminated and
 customers will be transitioned to the new GS rate.

4 Q. Please describe the rate design changes for the General Service Demand Class.

A. The current General Service Demand (GSD) rate consists of a \$52.00 per month
customer charge with a \$0.00340 per kWh energy charge and a \$2.80 per KW demand
charge. To this we applied the percentage increase for the General Service Demand class to
determine the new rates. The new General Service Demand rate will now consist of a
\$65.00 per month customer charge with an energy charge of \$0.00571 per kWh and demand
charge of \$4.20 per KW.

Q. Please describe the rate design changes for the General Service Large Demand Class.

A. The current General Service Large Demand (GSLD) rate consists of a \$100.00 per
month customer charge with a \$0.00145 per kWh energy charge and a \$4.00 per KW
demand charge. To this we applied the percentage increase for the General Service Large
Demand class to determine the new rates. The new General Service Large Demand rate will
now consist of a \$150.00 per month customer charge with an energy charge of \$0.00218 per
kWh and demand charge of \$6.00 per KW.

19 Q. Please describe the rate design changes for the General Service Demand Large
20 1 Class.

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A. The current General Service Large Demand 1 (GSLD1) rate consists of a \$600.00
per month customer charge with a \$0.00000 per kWh energy charge, a \$1.12 per KW
demand charge and a \$0.24 per excess kilovolt-amperes reactive, or kVAR, demand charge.
To this we applied the percentage increase for the General Service Large Demand 1 class to
determine the new rates. The new General Service Large Demand 1 rate will now consist of
a \$900.00 per month customer charge with an energy charge of \$0.00000 per kWh, a
demand charge of \$1.68 per KW and a \$0.36 per excess KVAR charge.

8 Q.

Please describe the rate design changes for the Standby Rate Class.

A. The current Standby rate (SB) rate consists of a \$626.47 per month customer charge
with a \$0.00000 per kWh energy charge and a \$0.53 per KW demand charge. To this we
applied the percentage increase for the General Service Large Demand 1 class to determine
the new rates. The new Standby rate will now consist of a \$940.00 per month customer
charge with an energy charge of \$0.00000 per kWh and a demand charge of \$0.80 per KW.

Q. Please describe the rate design changes for the Street Lighting and Outdoor Lighting Classes.

A. Within the COS model, we incorporated our intention to combine all lighting into one Lighting Rate Schedule. Standard allocation procedures were followed to determine the new revenue requirement for all lighting. The percentage impact for specific lights can be found within the E Schedules while proposed rates for lights can be found in Exhibit MC/DS-7. The existing SL and OL rate schedules have been deleted and they have been combined into a new Lighting Service (LS) rate schedule. For the existing mercury vapor lights, which are no longer available for new installations we created the Outdoor and

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Street Lighting (OSL) rate schedule. As a result of the combination of these rate schedules,
there will also be a change in the Rate Adjustment Rider for each division. The OL and SL
purchased power factor will be consolidated to align with the combined LS and OSL rate
schedules which will result in new fuel clause recovery amounts and rates for lighting in
both divisions. The details and calculations of these proposed modifications are included in
Exhibit MC/DS-8

7 Q. Please describe why you are proposing to combine the Street and 8 Outdoor lighting rate classes.

9 A. Street Lighting and Outdoor Lighting are managed from the same types of 10 materials using the same types of labor and transportation to install and maintain these 11 lights. In reality, very little if any, difference should be apparent through the cost of 12 service study results. However, the results do come out slightly different due to a long 13 standing effort to keep these types of lights separate and the margin of error through years 14 of COS modeling. Combining these rate classes will result in more equitable rates for 15 lighting customers.

16 Q. Are you proposing any changes to the Service Charges in this filing?

A. Yes. The proposed service charges are provided in MFR Schedule E-7. Each
service charge was evaluated in order to determine the appropriate cost and revenue
requirement for each. Labor cost, transportation costs and overheads were applied to
the typical task associated with each service charge. Based on typical costs, service
charge amounts were determined for six different tasks.

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1 A service charge for the initial establishment of service was set at \$61.00, as compared to the existing amount of \$53.00. A service charge for making changes to 2 3 or reestablishing an existing account was set at \$26.00, as compared to the existing amount of \$23.00. A service charge to temporarily disconnect and then reconnect a 4 service due to customer request was set at \$65.00. The existing amount is \$33.00. 5 This increase was due to a change in the classification of personnel who will be 6 7 involved with this type of work activity. A service charge to reconnect a service after a rule violation was set at \$52.00 during normal business hours and \$178.00 after 8 normal business hours, as compared to the existing amount of \$44.00 during normal 9 business hours and \$95.00 after normal business hours. A service charge used for 10 connecting a temporary service was set at \$85.00, as compared to the existing amount 11 12 of \$52.00. A service charge used during collection activities in the field was set at 13 \$16.00, as compared to the existing amount of \$14.00.

When a customer requests that a new temporary service be installed and later 14 15 removed a service charge was set in the amount of \$230.00 for an overhead service 16 and \$200.00 for an underground service, as compared to the existing amount of \$200.00 for an overhead service and \$170.00 for an underground service. Should a 17 pole be required in order to install the temporary service an additional service charge 18 19 was set at \$395.00 per pole for an overhead service and \$560.00 per pole for an 20 underground service, as compared to the existing amount of \$200.00 per pole for 21 overhead or underground services.

22 Q. Are you proposing any changes to the Transformer Ownership Discount?

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1 A. No.

2 Q. Why are you proposing to include a step rate within the Residential rate class?

As has been thoroughly described in the current step rate included in the 3 A. 4 residential purchased power adjustment rate approved by the Commission in Order 5 No. PSC-08-0030-FOF-EI, there are numerous benefits to the Residential rate class 6 and the general body of rate payers based on this type of step rate. A very significant 7 factor is the conservation benefit that this affords. Consumers are financially 8 benefitted to conserve electricity and minimize usage below 1,000 kWh per month. As more customers are incented to this benefit, the overall system usage will be 9 10 reduced which should translate into improved load factors and reduced purchased 11 power cost. This will, in turn, directly benefit all rate payers through reduced charges. 12 The step rate differential proposed in the base rate is equivalent to the amount 13 currently included in the fuel adjustment.

Q. Are you proposing any changes to the Fuel and Purchased Power Cost Recovery Clause ("Fuel Clause") or Time of Use Rates?

A. With the exception of the change associated with lighting rates which was mentioned above, there are no other changes at this time. However, FPU may seek approval to consolidate its 2015 fuel rates within the Fuel Clause filing in September 2014, which is consistent with the Commission's directive to the Company in the 2013 Fuel Clause proceeding, in Order No. 13-0665-FOF-EI. If approved, this will result in a single fuel factor for all FPU customers that will provide long term benefits

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for all rate payers through, among other things, a reduction in existing inequitable
 subsidization across our service territories. The TOU rates, which are based on our
 fuel costs, will also be impacted within the consolidation of fuel rates.

4 Q. Are you proposing any additional changes to the rates?

5 A. Yes. We will be adding an Economic Development Rider Program (EDRP) to6 the rates.

7

Q.

What benefits will this EDRP provide to customer?

8 A. This program is intended to work along with local economic development 9 organizations to attract additional business to the community which brings additional jobs and opportunities to the community. The participants will be required to have a 10 11 minimum electrical load of 200 KW in order to take advantage of the discounted electrical rate. The program discount begins with a 20% reduction in base energy and 12 13 demand charges in the applicable rate which decreases annually by 5% with the 14 discount expiring in the fifth year. More detailed information regarding this rate is 15 included in Testimony provided by Company Witness Aleida Socarras.

16 VII. IMPACT ON OPERATIONS OF ACQUISITION BY CHESAPEAKE

Q. With regard to the acquisition of FPU by Chesapeake Utilities Corporation, have there been additional benefits as it relates to FPU's electric system?

A. Yes. There have been meaningful improvements that have proven beneficial to the
 Company, its customers, as well as its employees. Specifically, prior to its acquisition by

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1 Chesapeake, FPU was a relatively small operation in Florida with an overtaxed leadership team that was mainly focused on day-to-day tactical matters. On the electric side of the 2 3 Company, there was insufficient attention and inadequate resources devoted to critical areas including system reliability, safety, purchased power costs, customer service and 4 5 relationships with cities and towns that were being served. Upon the closing of the 6 acquisition, Chesapeake immediately implemented initiatives to make improvements and 7 upgrades to these and other areas. Although these efforts have resulted in some necessary 8 increases in administrative and general expenses, they have much improved the electric utility, both for customers, as well as employees. 9

10 A. Investment in Improving System Reliability

11 Q. What specific improvement initiatives did Chesapeake undertake for FPU?

A. Historically, the FPU electric system had suffered from the poorest reliability statistics in the state of Florida. The frequency of outages on the FPU electric system was unsatisfactory. Likewise, the duration of outages on the FPU electric system was also unsatisfactory. Chesapeake responded by promptly installing a new executive leadership team in Florida, which initiated an assessment/review of what improvements needed to be made to the electric system to improve reliability. The executive team concluded it was necessary to take the following actions:

- 19
- 1. Bring in more experienced personnel in operations;
- 20 2. Add a safety coordinator in each of the electric divisions as described
 21 elsewhere in this testimony;

1	3	. Replace the old warehouse facility on Amelia Island, as described elsewhere
2		in this testimony, and upgrade the Marianna facility including painting,
3		parking lot drainage and office remodeling. This greatly improved employee
4		morale and has provided a greatly enhanced sense of pride about the
5		Company and the physical systems;
6	4	. Develop new training facilities in both electric divisions that include poles,
7		transformers, switches, fuses and reclosers. This training has improved and
8		enhanced the ability for climbing poles, working in buckets, rewiring
9		transformers, switching and service work for restores;
10	5	. Replace and upgrade tools and other equipment. One example is the
11		replacement of manual tools to battery operated. This had greatly improved
12		the speed and consistency of our linemen's work;
13	6	. Implement online NERC compliance training, which has increased the
14		thoroughness and consistency of training while decreasing the time away
15		from field work;
16	7	. Develop a formalized program of maintenance and capital investment; and
17	8	. Increase involvement and input from the corporate headquarters, which has
18		been important to this overall effort to improve our system.
19	As I have no	oted earlier in my testimony, these efforts have been successful. Reliability has
20	improved o	verall as measured by SAIDI/CAIDI/SAIFI/L-Bar, complaints have been
21	reduced, and	FPU now compares more favorably with other electric utilities in the region. 52 $P a g e$

1 B. Implementing a Safety Culture

2 Q. What other initiatives have been implemented by Chesapeake that benefit the3 Company's operations?

Prior to the acquisition, FPU promoted safety but had not ingrained it into the culture 4 A. 5 of the organization from top to bottom. Chesapeake Utilities, in contrast, has always placed the greatest importance on safety of its employees, its customers and the general public. In 6 fact, Chesapeake Utilities has won numerous awards for its safety achievements. 7 Chesapeake's new executive leadership team in Florida instituted an assessment of what 8 9 needed to be done in Florida to instill a true culture of safety in FPU. These efforts included a Company-wide program called Service Excellence, which leads off with Company values 10 11 regarding safety: (1) resolving safety issues and concerns first, (2) being proactive in 12 creating a safe work and community environment, (3) honoring all safety regulations and procedures and (4) always wearing personal protective equipment. In addition, the following 13 14 actions were taken:

 We created a Safety and Training Coordinator position for each division to provide ready access for employees to safety and job related training;
 We conducted multiple monthly safety meetings in each facility to ensure access for all employees to current and pertinent safety information;
 We required FPU Safety coordinators to obtain certification in CPR/First Aid and OSHA 30 Hour General Industry in order to provide training to all employees;

1	4. We	revised our Lineman Apprentice Training program to ensure adequate
2	trai	ning and opportunities to promote apprentices to journeymen linemen;
3	5. We	built training yards in our electric divisions to train apprentices and to
4	pro	vide climbing and pole top rescue training;
5	6. We	began a daily Stretching and Flexibility program for all linemen to
6	pre	vent sprains and strains and improve balance;
7	7. We	initiated "Smith System" defensive driving for all employees to promote
8	bet	ter driving habits and reduce accident potential;
9	8. We	began providing monthly refresher training in job specific duties for all
10	line	emen;
11	9. We	researched and acquired upgraded personal protective equipment and
12	flar	ne retardant uniform options; and
13	10. We	instituted safety incentive programs to recognize safe employee behavior
14	and	l promote culture of awareness.
15	Q. Have these	e efforts been successful?
16	A. Yes. These	efforts have been enormously successful. FPU has indeed adopted a true
17	safety culture and	the results have been significant. In the vehicle accident area, incidents
18	have declined slig	htly since 2011 while mileage has increased, resulting in a 25% reduction
19	in the accident rate	e, from a rate of about 4 to a rate of about 3. The results in the Recordable
20	Injury rate are eve	on more impressive. The Incident Rate has decline from over 10.1 to about

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1.7, an improvement of 83%. Detailed year by year statistics are available as shown on
 Exhibit MC/DS-5.

3 C. <u>Additional Benefits to Operations</u>

4 Q. Are there other areas where the Chesapeake acquisition has had a positive 5 impact on FPU's electric division?

A. Yes. As it relates to the operations side of the business, in particular, the more
proactive corporate philosophy has provided significant benefits in a couple of key areas –
power purchases, as I have discussed, and franchise relationships.



Q. What changes did Chesapeake initiate to improve FPU's franchise management and relationships?

Prior to the acquisition by Chesapeake, FPU had inadequate administrative resources 3 A. to appropriately manage franchise relationships with the cities and towns to which it 4 provided electricity. For instance, in the Northwest division, the City of Marianna initiated 5 6 efforts to purchase the franchise from FPU and provide the service to its own citizens. The resulting dispute, including court filings, involved a significant amount of time and effort 7 8 being spent by FPU to retain the franchise. The time was, however, well-spent, in that 9 negotiations with the City ultimately produced a settlement and the franchise was retained. 10 If this sort of issue were to become an ongoing occurrence, it would be costly to customers 11 and unduly distracting to Company personnel. Consequently, Chesapeake has directed the 12 implementation of proactive initiatives to avoid, or at least limit, this situation in the future. 13 These actions include:

- Attending council meetings and building relationships with the cities and
 towns we serve;
- Working closely with regional economic development organizations,
 chambers of commerce and trade organizations; and
- 18 3. Becoming involved in the communities we serve.
- In other testimony in this case, Company Witness Aleida Soccaras provides more detailabout our Community Involvement and related efforts.
- 21 Q. Please summarize your testimony.

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1 A. In order to enhance customer service, FPU and its parent, Chesapeake, have invested 2 significant amounts of time and resources over the last several years in a wide array of projects designed to improve reliability levels. The investment has been successful, resulting 3 in improvement in the Company's overall reliability measures between 2009 and 2013 and 4 further anticipated improvement in the future. These expenditures and other planned 5 6 expenditures were, and will continue to be, well-planned, efficiently executed, and should be 7 allowed for cost recovery in this proceeding. Never before in the history of FPU has such significant investment in system infrastructure occurred and never before has such an 8 9 improvement in overall system reliability occurred. FPU is committed to maintaining the 10 electrical systems by investing as necessary now and into the future.

11 As investment increases, so does the need to adjust electric rates accordingly. However, 12 FPU is also committed to being proactive in working to keep overall electric rates at a 13 reasonable level for FPU customers. In the Cost of Service study completed in conjunction 14 with this proceeding, all cost items included have been subjected to intense scrutiny and are 15 considered prudent by the Company. As such, we ask that the Commission reach the same 16 conclusion and deem these costs justified for recovery through base rates. In our COS, we used standard methodologies throughout the analysis in order to fairly and reasonably 17 18 allocate costs to the different rate classes and likewise determine appropriate rates. This 19 method has been successfully used in previous filings and is consistent with Commission-20 defined parameters. With the exception of the consolidation of lighting rates, elimination of 21 the sports field rate, addition of the residential step rate, and the addition of the Economic 22 Development Program Rider, the overall rate structure remains the same. While rates are

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increased based upon the results of the COS, our methodology is not new. In sum, the
 proposed rates are fair and equitable for the customers of FPU and reflective of a fair
 allocation methodology that incorporates prudent costs and justifiable expenditures.

4 Currently, purchased power cost accounts for more than 70% of our customers' total bill. 5 FPU is therefore committed to continuing to aggressively work to mitigate any increases, 6 and potentially decrease, it's purchased power costs in the future. FPU, along with 7 resources from Chesapeake, are prepared to continue to focus on ensuring fair and equitable 8 rates for customers, improving system reliability, fostering a safety culture that benefits 9 employees and customers, and continuing to improve relationships within our communities 10 in which we work and serve.

11 Q. Does this conclude your testimony?

12 A. Yes.

Exhibit _____ MC/DS-1 MFR'S Sponsored by Mark Cutshaw Page 1 of 1 T

MFR Number	Page 1 of 1 Title
A-2	Full Revenue Requirements Bill Comparison-Typical Monthly Bills
A-3	Summary of Tariffs
A-5	Interim Revenue Requirements Bill Comparison-Typical Monthly Bills
C-34	Statistical Information
E-1	Cost of Service Studies
E-2	Explanation of Variations from Cost of Service Study Approved in
E-5	Source and Amount of Revenues-At Present and Proposed Rates
E-6a	Cost of Service Study-Rates fo Return by Rate Schedule (Present Rates)
E-6b	Cost of Service Study-Rates fo Return by Rate Schedule (Proposed Rates)
E-7	Development of Service Charges
E-8	Company-Proposed Allocation of the Rate Increase by Rate Class
E-9	Cost of Service-Load Data
E-10	Cost of Service Study-Development of Allocation Factors
E-11	Development of Coincident and Non-coincident Demands for Cost Study
E-12	Adjustment to Test Year Unbilled Revenue
E-13a	Revenues From Sale of Electricity by Rate Schedule
E-13b	Revenues by Rate Schedule-Service Charges (Account 451)
E-13c	Base Revenue by Rate Schedule-Calculations
E-13d	Revenue by Rate Schedule-Lighting Schedule Calculation
E-14	Proposed Tariff Sheet and Support for Charges
E-15	Projectd Billing Determinants-Derivation
E-16	Customers by Voltage Level
E-17	Load Research Data
E-18	Monthly Peaks
E-19a	Demand and Energy Losses
E-19b	Energy Losses
E-19c	Demand Losses
F-5	Forcasting Models
F-6	Forcasting Models-Sensitivity of Output to Changes in Input Data
F-7	Forcasting Models-Historical Data
F-9	Public Notice
G-20	Interim-RevenueForm Sale of Electicity by Rate Schedule
G-21	Interim-Revenues From Service Charges (Account 451)
G-22	Interim-Base Revenue by Rate Schedule Calculations
G-23	Interim-Base Revenue by Rate Schedule Calculations

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						Undergrou	d Relay and	Substation	lines	Distribution	OH Line Upgrades	Contralia	Replacement		
project # Pre-CHPK	Account Group	Project Name	Start Date	Reliability	Total	Cible Replaceme	Control nt Scheme	Circuit Breaker	Substation	Wood Pole	Relocate	Highway	of Reclosers and	Transmission Line Upgrades	Substation Transformer
						In NE Florid	a Upgrades	Upgrades	BUSS	Replacement	Accessible	Upgrade	Regulators		Neplacement
22267	3672	UG Cable at AIP	Pre-2009	yes	\$243,747	\$ 243,7	17				Location	A CANER AND A	and to the		
22235	362	UFLS Relays at AIP	Pre-2009	yes	565,911	12 10110	\$ 65,911								
22398	3672	7 Amelia Island -Replace UG	Pre-2009 Pre-2009	yes yes	\$214,075 \$119	\$ 214,0	19								
22109	3693	Beachwood 5/D-AIP	Pre-2009	yes	\$1,113	\$ 1,1	3								
22226	3657	7 Amelia Island -Replace UG	Pre-2009	yes	\$1,581	\$ 1,5	81								
22226	3647	7 Amelia island -Replace UG	Pre-2009	yes	\$1,652	\$ 1,6	2					-			
22209	350	Brachwood S/D-AIP	Pre-2009	ves	\$115.567	\$ 115.5	7							\$ 12,133	
22109	3662	Beachwood S/D-AIP	Pre-2009	yes	\$228,055	\$ 228,0	15								
21922	3622	Transformer for AIP Substation	Pre-2009	yes	5838,152										\$ 838,152
2433	362	Purchase & install vacuum breaker	Pre-2009	yes	\$32,748				\$ 32,748						
2431	365E	Reclosure 1-11 Feeder	01/01/09	yes	\$30,994								\$ 30,994		
2398	3668	Beachwalker II	01/01/09	yes	5214,722	\$ 214,7	2							\$ 49.566	
2324	356E	Fletcher Trans Poles	01/01/09	Yes	\$151,354									\$ 151,354	
2324	355C	5. Fletcher Ave Poles	01/01/09	yes	\$296,670									\$ 296,670	
blanket	364E	Decayed Pole Repl	01/01/10	yes	\$48,719					\$ 48,719					
2482	353E	138 KV Diff Relays	01/20/10	yes	\$86,499		\$ 86,499								
blanket	364E	Poles Decayed Repl	01/27/10	yes	\$104,354					\$ 104,354					
2489	367E	Marsh Creek	02/05/10	yes	\$120,218	\$ 120,21	.8		-	-					
2501	3656	OH Circuir Recloser	03/09/10	ves	\$40,697	\$ 195,90	15					-	\$ 40.697		
2520	364E	REPLACE DECAYED POLES	04/26/10	yes	\$105,164					\$ 105,164	-	1000	P AGEN		
2520	365E	Decayed Poles & Conductors	04/28/10	yes	\$8,517					\$ 8,517					
2566	365E	Hwy 162 relocation of line	07/16/10	yes	\$7,283		_		- A.		\$ 7,283				
2566	364E	Hwy 162 relocation of line	07/16/10	yes	\$7,996				-		\$ 7,996				
2601	367E	REPLACE failed URD	09/08/10	yes	\$23,280	\$ 23,28	0		-						
2601	353F	Role 69KV Belavi-SD Sub	10/04/10	yes ves	\$152 727	3 64	\$ 152 727				-				
2634	365E	Pearidge Rd.	10/20/10	ves	\$4,497						\$ 4,497				
2634	364E	Pearidge Rd.	10/20/10	yes	\$10,202						\$ 10,202				
2685	355C	Conc. Pole-Ins Issue	12/17/10	yes	\$19,365		-							\$ 19,365	
	365E	S FLETCHER REINSULATE	01/01/11	yes	\$32,837		-					\$ 32,837			
	364E	POLES DISTR - NE BLKT	01/01/11	yes	\$142,326	¢ 6.46	e .			\$ 142,326					
	3536	SPARE RECLOSER	03/02/11	ves	55,495	\$ 2,43	2						\$ 17,991		
	362E	AIP RELAY REPLACE	04/25/11	yes	\$144,758			\$ 144,758							
	365E	PRIMARY OLD KNAPP, ETC	05/05/11	yes	\$26,566						\$ 26,566				
	364E	PRIMARY OLD KNAPP, ETC	05/05/11	yes	\$29,876					-	\$ 29,876				
	3628	2011 Reg Control Purch	05/25/11	yes	\$31,359								\$ 31,359		
	362E	2011 Regulator Purch	05/25/11	yes	\$49,605								\$ 49,605	\$ 66.697	
	367E	Sea Marsh Area Cable	07/11/11	yes	\$127,889	\$ 127,88	9							y 00,002	
	366E	Sea Marsh Conduit	07/11/11	yes	\$201,320	\$ 201,32	0								
	367E	Repi Porcelain Term	08/01/11	yes	\$55,996							\$ 55,996			
	353E	two 69kV Circuit Swit	10/01/11	yes	\$158,357			\$ 158,357							
	367E	Marsh Cove Subdiv Cable	11/30/11	yes	\$3,895	\$ 3,89	5								
	366E	Marsh Cove Subdiv Conduit	11/30/11	ves	\$7,056	\$ 7,05	4								
	367E	Stepdwn subfeeder exit cable	01/01/12	yes	\$48,535	\$ 48,53	5								
	365E	Osmose Pole Repl- insulators	01/01/12	yes	\$76,053					\$ 76,053					
	364E	Osmose Pole Repl approx 18	01/01/12	yes	\$115,811		-			\$ 115,811					
	365E	Reins Fletch Ave inst	01/01/12	yes	\$193,883	5 12. 030.01						\$ 193,883			
	3668	PLIBCH (2) BEG PLATEORNE	01/01/12	yes	\$281,127	5 281,12	7						¢		
	3676	Sea Marsh area6 Ph1	02/20/12	yes	\$257.555	\$ 257.55	5						\$ 6,353		
	366E	Joint Trench Feeder 312-Ph 1	03/15/12	yes	\$329,278	\$ 329,27	8								
	3668	Amelia Plaza -conduit	03/19/12	yes	\$4,457	\$ 4,45	7								
	356E	Replace 69kv Insulator-#74	04/03/12	yes	\$790									\$ 790	
	353E	Rpice 4-69kv oli circuit brkrs	05/01/12	yes	\$327,529			\$ 327,529				-			
	367E	Amelia by the Sea - conduct	06/01/12	ves	\$6,232	5 6,23	2								
	368R	AlP Office Complex	06/01/12	yes vec	\$7,195	\$ 7.10	5								
	367E	PEPPERTREE VILLAGE	06/01/12	ves	\$29,253	\$ 29,25	3								
	366E	PEPPERTREE VILLAGE	06/01/12	yes	\$29,847	\$ 29,84	7								_
	367E	AIP Office Complex	06/01/12	yes	\$32,031	\$ 32,03	1								
	366E	AIP Office Complex	06/01/12	yes	\$35,601	\$ 35,60	1								

Exhibit MC/DS-2

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project # Pre-CHPK	Account Group	Project Name	Start Date	Reliability	Total	Un Re	derground Cable placement	Relay and Control Scheme	Substation Circuit Breaker	Upgrade of Substation	Distribution Wood Pale	OH Line Upgrades and Relocate	Coastal Highway	Replacement of Reclosers and	Transmissio Line Upgrade	n T	Substation
						In	NE Florida	Upgrades	Upgrades	Buss	Replacement	Line to Accessible	Upgrade	Regulators			epiacement
教派部出的 133			I HARRIS	Distance of the	超建设加度				精神的感	8412611018	ST HIMES	Location	al an		age suggests		
	366E	Joint Trench Feeder 312-Ph 2	06/01/12	yes	\$316,410	\$	316,410	-	ter marter							-	
	353E	Stpdwn sub 69kv recon	06/08/12	yes	\$615,099	-			\$ 615,099				- 1			+	
	3688	AIP conf exp-inst txfmrs	06/11/12	yes	\$9,905	\$	9,905									+	
	3688	SEA MARSH AREA 7	06/11/12	yes	\$10,920	\$	10,920									+	
	367E	AIP conf exp-Install Cable	06/11/12	yes	\$70,843	5	70,843									+	
	367E	SEA MARSH AREA 7	06/13/12	yes	\$261,132	\$	261,132									+	
	3668	SEA MARSH AREA 7	06/20/12	yes	\$326,149	\$	326,149		-							+	
	365E	OCK Purch and Install	07/26/12	yes	\$27,172	-								\$ 27,172		+	
	362E	Reg Purch and install	07/26/12	yes	\$50,894	+		-				-		\$ 50,894		+	
	353E	PTs at JTL Substation	08/01/12	yes	\$109,208		-	\$ 109,208								+-	
	366E	Amelia Park Conduit	08/20/12	yes	\$18,195	\$	18,195									+-	
	367E	Amelia Park Cable	08/20/12	yes	\$20,706	s	20,706									+	
	356E	Repair CKT 315 69kv insul	08/23/12	yes	\$1,551	-									\$ 1,55	-	
	356E	REPLACE 31 WOOD TRANS POLES	09/01/12	yes	\$20,151	-									5 20,15	+	
	355C	REPLACE 31 WOOD TRANS POLES	09/01/12	yes	\$378,823	-	1.2 States Street								\$ 378,82	4	
	367E	Rpic 750MCM Cable-circ 104	10/01/12	yes	\$161,401	\$	161,401									+	
	3628	Reinsulate AIP Sub 15kv	10/01/12	yes	\$450,216	-				\$ 450,216			-		ST WESS	+	
	356E	Replace 69Kv Arrestors	10/15/12	yes	\$51,154	-						-	-		\$ 51,15	4	
	3890	Land Purch for AIP Sub	11/14/12	yes	\$320,005	-		-		\$ 320,005						+	
	353E	Rplc 2 GCBs at Stpdwn Sub	12/01/12	yes	\$145,567	-			\$ 145,567							+	
	3668	OSMOSE POLE REPLACEMENT	01/14/13	yes	\$294	-					\$ 294		÷			+	
	368.H	OSMOSE RPLC - OH TXNS	01/14/13	yes	\$3,842	-					\$ 3,842					+	
	367E	OSMOSE POLE REPLACEMENT	01/14/13	yes	\$4,786	-					\$ 4,786		-			+	
	365E	OSMOSE POLE REPLACEMENT	01/14/13	yes	\$13,366	-		-			\$ 13,366		-			+	
	367E	RPLC 750MCM CBL	01/31/13	yes	\$107,175	\$	107,175									+	
	365E	SWITCH CHANGE OUTS	02/01/13	yes	\$6,972	-							\$ 6,972			+	
	368H	REGULATOR PURCHASE	02/01/13	yes	\$48,241		(2-1021-78V							\$ 48,241		+	
	367E	Install UG Cable CKT 312	02/01/13	yes	\$378,043	\$	378,043									+	
	368H	AMELIA ROAD UPGRADE PH1	03/01/13	yes	\$19,041	-	2555055				-	\$ 19,041				+-	
	3668	Upgrd UG Secondary 512th	03/01/13	yes	\$33,678	\$	33,678									+	
	367E	Upgr UG Scdry S12th conduct	03/01/13	yes	\$42,370	\$	42,370									+-	
	365E	AMELIA ROAD UPGRADE PH1	03/01/13	yes	\$66,631	-						\$ 66,631				+	
	364E	AMELIA ROAD UPGRADE PH1	03/01/13	yes	\$70,052	201	10000000	_				\$ 70,052				+	
	366E	Repl TC95 to TC67	05/06/13	yes	\$14,580	\$	14,580									+-	
	3688	Gateway to Amelia Phase 1 Up	07/01/13	yes	\$4,499	\$	4,499									+	
	3628	AIP Batteries Charger Repl	07/01/13	yes	\$18,346	-		\$ 18,346								+	
	367E	Gateway to Amelia Ph 1 Upgrd	07/01/13	yes	\$19,970	\$	19,970									+	
	366E	Gateway to Amelia Phase 1 Up	07/01/13	yes	\$39,117	\$	39,117								Carlos Ca	+	
	356E	Replace 69kv insulator	08/06/13	yes	\$11,733	-				-		S 100.044			\$ 11,73	4-	
	3658	Line Relocation	08/21/13	yes	\$19,274	-			-		1	\$ 19,274				+	
	364E	Line Relocation	08/21/13	yes	\$55,001							\$ 55,001				+	
	355C	69kv Line Relo to Rayonier	08/30/13	yes	\$50,792	-									\$ 50,793	4	
	365E	System Upgrade Phase 1	10/01/13	yes	\$83,861	_						\$ 83,861				+	
	364E	System Upgrade Ph 1	10/01/13	yes	\$94,528	-						\$ 94,528			75 23,040	+	
	365E	repl 34 Transmission Poles	10/14/13	yes	\$1,783	-		1000 C							\$ 1,783	4-	
	355C	Repl 34 Transmission Poles	10/14/13	yes	\$4,861	-	_						-		\$ 4,861	+	
	356E	Repl 34 Transmission Poles	10/14/13	yes	\$6,987	_									\$ 6,987	4	
	362E	Purch Substation Equip-Mar	11/05/13	yes	\$251	¢	4 615 021	6 433 503	6 1 201 211	\$ 802 620	\$ 633.333	\$ 404 BOF	\$ 780 587	\$ 251	\$ 1 134 200	10	836 153
					44/211.0/4						- V60.606	0,00,000	AU3,00/		A	100	Sec. 2. 24.

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P.O. Box 418 Fernandina Beach FL 32035-0418 Phone: 904/261-3663 Fax: 904/261-3666 www.fpuc.com

March 1, 2014

Mr. Thomas Ballinger, Director Division of Engineering Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0868

Dear Mr. Ballinger:

Attached is Florida Public Utilities Company's required 2013 Annual Update. The update includes the Annual Distribution Service Reliability Report required by Rule 25-6.0455, the Annual Wood Pole Inspection Report required by Order No. PSC-06-0144, and updates of our Storm Hardening Plan and Ten Storm Preparedness Initiatives, as required by Order No. PSC-06-0781.

If you have any questions, please call 904-277-1957 or e-mail mcutshaw@fpuc.com .

Sincerely,

P. Mark Cutahaw

P. Mark Cutshaw General Manager, NE Florida Division Florida Public Utilities Company

Attachments Cc: Grant, William Householder, Jeff Martin Cheryl Puentes, Jorge Shelley, Buddy Tanner, Lynwood Toole, Steve Webber, Kevin

Florida Public Utilities Company

Reliability, Wood Pole Inspections, Storm Hardening Plan, and Storm Preparedness Initiatives

2013 Annual Update

March 1, 2014



Florida Public Utilities Company

Reliability, Wood Pole Inspections, Storm Hardening, and Storm Preparedness Initiatives

Annual Update

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Introduction

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IV. Storm Preparedness Initiatives

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- 2. Joint Use Pole Attachment Audit
- 3. Six Year Transmission Structure Inspection Program
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Introduction

Rule 25-6.0342, FAC, "Electric Infrastructure Storm Hardening, requires each investor-owned electric utility to file a comprehensive storm hardening plan for review and approval by the Florida Public Service Commission (FPSC). Florida Public Utilities Company (FPUC) submitted its Storm Hardening Plan to the Commission on 7/3/07. Docket No. 070300-EI was opened to address FPUC's filing (Storm Plan Docket). During 2010, FPUC submitted an update to the Storm Hardening Plan for the 2010 thru 2012 time period. The plan was approved in Docket No. 100264 under Consummating Order PSC-10-0724-CO-EI.

This is the FPUC annual update. The update includes the Annual Distribution Service Reliability Report required by Rule 25-6.0455, the Annual Wood Pole Inspection Report required by Order No. PSC-06-0144, and updates of our Storm Hardening Plan and Ten Storm Preparedness Initiatives, as required by Order No. PSC-06-0781. The update is divided into four primary sections: I. Reliability Indices; II. Wood Pole Inspections; III. Storm Hardening; and, IV. Storm Preparedness Initiatives. FPUC report forms, research reports, contractor reports, and other available supplemental supporting documentation are incorporated into the appropriate sections of the update. FPSC reliability index report forms have been updated and are also included.

FPUC has two electric divisions, Northwest (NW) Division, also referred to as Marianna, and Northeast (NE) Division, also referred to as Fernandina Beach. In some cases, each division's results are reported separately. For example, NW has no transmission facilities. Therefore, only NE will be reporting on Storm Preparedness Initiatives #3 (Six Year Transmission Structure Inspections) and #4 (Storm Hardening of Existing Transmission Structures). Also, the two divisions are approximately 250 miles apart and, although they may supply resources to support one another during emergency situations, each division will prepare separate emergency response plans to address Initiative #10 (Natural Disaster Preparedness and Recovery Program). In other cases, consolidated reports or a combination of individual and consolidated reports provide a more complete overview and reports are prepared accordingly.

I. Reliability Indices

This section contains the FPUC Annual Distribution Service Reliability Report required by Florida Public Service Commission (FPSC) Rule 25-6.0455.

In addition to the supporting data provided by FPUC for clarification, the report was prepared using the forms developed by FPSC. Indices are reported on an *actual* and *adjusted* basis, as follows:

- a. Total number of Outage Events (N), categorized by cause for the highest ten causes.
- b. Identification of three percent (3%) of Primary Circuits (feeders) with the highest number of feeder breaker interruptions.
- c. SAIDI, CAIDI, SAIFI, and L-Bar reliability indices for each division and by company total*.

Indices are calculated as follows:

SAIDI = System Average Interruption Duration Index	Total Customer Minutes of Interruption (Cl	(IM
	Total Number of Customers Served (C)	
CAIDI = Customer Average Interruption Duration Index	Total Customer Minutes of Interruption (CI	AI)
	Total Number of Customer Interruptions (CI)
SAIFI = System Average Interruption Frequency Index	_ Total Number of Customer Interruption	s (CI)
	Total Number of Customers Served (C)
L-Bar = Average Duration of Outage Events	Sum of All Outage Event Durations (L)
	Total Number of Outage Events (N)

* The FPUC total electric retail customer count is well below 50,000. Per Rule 25-6.0455, (3) (c), MAIFIe and CEMI5 indices are not applicable (N/A) and not reported at this time.

Forms reporting *actual* data include <u>all</u> outage events. Forms reporting *adjusted* data exclude outage events directly caused by one or more of the following, if applicable:

- a. Planned Service Interruptions;
- b. A storm named by the National Hurricane Center;
- c. A tornado recorded by the National Weather Service;
- d. Ice on lines;
- e. A planned load management event;
- f. Electric generation or transmission events not governed by subsections 25-6.018 (2) and (3);
- g. Extreme weather or fire events causing activation of the county emergency operation center.

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Definitions from Rule 25-6.044 'Continuity of Service' are provided below for clarification:

- a. "Area of Service." A geographic area where a utility provides retail electric service. An Area of Service can be the entire system, a district, or a sub-region of the utility's system in which centralized distribution service functions are carried out.
- b. "Average Duration of Outage Events (L-Bar)." The sum of each Outage Event Duration
 (L) for all Outage Events occurring during a given time period, divided by the Number of Outage Events (N) over the same time period within a specific Area of Service.
- c. "Customer Average Interruption Duration Index (CAIDI)." The average time to restore service to interrupted retail customers within a specified Area of Service over a given period of time. It is determined by dividing the sum of Customer Minutes of Interruption (CMI) by the total number of Service (aka Customer) Interruptions (CI) for the respective Area of Service.
- d. N/A (CEMI5).
- e. "Customer Minutes of Interruption (CMI)". For a given Outage Event, CMI is the sum of each affected retail customer's Service Interruption Duration.

f. thru h. N/A (MAIFIe)

- i. "Number of Customers Served (C)." The sum of all retail customers on the last day of a given time period within a specific Area of Service.
- j. "Number of Outage Events (N)." The sum of Outage Events for an Area of Service over a specified period of time.
- k. "Outage Event." An occurrence that results in one or more individual retail customer Service Interruptions.
- 1. **"Outage Event Duration (L)."** The time interval, in minutes, between the time a utility first becomes aware of an Outage Event and the time of restoration of service to the last retail customer affected by that Outage Event.
- m. "Service Interruption." The complete loss of voltage of at least one minute to a retail customer. (CI for one customer).
- n. "Service Interruption Duration." The time interval, in minutes, between the time a utility first becomes aware of a Service Interruption and the time of restoration of service to that retail customer. (CMI for one customer).
- o. "System Average Interruption Duration Index (SAIDI)." The average minutes of Service Interruption Duration per retail customer served within a specified Area of Service over a given period of time. It is determined by dividing the total Customer Minutes of Interruption (CMI) by the total Number of Customers Served (C) for the respective Area of Service.
- p. "System Average Interruption Frequency Index (SAIFI)." The average number of Service Interruptions per retail customer within a specified Area of Service over a given period of time. It is determined by dividing the sum of Service (aka Customer) Interruptions (CI) by the total Number of Customers Served (C) for the respective Area of Service.
- q. "Planned Service Interruption." A Service Interruption initiated by the utility to perform necessary scheduled activities, such as maintenance, infrastructure improvements, and new construction due to customer growth.

FLORIDA PUBLIC SERVICE COMMISSION ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ACTUAL

PART I

CAUSE	S OF OUTAGE EVE	NTS – ACTUAL						
Utility Name: Florida Public Utilities Company- NE Division Year: 2013								
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)					
1. Vegetation	38	113.23	66.16					
2. Corrosion	29	88.16	102.76					
3. Other Weather	23	87.62	83.03					
4. Planned Outage	23	652.63	81.44					
5. Other	17	129.59	52.67					
6. Animal	16	60.86	41.16					
7. Unknown	14	72.95	82.97					
8. Lightning	13	110.28	100.27					
9. Xfmr Failure	10	170.59	137.23					
10. Transmission	9	109.93	91.38					
11. Named Storm - Andrea	7	74.69	67.51					
12. Vehicle	6	154.66	121.88					
13. Transmission/JEA	3	62.44	40.82					
-								
System Totals NE	208	162.74	76.41					

PSC/ECR 102-1(a) (8/06) Incorporated by reference in Rule 25-6.0455, Florida Administrative Code

FLORIDA PUBLIC SERVICE COMMISSION ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ADJUSTED

PART I

CAUSES OF OUTAGE EVENTS – ADJUSTED								
Utility Name: Florida Public Utilities Company- NE Division Year: 2013								
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)					
1. Vegetation	38	113.23	66.16					
2. Corrosion	29	88.16	102.76					
3. Other Weather	23	87.62	83.03					
4. Other	17	129.59	52.67					
5. Animal	16	60.86	41.16					
6. Unknown	14	72.95	82.97					
7. Lightning	13	110.28	100.27					
8. Xfmr Failure	10	170.59	137.23					
9. Vehicle	6	154.66	121.88					
System Totals NE	166	103.26	80.54					

PSC/ECR 102-1(b) (8/06) Incorporated by reference in Rule 25-6.0455, Florida Administrative Code

FLORIDA PUBLIC SERVICE COMMISSION ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ACTUAL

CAUSES OF OUTAGE EVENTS - ACTUAL							
tility Name: Florida Public Utilities Company- NW Division Year: 2013							
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)				
1. Other Weather	276	140.44	133.65				
2. Animal	259	55.67	45.59				
3. Vegetation	227	77.52	88.65				
4. Unknown	81	62.18	67.68				
5. Corrosion	36	94.48	53.19				
6. Lightning	35	75.58	96.37				
7. Xfmr Failure	19	135.44	108.02				
8. Planned Outage	16	69.11	60.17				
9. Other	15	57.75	55.96				
10. Vehicle	10	93.60	65.69				
11.							
12.							

974

89.67

97.21

PART I

PSC/ECR 102-1(a) (8/06) Incorporated by reference in Rule 25-6.0455, Florida Administrative Code

System Totals NW

FLORIDA PUBLIC SERVICE COMMISSION ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ADJUSTED

PART I

CAUSES	CAUSES OF OUTAGE EVENTS – ADJUSTED							
Utility Name: Florida Public Utilities Company – NW Division Year: 2013								
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)					
1. Other Weather	276	140.44	133.65					
2. Animal	259	55.67	45.59					
3. Vegetation	227	77.52	88.65					
4. Unknown	81	62.18	67.68					
5. Corrosion	36	94.48	53.19					
6. Lightning	35	75.58	96.37					
7. Xfmr Failure	19	135.44	108.02					
8. Other	15	57.75	55.96					
9. Vehicle	10	93.60	65.69					
System Totals: NW	958	90.02	98.49					

PSC/ECR 102-1(b) (8/06) Incorporated by reference in Rule 25-6.0455, Florida Administrative Code

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FLORIDA PUBLIC SERVICE COMMISSION ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ACTUAL

CAUSES OF OUTAGE EVENTS – ACTUAL							
Utility Name: Florida Public Utilities Company- FPUC Total Year: 2013							
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)				
1. Other Weather	299	136.37	118.38				
2. Animal	275	55.98	44.91				
3. Vegetation	265	82.64	81.51				
4. Unknown	95	63.77	70.47				
5. Corrosion	65	91.66	71.88				
6. Lightning	48	84.98	97.67				
7. Planned Outage	39	413.24	74.09				
8. Other	32	95.92	54.73				
9. Xfmr Failure	29	147.56	125.16				
10. Vehicle	16	116.50	69.92				
11. Transmission	9	109.93	91.38				
12. Named Storm - Andrea	7	74.69	67.51				
13. Transmission/JEA	3	62.44	40.82				
System Totals FPUC	1182	102.53	84.13				

PSC/ECR 102-1(a) (8/06) Incorporated by reference in Rule 25-6.0455, Florida Administrative Code

FLORIDA PUBLIC SERVICE COMMISSION ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ADJUSTED

PART I

CAUSES OF OUTAGE EVENTS – ADJUSTED							
Utility Name: Florida Public Utilities Company- FPUC Total Year: 2013							
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)				
1. Other Weather	299	136.37	118.38				
2. Animal	275	55.98	44.91				
3. Vegetation	265	82.64	81.51				
4. Unknown	95	63.77	70.47				
5. Corrosion	65	91.66	71.88				
6. Lightning	48	84.98	97.67				
7. Other	32	95.92	54.73				
8. Xfmr Failure	29	147.56	125.16				
9. Vehicle	16	116.50	69.92				
System Totals FPUC	System Totals FPUC 1,124 91.97 93.31						

PSC/ECR 102-1(b) (8/06) Incorporated by reference in Rule 25-6.0455, Florida Administrative Code

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PART II

THREE PERCENT FEEDER LIST – ACTUAL													
Utility N	lame: <u>F</u>	Iorida Put	olic Utilities	Company				_				Year:	<u>2013</u>
			Number of Customers										
Primary Circuit Id. No. or Name (a)	Sub- station Origin (b)	Location (c)	Residential (d)	Commercial (e)	Industrial (f)	Other (g)	Total (h)	Outage Events "N" (i)	Avg Duration "L-Bar" (j)	CAIDI (k)	Listed Last Year? (I)	No. of Years in the Last 5 (m)	Corrective Action Completion Date (n)
102	AIP	Northeast	1700	31	0	0	1731	3	189.17	189.17	NO	NO	N/A
9512	Marianna	Northwest	705	290	0	0	995	3	149	149	NO	NO	N/A

PSC/ECR 102-2(a) (8/06) Incorporated by reference in Rule 25-6.0455, Florida Administrative Code

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.

PART II

				THREE PE	ERCENT	FEEDEI	R LIST	- ADJI	JSTED				
Utility N	lame: <u>F</u>	Iorida Pul	blic Utilities	Company								Year:	2013
			Number of Customers										
Primary Circuit Id. No. or Name (a)	Sub- station Origin (b)	Location (c)	Residential (d)	Commercial (e)	Industrial (f)	Other (g)	Total (h)	Outage Events "N" (i)	Avg Duration "L-Bar" (j)	CAIDI (k)	Listed Last Year? (I)	No. of Years in the Last 5 (m)	Corrective Action Completion Date (n)
211	ЛТ	Northeast	1600	82	0	0	1682	3	52.51	52.56	No	2	N/A
9512	Marianna	Northwest	705	290	0	0	995	3	149	149	NO	NO	N/A

PSC/ECR 102-2(b) (8/06) Incorporated by reference in Rule 25-6.0455, Florida Administrative Code

SYSTEM RELIABILITY INDICES - ACTUAL										
Utility Name: Florida Public Utilities Company Year: 2013										
District or Service Area (a)	SAIDI (b)	CAIDI (c)	SAIFI (d)	MAIFIe (e)	CEMI5 (f)					
NE Division	313.90	76.41	4.11	N/A*	N/A*					
NW Division	290.29	97.21	2.99	N/A*	N/A*					
System Averages	303.32	84.13	3.61	N/A*	N/A*					

PART III

* Total # of Electric Retail Customers is well below 50,000. N/A by Rule 25-6.0455 (3)(c)

PSC/ECR 102-3(a) (8/06) Incorporated by reference in Rule 25-6.0455, Florida Administrative Code

SYSTEM RELIABILITY INDICES – ADJUSTED										
Utility Name: Florida Public Utilities Company Year: 2013										
District or Service Area SAIDI CAIDI SAIFI MAIFIe (a) (b) (c) (d) (e)										
NE Division	76.50	80.54	0.95	N/A*	N/A*					
NW Division	284.32	98.49	2.89	N/A*	N/A*					
System Averages	169.66	93.31	1.82	N/A*	N/A*					

PART III

* Total # of Electric Retail Customers is well below 50,000. N/A by Rule 25-6.0455 (3)(c)

PSC/ECR 102-3(b) (8/06) Incorporated by reference in Rule 25-6.0455, Florida Administrative Code

2013 - Reliability Indicators By Feeder FPUC – NE (Actual)

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
102 South Fletcher	22	118.74	99.15	78,134	788	2.612		
104 Parkway South\	2	227.05	227.05	454	2	454		
110 Plantation Roadside	3	64.29	55.89	838	15	193		
111 Plantation Fieldside	8	118.42	104.33	8,034	77	947		(117)
209 Fifteenth Street	12	128.96	139.21	433,911	3,117	1,548		
210 Buss Tie	12	102.11	93.28	131,248	1,407	1,225		
211 Jasmine Street	26	156.38	54.21	281,964	5,201	4,066		
212 Eleventh Street	26	96.60	34.94	40,631	1,163	2,512		
214 Clinch Drive	13	88.48	66.28	7,291	110	1,150		
215 Sadler, Nectarine, So.14th	9	148.48	46.02	46,162	1,003	1,336		
310 Bonnieview	11	74.39	69.69	21,115	303	818		
311 Bailey	54	294.81	74.59	417,260	5,594	15,920		
Gcb 201 - 69kv	3	51.92	51.92	311	6	156		
All FEEDERS	2	20.91	20.91	633,564	30,302	42		
Aip Substation - All Fdrs	3	189.17	189.20	2,767,122	14,625	568		
Gcb 202 - 69kv	2	151.89	151.89	304	2	304		
	208	162.74	76.41	4,868,343	63,715	33,850	313.90	4.11

Total No. of Customers at end of 2013 ==>

15,509
2013 - Reliability Indicators By Feeder FPUC - NE (Adjusted)

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
102 South Fletcher	20	109.86	98.99	77,610	784	2,197		
104 Parkway South\	1	138.25	138.25	138	1	138		
110 Plantation Roadside	3	64.29	55.89	838	15	193		
111 Plantation Fieldside	8	118.42	104.33	8,034	77	947		
209 Fifteenth Street	9	97.88	139.23	432,881	3,109	881		
210 Buss Tie	10	100.15	97.21	72,228	743	1,001		
211 Jasmine Street	22	127.16	54.00	278,684	5,161	2,798		
212 Eleventh Street	24	97.16	72.19	24,473	339	2,332		
214 Clinch Drive	13	88.48	66.28	7,291	110	1,150		
215 Sadler, Nectarine, So.14th	8	87.76	45.44	45,528	1,002	702		
310 Bonnieview	10	73.29	69.26	20,432	295	733		
311 Bailey	38	107.04	70.53	218,231	3,094	4,068		
	166	103.26	80.54	1,186,367	14,730	17,140	76.50	0.95

Total No. of Customers at end of 2013 ==>

15,509

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
Altha	71	104.76	86.37	157,271	1.821	7.438		1
Blountstwn	12	99.06	104.83	20,127	192	1,189		
Bristol	67	60.17	50.11	108,795	2,171	4.032		
College	120	90.16	68.40	300,203	4,389	10,819		
Cottondale	122	85.12	94.03	618,706	6,580	10,385		
Dogwood Ht	26	66.31	69.74	18,552	266	1,724		
Family Dol	1	69.30	69.30	69	1	69		
Greenwood	131	95.36	137.75	880,489	6,392	12,493		
Hospital	42	109.17	127.30	194,003	1,524	4,585		
Hwy 90e	83	82.77	121.48	165,212	1,360	6,870		
Hwy 90w	25	106.82	87.73	33,512	382	2,671		
Ind Park	2	159.46	227.38	10,459	46	319	6	
Indian Spr	82	93.76	89.54	152,846	1,707	7,688		
Prison	8	94.66	104.99	1,470	14	757		
Railroad	36	94.66	132.13	512,388	3,878	3,408		
South St	146	88.34	70.08	484,174	6,909	12,897		
	974	89.67	97.21	3,658,278	37,632	87,343	290.29	2.99

Total No. of Customers at end of 2013 ==>

12,602

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
Altha	71	104.76	86.37	157 271	1 821	7 438		
Blountstwn	12	99.06	104.83	20 127	192	1 189		
Bristol	63	60.81	49.44	94.029	1 902	3 831		
College	120	90.16	68.40	300,203	4 389	10 819		
Cottondale	121	85.50	96.88	605,623	6,251	10,345		
Dogwood Ht	23	66.21	69.14	14,934	216	1 523		
Family Dol	. 1	69.30	69.30	69	1	69		
Greenwood	128	96.55	141.17	877.683	6,217	12 358		
Hospital	41	108.91	127.31	193,643	1.521	4 465		
Hwy 90e	83	82.77	121.48	165,212	1,360	6.870		
Hwy 90w	25	106.82	87.73	33,512	382	2.671		
Ind Park	2	159.46	227.38	10,459	46	319		
Indian Spr	81	93.55	84.21	114,352	1.358	7.578		
Prison	6	80.22	96.65	1,063	11	481		
Railroad	36	94.66	132.13	512,388	3,878	3,408		
South St	145	88.78	70.58	482,381	6,835	12,873		
	958	90.02	98.49	3.582.951	36,380	86,237	284 32	2 89

Total No. of Customers at end of 2013==>

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12,602

FPUC 2013 - Reliability Indicators and Analysis

FPUC's reliability indicators continue to be heavily influenced by the weather as well as the relatively small size of our territories when compared to other larger investor owned utilities. This situation generates a greater level of volatility in our reliability indices. However, both NE and NW Divisions continue to invest in infrastructure upgrades and renovations which continue to generate improvements in all our reliability indicators from the 5 year high values in 2009. Clear examples of this are the 2013 decreases in all FPU's combined indicators which show reductions ranging from 28.73% to 10.44% from the values in 2009. These improvements are direct results of closely implementing the initiatives described in this report.

The NE Division has continued substantial reductions in SAIDI with a 45.78% decrease from 141, 08 in 2012 to 76.50 in 2013. Likewise, they obtained a 24.63% reduction in CAIDI from 106.86 in 2012 to 80.54 in 2013, a 28.03% reduction in SAIFI from 1.32 in 2012 to 0.95 in 2013, and a 9.34% reduction in L-BAR from 113.9 in 2012 to 103.36 in 2013.

While the NW division saw substantial increases in SAIDI and SAFI, it was mainly due to the severe weather that affected their territory. This can be seen on page 9 above on the table labeled "Causes of Outage Events – Adjusted". This table outlines that the highest number of events are due to "Other Weather", which are none excludable severe storms. FPUC will continue to monitor all the reliability indices and outage causes to adjust and improve our current reliability programs.

<u>FPUC 2013 – Description of Excluded Events for Named Storms,</u> <u>Transmission, Distribution, and Substations</u>

Named Storms

The NW was not impacted by any named storms in 2013. However, the NE Division experienced several outages, as a result of named storm Andrea, at the beginning of the hurricane season on June 6, 2013

Transmission, Distribution and Substation

The NE Division was affected by several 69KV transmission outages during 2013 that were mainly related to lightning. As a result, FPUC performed a study which identified lightning arrestors and grounding as the root cause of the failures. The NE division, in the upcoming years, will begin implementing a new lightning arrestor and grounding standard along the areas that have been most affected by these events. The other major outage was due to a temporary loss of FPU's power supplier, Jacksonville Electric Authority (JEA), which was performing maintenance at one of their 138KV substations. This event affected the whole NE division on

December 27, 2013. In all cases crews were immediately dispatched and power was restored to all customers as soon as possible.

The NE and NW Divisions, as noted below in the Excluded Events Tables, had several planned outages to perform maintenance to different sections of the distribution system.

The NW did not experience any substation and transmission related events in 2013.

	ZOIS NE DIV	ISIOII EXCluded EVE	The engineer of the second	1.1.1.1.1.1.1	STAR STAR
Date	Feeder	Exclusion	Aff Cust	整理建	CMI
3/23/13	AIP SUBSTATION - ALL FDRS	Transmission	4,879	294	1,432,068
4/11/13	210 BUSS TIE	Transmission	659	89	58,343
4/11/13	212 ELEVENTH STREET	Transmission	822	19	15,837
4/17/13	311 BAILEY	Planned Outage	6	120	722
4/17/13	210 BUSS TIE	Planned Outage	5	135	676
4/18/13	311 BAILEY	Planned Outage	2	89	178
4/23/13	311 BAILEY	Planned Outage	7	200	1,403
4/23/13	311 BAILEY	Planned Outage	4	119	477
4/24/13	311 BAILEY	Planned Outage	22	109	2,404
4/25/13	310 BONNIEVIEW	Planned Outage	8	85	683
5/1/13	311 BAILEY	Planned Outage	13	2	23
5/6/13	311 BAILEY	Planned Outage	2	209	419
5/7/13	311 BAILEY	Planned Outage	2	59	118
5/14/13	311 BAILEY	Planned Outage	7	170	1,192
5/14/13	311 BAILEY	Planned Outage	1	89	89
5/21/13	311 BAILEY	Planned Outage	3	10,224	30,671
5/21/13	311 BAILEY	Planned Outage	2	120	240
5/22/13	311 BAILEY	Planned Outage	4	135	541
6/1/13	215 SADLER, NECTARINE, SO.14TH	Planned Outage	1	634	634
6/6/13	211 JASMINE STREET	Named Storm -	30	61	1 822
6/6/13		Named Storm -	2	160	321
0/0/13		Named Storm -	2	100	521
6/6/13	209 FIFTEENTH STREET	Andrea Named Starm	6	73	436
6/6/13	211 JASMINE STREET	Andrea	8	36	287
6/6/13	102 SOUTH FLETCHER	Named Storm - Andrea	3	54	163
6/6/13	311 BAILEY	Named Storm - Andrea	65	69	4,517
6/6/13	311 BAILEY	Named Storm - Andrea	82	69	5,687
6/24/13	211 JASMINE STREET	Planned Outage	1	710	710
6/24/13	211 JASMINE STREET	Planned Outage	1	461	461
7/13/13	209 FIFTEENTH STREET	Planned Outage	1	70	70
8/1/13	AIP SUBSTATION - ALL FDRS	Transmission	4,874	63	307,062
8/5/13	102 SOUTH FLETCHER	Planned Outage	1	361	361
8/22/13	AIP SUBSTATION - ALL FDRS	Transmission	4,872	211	1,027,992
		Planned Outage	0.070		450.040

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	1				
9/17/13	GCB 202 - 69KV	Transmission	1	233	233
10/28/13	GCB 201 - 69KV	Transmission	2	64	128
10/28/13	GCB 201 - 69KV	Transmission	2	16	32
10/28/13	All FEEDERS	Transmission	15,151	1	15,151
11/2/13	209 FIFTEENTH STREET	Planned Outage	1	524	524
12/16/13	104 PARKWAY SOUTH	Planned Outage	1	316	316
12/27/13	All FEEDERS	Transmission/JEA	15,151	41	618,413
12/27/13	GCB 202 - 69KV	Transmission/JEA	1	71	71
12/27/13	GCB 201 - 69KV	Transmission/JEA	2	76	152

2013 NW Division Excluded Events										
Date	Feeder	Cause	Aff Cust	E St	СМІ					
3/14/13	SOUTH ST	Planned Outage	74	24	1,793					
6/7/13	PRISON	Planned Outage	1	145	145					
6/7/13	PRISON	Planned Outage	2	131	262					
6/14/13	BRISTOL	Planned Outage	92	58	5,338					
6/18/13	DOGWOOD HT	Planned Outage	4	53	212					
7/8/13	GREENWOOD	Planned Outage	1	108	108					
7/15/13	BRISTOL	Planned Outage	104	62	6,415					
8/17/13	HOSPITAL	Planned Outage	3	120	360					
8/21/13	BRISTOL	Planned Outage	50	43	2,150					
9/18/13	DOGWOOD HT	Planned Outage	23	23	539					
9/23/13	BRISTOL	Planned Outage	23	38	863					
9/26/13	DOGWOOD HT	Planned Outage	23	125	2,867					
11/11/13	GREENWOOD	Planned Outage	4	11	43					
11/12/13	GREENWOOD	Planned Outage	170	16	2,655					
11/25/13	COTTONDALE	Planned Outage	329	40	13,083					
12/16/13	INDIAN SPR	Planned Outage	349	110	38,495					

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II. Wood Pole Inspections

Introduction

To comply with FPSC Order No. PSC-06-0144, in 2008 Florida Public Utilities Co. (FPUC) implemented an 8-year cycle wood pole inspection program. The most current edition of the National Electric Safety Code (NESC) serves as a basis for the design of replacement poles for wood poles that fail inspection. Grade 'B' construction, as described in Section 24 of the NESC, has been adopted as the standard of construction for designing new pole installations and the replacement of reject poles in each FPUC Electric Division (NE & NW). Extreme wind loading, as specified in figure 250-2(d) of the NESC, has been adopted, as follows: 130 mph wind speed for wind loading in NE Division (Fernandina); 120 mph wind speed for wind loading in NW Division (Marianna).

Wood pole inspections are performed by a qualified wood pole inspection contractor. Inspection results are summarized for each division using the Wood Pole Inspection Reports included in this section. Also included are bar charts and tables that show inspection results summary, failure rates, and pole ages.

The number of inspections may vary from year-to-year based upon a variety of factors. FPUC will continue to work diligently to complete all required wood pole inspections during the eight year wood pole inspection cycle.

Inspection Process

The first inspection is a visual inspection to determine if there are any defects that require pole replacement. If the visual inspection indicates that the pole is not suited for continued use, it is rejected by the contractor and reported to FPUC for follow-up.

If the pole passes visual inspection, the pole is sound and bore tested to determine the internal condition of the pole. If the sound and bore inspection indicates that the pole is not suited for continued use, the pole is rejected by the contractor and reported to FPUC for follow-up.

If the pole passes the sound and bore test, the pole is excavated a minimum of 18 inches in depth and tested. If this test indicates the pole is suitable for continued service, the pole is treated and backfilled. If this test indicates the pole is not suited for continued use, it is rejected by the contractor and reported to FPUC for follow-up.

During 2013, FPUC submitted the 2013-2015 Storm Hardening Plan for PSC approval. The plan introduced modified criteria for CCA pole inspections. However, the plan was approved after 2013 pole inspections were begun. Therefore, the criteria used were those contained in the 2010-2012 Storm Hardening Plan. CCA poles less than 16 years of age were visually inspected, sounded, and selectively bored. Boring was performed only if internal decay was suspected. Unless a pole failed sound and bore, a full excavation was not performed on these poles. To ensure that more rigorous inspections were not warranted, FPUC required its contractor to perform full excavation sampling of at least 1.0% of CCA poles under 16 years of age and planned for current cycle inspection. The random sample inspections for 2013 produced no reject failures for 2013.

Strength and Loading Assessment

The contractor performs Strength Assessment tests on selected poles to compare the current measured circumference to the original circumference of the pole. The effective circumference of the pole is determined to ensure that the current condition of the pole meets the requirements of NESC Section 26 "Strength Requirements". Beginning in 2010, pole inspection criteria were enhanced to include LoadCalc analysis on poles with remaining strength at or below 67%. If the 'required' remaining strength resulting from the combined strength and load analysis indicates that the pole is not suited for continued use, the contractor rejects the pole and reports it to FPUC for follow-up.

Poles having 3rd party attachments of ¹/₂" or larger in diameter are assessed for loading by the contractor who uses a program called LoadCalc. When conducting the Loading Assessment, span lengths, attachment heights, wire sizes, and 3rd party attachments are analyzed to estimate pole loading. Poles identified by the contractor as being loaded at or above 100% are re-evaluated by FPUC engineers using a program called PoleForeman. NESC Grade B construction & 60 mph winds provide the basis for calculations. Poles loaded at or above 100% following re-evaluation are replaced. Additional discussion about 3rd party attachments is provided in Storm Preparedness Initiatives section under Initiative #2, "Joint Use Pole Attachment Audit".

Post Inspection Follow-Up

The contractor provides FPUC with follow up reports.

Poles Needing Maintenance Report: Maintenance items are provided to FPUC construction employees. The poles are re-inspected and assigned a priority based upon potential hazard to public and employee safety. Repairs are then made in order of priority.

Reject Poles Report: FPUC policy is to replace all reject poles in lieu of bracing "restorable" reject poles. Poles are prioritized for replacement using the reject severity level awarded by the inspector as the basis. Each pole is analyzed by FPUC engineers. A computer program called PoleForeman is used to make sure the new poles meet the storm hardening criteria discussed in the first paragraph of this section.

The list of reject poles is provided to 3rd party attachers so they may give feedback concerning planned attachments that require increased pole size for added loading.

Summary

FPUC collects and stores pole inspection data upon completion of annual wood pole inspections. The contractor provides FPUC with wood pole inspection data that includes pole location, size, class, test results, and general comments. The contractor provides inspection summary data via an On-line Data Center that allows FPUC to create specific reports and view detailed or summary information. The On-line Data Center is essential for post inspection follow up.

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Florida Public Utilities Company - NE Division Annual Wood Pole Inspection Report Cycle Year #6 of 8 Year Cycle (Inspection Year 2013)

а	b	С	d	е	f	g	h	i	j	k	1	m	n	0
Total # of wood poles in NE Division	# of pole inspections planned for this γear	Backlog included in plans for this year	# of pole inspections completed this year	# of poles failing inspection this year	% failure rate this year	# failures replaced this year	# failures repaired this year	Total # of failures remaining to be replaced	Total # of failures remaining to be repaired	# of poles requiring maint. follow-up this year	# of poles overloaded this year	Total # of poles inspected in 8 yr cycle to date	Total % of poles inspected in 8 yr cycle to date	# of pole inspections planned next year
4872	595	0	623	63	10.1%	52	N/A*	13	N/A*	83	1	3873	79.5%	587
lf d < b, expla	provide nation	Include reas	ion for variance	e, resulting ba	cklog, and pla	ns to address	backlog: N/A.							
lf g + pro expla	h < e, vide nation	Include reas	Include reason for variance, resulting backlog, and plans to address backlog: N/A * Present FPUC policy is to replace all failure poles in lieu of bracing "restorable" failure poles. Therefore, columns (h) and (j) are not applicable (N/A) to FPUC at this time.											
Addi Inforr	tional mation	Random sar results to in	nple full excava dicate more rig	ation inspectio gorous inspect	ons were comp ions of CCA po	bleted on at le bles are neces	ast one perce sary at this tin	nt of CCA pole ne.	s planned for	current cycle	nspections. Rai	ndom sample	inspections pr	oduced no

NE Division



NE Division ed Congruge droup

Age Span (years)	No De	ecay	De	ecayed	but Ser	viceable	2	Rejected					Total Poles Inspected	
	Number	%	internal Decay	External Decay	Other Decay	Number	%	Internal Decay	External Decay	Other Decay	Number	%	Number	%
0-5	6	100%	0	0	0	0	0%		0.5	o	0	0%	6	1%
6-10	51	100%	0	0	0	0	0%			0	O C	0.25	51	8%
11-15	54	100%	0	0	0	0	0%	o			0	COL.	54	9%
16-20	57	95%	o	3	0	3	5%	ave Stores		9		1	60	10%
21-25	57	93%	0	3	1	4	7%	0		0		0%	61	10%
26-30	27	75%	0	6	1	7	19%	0.0		ė		Distantion of the	36	6%
31-35	21	29%	0	38	6	43	60%	10月1日月1日		n in the second		1156	72	12%
36-40	34	34%	0	38	з	41	41%	0	23	(0)	11 26 10	2896	101	16%
41-45	40	44%	0	27	3	30	33%			C		23%	91	15%
46-50	3	13%	O	14	2	16	70%			0		1700	23	4%
51-55	8	57%	0	4	0	4	29%					1495/	14	2%
56-60	0	0%	0	0	0	0	0%				O.	0%	0	0%
60+	0	0%	0	0	0	0	0%	0		0	1 1	0.2	0	0%
Unknown	54	100%	0	0	0	O	0%			a l	O	0%6	54	9%
Total	412	66%	0	133	15	148	24%	0	63	0	63	10%	623*	

X.

* Average Age: 29.5 years

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	Florida Public Utilities Company - NW Division Annual Wood Pole Inspection Report Cycle Year #6 of 8 year Cycle (Inspection Year 2013)													
а	b	с	d	е	f	g	h	i	j	k	1	m	n	o
Total # of wood poles in NW Division	# of pole inspections planned for this year	Backlog included in plans for this year# of poles failing inspections this year# of poles failure year# of poles failures replaced# failures replacedTotal # of failures repaired# of poles failures remaining to be replaced# of poles failures remaining to be replaced# of poles failures remaining to be replaced# of poles failures 												
21279	2394	0	0 3264 460 14.1% 83 N/A* 844 N/A* 973 34 17362 81.6% 1959											
If d < b, provide explanation Include reason for variance, resulting backlog, and plans to address backlog: N/A														
If g + h < e, explant	, provide ation	e Include reason for variance, resulting backlog, and plans to address backlog: N/A * Present FPUC policy is to replace all failure poles in lieu of bracing "restorable" failure poles. Therefore, columns (h) and (j) are not applicable (N/A) to FPUC at this time.												
Additional Random sample full excavation inspections were completed on at least one percent of CCA poles planned for current cycle inspections. Random sample inspections produced no results to indicate more rigorous inspections of CCA poles are necessary at this time.									1 no results					

NW Division



NW Division

Age Span (years)	No	Decay	Deca Serv	iyed but viceable	Re	jected	Total Poles Inspected		
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	
0-5	152	100%	0	0%		096	152	5%	
6-10	286	100%	0	0%		10%	286	9%	
11-15	322	100%	0	0%	0	0%	322	10%	
16-20	386	99%	3	1%	0 14	0%	389	12%	
21-25	324	99%	4	1%	C	1%	328	10%	
26-30	82	63%	42	32%	6	5%	130	4%	
31-35	69	32%	116	53%	33	15%	218	7%	
36-40	152	33%	220	47%		20%	466	14%	
41-45	92	17%	251	47%	190	36%	533	16%	
46-50	54	24%	90	40%	83	37%	227	7%	
51-55	26	20%	56	42%	51	38%	133	4%	
56-60	1.11	14%	3	43%		13%	7	0%	
60+	2	100%	0	0%	D.	- 10 DWG	2	0%	
Unknown	71,	100%	0	0%		0%	71	2%	
Total	2019	62%	785	24%	460	14%	3264*		

All Poles Inspected Condition by Age Group

* Average Age: 28.7 years

III. Storm Hardening Update

Introduction

This is the required annual update of the FPUC Storm Hardening Plan. Wood pole inspection is addressed in more detail in Section II of this update. More extensive updates for the ten storm preparedness initiatives can be found in Section IV.

Compliance with NESC Requirements:

The National Electric Safety Code (NESC) serves as a basis for the design and construction of new and replacement FPUC facilities. Pursuant to subsection 25-6.0345 (2), F.A.C., all FPUC facilities were installed in accordance with NESC requirements in effect at the time of their installation. To enhance FPUC storm hardening efforts, more stringent Grade 'B' construction, as described in Section 24 of the 2007 edition of the NESC, has been adopted as the standard for the design and installation of all future new and replacement poles in each FPUC Electric Division (NE & NW).

Extreme Wind Loading:

Extreme wind loading, as specified in figure 250-2(d) of the 2007 edition of the NESC, has been adopted, as follows: 130 mph wind speed for wind loading in NE Division (Fernandina); and, 120 mph wind speed for wind loading in NW Division (Marianna).

Mitigation of Damage Due to Storm Surge and Flooding:

FPUC continues to develop specifications for mitigating damage to underground and overhead distribution and transmission facilities caused by flooding and storm surges. Additionally, FPUC is participating along with other investor owned, cooperative, and municipal electric utilities in the Public Utility Research Center (PURC) research regarding hurricane winds and storm surge within the state.

FPUC transmission facilities are located in the Northeast (Florida) Division only. Transmission lines constructed near and across coastal waterways were originally designed to meet, at a minimum, NESC requirements for those applications. Where necessary, foundations and casings were used to stabilize the structures due to the soil conditions.

Some overhead distribution lines in both divisions are subject to storm surges and flooding. Lines located near the coast or inland waterways that are subject to storm surges or flooding are continually evaluated. Additional supporting mechanisms are installed when practicable. This includes storm guys or pole bracing, as needed. Storm guys or bracing are being placed so that additional support is achieved perpendicular to the distribution line. Potentially affected lines that have reclosers, capacitors, or regulators that require electronic controls have associated controls mounted above maximum anticipated surge or flood levels.

Underground distribution lines subject to potential storm surges and flooding are mainly located in Northeast Florida Division. Storm hardening specifications include the use of reinforced concrete pads with legs on each corner that are poured approximately two feet into the ground to provide additional stability. Equipment is securely attached to the pad. Underground distribution lines are placed in conduit but are not typically encased in concrete. Future installations of underground distribution feeders will be evaluated based upon potential exposure to storm surges and flooding. Additional information and conclusions from research performed by the PURC will be included in the evaluation. If it is determined that storm surges could cause excessive damage, the installation may be encased in concrete ducts if feasible and validated by research.

Placement of New and Replacement Facilities:

Accessible locations are necessary for the efficient and safe installation and maintenance of FPUC facilities. Therefore, facilities are placed along public rights of way or located on private easements that are readily accessible from public streets. Placement of facilities along rear lot lines will not occur except in certain commercial applications were easily accessible concrete or asphalt driveways are located at the rear of the development or in residential neighborhoods with alleyways designed specifically for the purpose of installing utility services behind the homes.

Deployment Strategy:

FPUC has a fully implemented storm hardening strategy. Significant areas of note for 2013 include:

- During 2013, each division completed the sixth year of pole inspections for the 8 year cycle wood pole inspection program. Specific results are reported in Section II - Wood Pole Inspections.
- FPUC continues its Vegetation Management Program that includes trimming main feeders every three years, laterals every six years, and addressing danger trees as soon as possible. Additional information about the FPUC Vegetation Management Program can be found in Section IV - Storm Preparedness Initiatives, Initiative #1 - Vegetation Management Program for Distribution Circuits.
- Pole loading inspections and follow up are performed annually in both divisions as part of the Wood Pole Inspection Program. More information about pole loading inspections and follow up can be found in Section II - Wood Pole Inspections, and Section IV - Storm Preparedness Initiatives, Initiative #2 - Joint Use Pole Attachment Audit.
- 4. FPUC owned transmission poles are only located in NE Division. Details about climbing inspections of transmission poles can be found in Section IV Storm Preparedness Initiatives, Initiative #3 Six Year Transmission Structure Inspection Program.
- 5. Section IV Storm Preparedness Initiatives, Initiative #4 Storm Hardening of Existing Transmission Structures contains additional information about transmission structure storm hardening.
- 6. New underground facilities are designed to mitigate damage from storm surges and flooding.
- 7. FPUC will continue to place facilities on public rights of way and, if this is not possible, will secure private easements to make sure facilities are easily accessible.

Communities and Areas Affected by Electric Infrastructure Improvements:

The majority of the items listed in the deployment strategy affect all areas of the FPUC electric service territory. The intent is to make sure both divisions benefit from these strategies. Transmission inspection and transmission storm hardening programs only affect the Northeast Florida Division since there are no FPUC owned transmission facilities in the Northwest Florida

Division at this time. Constructing distribution lines to comply with the NESC extreme wind loading standards is beneficial to both divisions and the communities they serve.

Upgrading of Joint Use Facilities

In 2012 two storm hardening projects took place in the NW division. Distribution facilities along Hartsfield Rd were relocated along the county ROW and storm hardened in the process. The Malone feeder between Greenwood and Malone began at the end of 2013 and will be complete mid-2014.

NE Division storm hardening projects planned for 2012 were placed on hold because the local government wanted to discuss undergrounding some of the overhead facilities associated with the projects. FPUC agreed to take another look at the projects to include conversion from overhead facilities to underground as soon as the local government made a formal request for preparation of a preliminary cost estimate. As of the end of 2013, no formal request had been received by FPUC. The two NE Division storm hardening projects submitted in the FPUC 2010-2012 Storm Hardening Plan have been placed on hold pending input from local government. Two new storm hardening projects are under development for the NE Division and will be included in the FPUC 2013-2015 Storm Hardening Plan. NE Division has continued to replace reject poles. Many of these reject poles have joint use facilities. New replacement poles were designed to accommodate joint use facilities and were installed in accordance with criteria found in the current addition of NESC guidelines for extreme wind loading conditions. The new installations were coordinated with joint users. Fifty two reject poles were replaced during 2013 in NE Division. Only three wooden transmission poles remain on the NE Division backlog. Due to the extended lead order time for building concrete poles, the three transmission poles will be replaced with concrete poles in 2014, along with twenty nine additional wooden transmission poles with significant damage that were discovered during the 2012 transmission climbing inspection.

IV. Storm Preparedness Initiatives

This is the FPUC required annual update of the ten storm preparedness initiatives.

Initiative #1 - Vegetation Management Programs for Distribution Circuits

FPUC continues to work towards the accomplishment of a three year vegetation management cycle on main feeders and a six year vegetation management cycle on laterals on the system.

The program includes the following:

- 1. Three year vegetation management cycle on all main feeders.
- 2. Six year vegetation management cycle on all laterals.
- 3. Increased participation with local governments to address improved overall reliability due to tree related outages.
- 4. Information made available to customers regarding the maintenance and placement of trees.

Based upon current tree trimming crew levels, the Company will make reasonable efforts to address the following :

- 1. Annual inspection of main feeders to critical infrastructure prior to the storm season to identify and perform the necessary trimming.
- 2. Address danger trees located outside the normal trim zone and located near main feeders as reported.

<u>Performance Metrics</u>: Adjusted data includes only activities that are budgeted and included in the Company's filed vegetation management plan. Unadjusted (actual) data includes all performance data, such as, hurricane performance and all other vegetation caused outage events FPUC believes to be excludable pursuant to 25-6.0455,F.A.C. The difference between unadjusted data and adjusted data are the storm reliability performance metrics.

The FPUC vegetation management program was implemented in 2008. Because the Company Program for trimming main Feeders is a Three Year Program, a Comparison Table is not necessary for Feeders. The Company Program for trimming Laterals is six years. FPUC will begin preparing Comparison Tables for Laterals when Six Year Cycle trimming has been completed in 2013 (2014 Report).

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		Feeders			Laterals	
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages	3	3	0	262	262	0
(B) Customer Interruptions	4,373	4,373	0	8,339	8,339	0
(C) Miles Cleared	66.77	66.77	0	129.46	129.36	0.1
(D) Remaining Miles (Note 2 & 3)	27.51	27.51	0	-181.64	-181.64	0
(E) Outages per Mile [A ÷ (C + D)]	0.03	0.03	0.00	-5.02	-5.01	-0.01
(F) Vegetation CI per Mile [B \div (C + D)]	46.38	46.38	0.00	-159.81	-159.51	-0.31
(G) Number of Hotspot trims	192	192	0	NA	NA	NA
(H) All Vegetation Management Costs	\$858,222	\$858,222	0	(Note 4)	(Note 4)	(Note 4)
(I) Customer Minutes of Interruption	445,055	445,055	0	591,113	591,113	0
(J) Outage restoration costs	(Note 5)	(Note 5)	0	NA	NA	NA
(K) Vegetation Budget (current year)	\$ 869,000	\$ 869,000	\$ -	NA	NA	NA
(L) Vegetation Goal (current year)	\$ 869,000	\$ 869,000	\$ -	NA	NA	NA
(M) Vegetation Budget (next year)	\$ 725,000	\$ 725,000	\$ -	NA	NA	NA
(N) Vegetation Goal (next year)	\$ 725,000	\$ 725,000	\$ -	NA	NA	NA
(O) Trim-Back Distance	(Note 6)	(Note 6)	0	(Note 6)	(Note 6)	NA

FPUC Consolidated Vegetation Management Performance Metrics - 2013

Danger Trees (FPUC Totals) - Additional Questions

a) Number of danger trees removed? 338 (est)

b) Expenditures on danger tree removal? <u>\$44,000 (est)</u>

c) Number of request for removals that were denied? $\underline{0}$

d) Avoided CI with danger trees removed (estimate)? ____

e) Avoided CMI with danger trees removed (estimate)?

Note 2: NE and NW Division uses GIS system to obtain miles of feeders and laterals.

Note 3: Remaining miles negative numbers indicate additional trimming that the required 3 and 6 year cycles.

Note 4: Vegetation management costs have not been separated between main feeders and laterals.

Note 5: Outage restoration costs have not been historically documented.

Note 6: Distribution is 10 feet and transmission (138KV is 30 feet and 69KV is 15 feet)

Note 8: For 2013 and beyond vegetation management metrics will be recalculated using new project management procedure.

NE Division Vegetation Management Performance Metrics - 2013

	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages	2	2	0	36	36	0
(B) Customer Interruptions	3,370	3,370	0	665	665	0
(C) Miles Cleared (Notes 1 & 2)	36.09	36.09	0	26.98	26.98	0
(D) Remaining Miles (Note 2 & 3)	-7.49	-7.49	0	-24.83	-24.83	0
(E) Outages per Mile $[A \div (C + D)]$	0.07	0.07	0	16.74	16.74	0
(F) Vegetation CI per Mile [B ÷ (C + D)]	117.83	117.83	0	309.30	309.30	0
(G) Number of Hotspot trims	0	0	0	0	0	0
(H) All Vegetation Management Costs	\$298,709	\$298,709	0	(Note 4)	(Note 4)	(Note 4)
(I) Customer Minutes of Interruption	193,503	193,503	0	73,438	73,438	0
(J) Outage restoration costs	(Note 5)	(Note 5)	NA	NA	NA	NA
(K) Vegetation Budget (current year)	\$290,000	\$290,000	\$ -	NA	NA	NA
(L) Vegetation Goal (current year)	\$290,000	\$290,000	\$ -	NA	NA	NA
(M) Vegetation Budget (next year)	\$275,000	\$275,000	\$ -	NA	NA	NA
(N) Vegetation Goal (next year)	\$275,000	\$275,000	\$ -	NA	NA	NA
(O) Trim-Back Distance	(Note 6)	(Note 6)	0	(Note 6)	(Note 6)	NA

Danger Trees (NE Division) - Additional Questions

a) Number of danger trees removed? 16

b) Expenditures on danger tree removal? <u>\$4,000 (est)</u>

c) Number of request for removals that were denied? $\underline{0}$

d) Avoided CI with danger trees removed (estimate)? _____

e) Avoided CMI with danger trees removed (estimate)?

Note 1: Miles cleared in 2013 include total miles of main feeders and laterals and hot spot trimming.

Note 2: NE Division uses GIS system to obtain miles of feeders and laterals.

Note 3: Remaining miles negative numbers indicate additional trimming that the required 3 and 6 year cycles.

Note 4: Vegetation management costs have not been separated between main feeders and laterals.

Note 5: Outage restoration costs have not been historically documented.

Note 6: Distribution is 10 feet and transmission (138KV is 30 feet and 69KV is 15 feet)

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		Feeders			Laterals	
ii.	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages	1	1	0	226	226	0
(B) Customer Interruptions	1003	1003	0	7,674	7,674	0
(C) Miles Cleared (note 2)	30.68	30.68	0	102.48	102.38	0
(D) Remaining Miles	35	35	0	-156.81	-156.81	0
(E) Outages per Mile $[A \div (C + D)]$	0.02	0.02	0	-4.16	-4.15	0
(F) Vegetation CI per Mile [B ÷ (C + D)]	15.27	15.27	0	-141.25	-140.99	0
(G) Number of Hotspot trims	192	192	0	NA	NA	NA
(H) All Vegetation Management Costs	\$559,513	\$559,513	0	(Note 4)	_	
(I) Customer Minutes of Interruption	251,552	251,552	0	517,675	517,675	0
(J) Outage restoration costs	(Note 5)	(Note 5)	NA	NA	NA	NA
(K) Vegetation Budget (current year)	\$579,000	\$579,000	0	NA	NA	NA
(L) Vegetation Goal (current year)	\$579,000	\$579,000	0	NA	NA	NA
(M) Vegetation Budget (next year)	\$450,000	\$450,000	0	NA	NA	NA
(N) Vegetation Goal (next year)	\$450,000	\$450,000	0	NA	NA	NA
(O) Trim-Back Distance	10	10	NA	10	10	NA

Danger Trees (NW Division) - Additional Questions

a) Number of danger trees removed? 322 (est.)

b) Expenditures on danger tree removal? \$40,000 (est)

c) Number of request for removals that were denied? $\underline{0}$

d) Avoided CI with danger trees removed (estimate)?

e) Avoided CMI with danger trees removed (estimate)?

Note 2: NW Division uses GIS system to obtain miles of feeders and laterals.

Note 4: Vegetation management costs have not been separated between main feeders and laterals.

Note 5: Outage restoration costs have not been historically documented.

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NW TREE TRIM SCHEDULE – MAIN FEEDERS

2014 - 2016

- **2014** 1. OCB#9942: HWY 90E Feeder
 - 2. OCB#9992: HWY 90W Feeder
 - 3. OCB#9972 Blountstown Feeder
 - 4. OCB#9882: Bristol Feeder
 - 5. OCB# 9952: Altha Feeder
- 2015 1. OCB#9932: Indian Springs Feeder
 - 2. OCB#9782 Family Dollar Feeder
 - 3. OCB#9854: South Street Feeder
 - 4. OCB#9512: Railroad Feeder
 - 5. OCB#9872: Hospital Feeder
 - 6. OCB#9752: Industrial Park Feeder
 - 2016 1. OCB#9742: Greenwood/Malone Feeder
 - 2. OCB#9722: Dogwood Heights Feeder
 - 3. OCB#9982: College Feeder
 - 4. OCB#9866: Cottondale Feeder
 - 5. OCB#9732: Prison Feeder

NW TREE TRIM SCHEDULE – LATERALS 2014 - 2019

2014 1. OCB#9882: Bristol Feeder 2. OCB#9972: Blountstown Feeder 1. OCB#9932: Indian Springs Feeder 2015 2. OCB#9942: HWY 90E Feeder 3. OCB#9872: Family Dollar Feeder 2016 1. OCB#9992: HWY 90W Feeder 2. OCB#9854: South Street Feeder 3. OCB#9732: Prison Feeder 2017 1. OCB#9866: Cottondale Feeder 2. OCB#9952: Altha Feeder 2018 1. OCB#9512: Railroad Feeder 2. OCB#9872: Hospital Feeder 3. OCB#9982: College Feeder 2019 1. OCB#9742: Greenwood/Malone Feeder 2. OCB#9722: Dogwood Heights Feeder 3. OCB#9752: Industrial Park Feeder

NE DIVISION - TREE TRIM SCHEDULE – Main Feeders

2014 - 2016

- 2014: 1. Feeder#310
 - 2. Feeder#311
 - 3. Feeder#201(69KV)
 - 4. Feeder#202 (69KV)
 - 5. Feeder#315 (69KV)
- 2015: 1. Feeder#102
 - 2. Feeder#104
 - 3. Feeder#110
 - 4. Feeder#111
 - 5. Feeder#802(138KV)
 - 6. Feeder#803(138KV)
- 2016: 1. Feeder#211
 - 2. Feeder#212
 - 3. Feeder#209
 - 4. Feeder#214
 - 5. Feeder#210
 - 6. Feeder#215
 - 7. Feeder#313 (69KV)

NE DIVISION - TREE TRIM SCHEDULE - Laterals – 2014 – 2019

- **2014:** 1. Feeder#310 2. Feeder#102
- 2015: 1. Feeder#311 2. Feeder#212
- **2016:** 1. Feeder#214 2. Feeder#215
- **2017:** 1. Feeder#110 2. Feeder#111
- **2018:** 1. Feeder#104 2. Feeder#209
- **2019:** 1. Feeder#210 2. Feeder#211

		FPUC	NE Di	vision -	D&T Ve	getatior	n Manag	ement*		
Feeder #	Main Feeder		Main Feeder Feeder Laterals		Main F	Main Feeder		Feeder Laterals		ALS
	OH (feet)	UG (feet)	OH (feet)	UG (feet)	OH (miles)	UG (miles)	OH (miles)	UG (miles)	OH (miles)	UG (miles)
311	27,672	260	52,529	95,681	5.24	0.05	9.95	18.12	15.19	18.17
310	16,080	1,485	32,580	51,837	3.05	0.28	6.17	9.82	9.22	10.10
209	25,423	1,062	22,253	37,236	4.81	0.20	4.21	7.05	9.03	7.25
210	9,990	2,245	27,961	6,700	1.89	0.43	5.30	1.27	7.19	1.69
211	13,992	225	60,222	23,852	2.65	0.04	11.41	4.52	14.06	4.56
212	17,477	110	55,966	8,505	3.31	0.02	10.60	1.61	13.91	1.63
214	14,935	305	22,435	3,491	2.83	0.06	4.25	0.66	7.08	0.72
215	11,264	1,250	14,549	38,850	2.13	0.24	2.76	7.36	4.89	7.59
102	19,249	2,207	37,931	114,746	3.65	0.42	7.18	21.73	10.83	22.15
104	1,438	6,799	0	51,595	0.27	1.29	0.00	9.77	0.27	11.06
110	10,292	0	7,762	163,381	1.95	0.00	1.47	30.94	3.42	30.94
111	10,354	6,020	7,990	90,453	1.96	1.14	1.51	17.13	3.47	18.27
Dist. Totals	178,166	21,968	342,178	686,327	33.74	4.16	64.81	129.99	98.55	134.15
69KV Line									11 45	
138KV Line									8.02	
D&T Totals	178,166	21,968	342,178	686,327	33.74	4.16	64.81	129.99	118.02	134.15

* Basis for tracking and managing 2010 and future tree trimming cycles (3 yr. mains and 6 yr. laterals) - Data source is GIS mapping system.

2/16/2011

		2013 FP		Division	- D&T V	egetatio	n Manag	ement**		
Feeder #	Main Feeder		Feeder Laterals		Main I	Feeder	Feeder Laterals		TOTALS	
	OH (feet)	UG (feet)	OH (feet)	UG (feet)	OH (miles)	UG (miles)	OH (miles)	UG (miles)	OH (miles)	UG (miles)
311	14,700	0	16,200	0	2.78	0.00	3.07	0.00	5.85	0.00
310	19,975	0	8,250	0	3.78	0.00	1.56	0.00	5.35	0.00
209	7,500	0	60	0	1.42	0.00	0.01	0.00	1.43	0.00
210	2,200	0	14,850	0	0.42	0.00	2.81	0.00	3.23	0.00
211	31,320	0	23,100	0	5.93	0.00	4.38	0.00	10.31	0.00
212	37,050	0	20,900	0	7.02	0.00	3.96	0.00	10.98	0.00
214	18,100	0	22,100	0	3.43	0.00	4.19	0.00	7.61	0.00
215	18,800	0	7,850	0	3.56	0.00	1.49	0.00	5.05	0.00
102	4,875	0	29,145	0	0.92	0.00	5.52	0.00	6.44	0.00
104	750	0	0	0	0.14	0.00	0.00	0.00	0.14	0.00
110	400	0	0	0	0.08	0.00	0.00	0.00	0.08	0.00
111	2,800	0	0	0	0.53	0.00	0.00	0.00	0.53	0.00
Dist. Totals	158,470	0.00	142,455	0.00	30.01	0.00	26.98	0.00	56.99	0.00
69KV Line	7,150	0.00	0	0.00	1.35	0.00	0.00	0.00	0.00	0.00
138KV Line	24,954	0.00	0	0.00	4.73	0.00	0.00	0.00	0.00	0.00
DOTT										
D&I Totals	190,574	0.00	142,455	0.00	36.09	0.00	26.98	0.00	56.99	0.00

** 2013 Trim Totals

2/26/20134

FPUC NW Division - D&T Vegetation Management*										
	Main F	eeder	Feeder L	aterals	Main I	Feeder Feeder Laterals			тот	ALS
Feeder #	OH (feet)	UG (feet)	OH (feet)	UG (feet)	OH (miles)	UG (miles)	OH (miles)	UG (miles)	OH (miles)	UG (miles)
9742 Greenwood/ Malone	78,442	0	238,837	5,420	14.86	0.00	45.23	1.03	60.09	1.03
9722 Dogwood Heights	22,492	0	62,410	2,870	4.26	0.00	11.82	0.54	16.08	0.54
9982 College	70,950	0	217,104	24,260	13.44	0.00	41.12	4.59	54.56	4.59
9932 Indian Springs	30,117	0	140,560	38,895	5.70	0.00	26.62	7.37	32.33	7.37
9732 Prison	16,950	0	13,505	14,742	3.21	0.00	2.56	2.79	5.77	2.79
9942 Hwy 90E	67,057	0	259,711	21,503	12.70	0.00	49.19	4.07	61.89	4.07
9992 Hwy 90W	15,096	0	58,897	1,365	2.86	0.00	11.15	0.26	14.01	0.26
9854 South Street	80,724	0	441,570	11,934	15.29	0.00	83.63	2.26	98.92	2.26
9882 Bristol	60,851	0	221,202	4,787	11.52	0.00	41.89	0.91	53.42	0.91
9872 Family Dollar	15,910	365	4,559	2,698	3.01	0.07	0.86	0.51	3.88	0.58
9866 Cottondale	71,809	0	348,188	8,838	13.60	0.00	65.94	1.67	79.54	1.67
9952 Altha	47,917	0	237,241	1,521	9.08	0.00	44.93	0.29	54.01	0.29
9972 Blountstown	32,921	0	70,769	1,562	6.24	0.00	13.40	0.30	19.64	0.30
9512 Railroad	41,251	0	81,053	8,206	7.81	0.00	15.35	1.55	23.16	1.55
9872 Hospital	16,417	0	193,307	1,843	3.11	0.00	36.61	0.35	39.72	0.35
9752 Industrial Park	18,609	0	3,589	1,371	3.52	0.00	0.68	0.26	4.20	0.26
Dist. Totals	687,513	365	2,592,502	151,815	130.21	0.07	491.00	28.75	621.21	28.82

* Basis for tracking and managing 2010 and future tree trimming cycles (3 yr. mains and 6 yr. laterals) - Data source is GIS mapping system. 2/16/2011

20	13 FPI	JC NW	/ Divis	ion - D	&T Veg	etation	Manag	ement**	e e e e e e e e e e e e e e e e e e e	
	Main F	eeder	Feeder I	aterals	Main F	eeder	Feeder	Laterals	тот	ALS
Feeder #	OH (feet)	UG (feet)	OH (feet)	UG (feet)	OH (miles)	UG (miles)	OH (miles)	UG (miles)	OH (miles)	UG (miles)
9742 Greenwood/ Malone	14,160	0	74,880	0	2.68	0.00	14.18	0.00	16.86	0.00
9722 Dogwood Heights	11,280	0	5,760	0	2.14	0.00	1.09	0.00	3.23	0.00
9982 College	19,680	0	122,400	0	3.73	0.00	23.18	0.00	26.91	0.00
9932 Indian Springs	0	0	21,600	0	0.00	0.00	4.09	0.00	4.09	0.00
9732 Prison	16,320	0	2,400	0	3.09	0.00	0.45	0.00	3.55	0.00
9942 Hwy 90E	14,640	0	14,880	0	2.77	0.00	2.82	0.00	5.59	0.00
9992 Hwy 90W	10,320	0	0	0	1.95	0.00	0.00	0.00	1.95	0.00
9854 South Street	12,000	0	55,480	0	2.27	0.00	10.51	0.00	12.78	0.00
9882 Bristol	0	0	3,360	0	0.00	0.00	0.64	0.00	0.64	0.00
9872 Family Dollar	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
9866 Cottondale	44,640	0	227,610	0	8.45	0.00	43.11	0.00	51.56	0.00
9952 Altha	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
9972 Blountstown	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
9512 Railroad	0	0	10,800	0	0.00	0.00	2.05	0.00	2.05	0.00
9872 Hospital	13,680	0	1,920	0	2.59	0.00	0.36	0.00	2.95	0.00
9752 Industrial Park	5,280	0	0	0	1.00	0.00	0.00	0.00	1.00	0.00
Dist. Totals	162,000	0	541,090	0	30.68	0	102.48	0	133.16	0

** 2013 Trim Totals

2/13/2014

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Initiative #2 – Joint Use Pole Attachment Audit

During 2013, six hundred and eighty four (684) detailed pole loading calculations were performed for FPUC by a contractor as part of the Wood Pole Inspection Program. Poles having remaining strength at or below 67% and poles having 3rd party attachments of 1/2" or larger in diameter were selected for loading assessment using a contractor supplied computer program called LoadCalc. Span lengths, attachment heights, wire sizes, and 3rd party attachments were included in the loading assessments. Loading assessment reports were supplied to FPUC by the contractor. Poles with loading estimates at or above 110% of design load are automatically included in the FPUC post inspection follow-up plan. FPUC will perform additional load assessment on these poles using PoleForeman. FPUC calculations will be in accordance with the 2007 addition of NESC with 60 mph wind speed. Poles that fail the PoleForeman assessment will be scheduled for replacement. Replacement poles will be designed to comply with storm hardening requirements. The list of replacement poles will be provided to 3rd party attachers so they can give feedback concerning existing or planned attachments that may require increased pole size for added loading. Third party attachers will be notified of the replacement pole locations so their attachments can be transferred. FPUC joined NJUNS (National Joint Use Notification System) during 2009 to facilitate notification of joint use partners.

FPUC has joint use agreements with multiple telecommunication and cable television providers. Some need additional language to add or clarify joint use safety audit instructions. The agreements will be rewritten during 2014 to make sure clearly defined provisions are included for joint use pole attachment safety audits. Audits will be initiated as soon as parties agree to terms for conducting the audits. Data collected during the audits will be analyzed to identify poles that could potentially pose a hazard to public safety. Action will be taken to correct any safety issues discovered during the audit as soon as practical. Priority will be given based upon the severity of the potential hazard. The goal is to conduct a thorough joint use safety audit in accord with terms spelled out in the joint use agreements.

Initiative #3 – Six Year Transmission Structure Inspection Program

Transmission inspections will be completed on all transmission facilities and will include climbing patrols of the 138 KV and 69 KV transmission lines owned by FPUC. This inspection will ensure that all structures have a detailed inspection performed at a minimum of every six years. The inspection will include ninety five (95) 138 KV structures and two hundred and nineteen (219) 69 KV structures. The inspections will ensure that all transmission towers and other transmission line supporting equipment such as insulators, guying, grounding, conductor splicing, cross-braces, cross-arms, bolts, etc structurally sound and firmly attached. Customers who own 69 KV transmission line structures connected to FPUC will be strongly encouraged to complete a similar type inspection. In addition to the six year climbing inspections mentioned above, wood transmission poles are also included in the 8 year wood pole ground-line condition inspection and treatment program.

Substation equipment will also be inspected annually to document the integrity of the facility and identify any deficiencies that require action. Substations will be inspected to ensure that all structures, buss work, insulators, grounding, bracing, bolts, etc are structurally sound and firmly attached.

I ransmission Circuit, Subst	ation and	Other Eq	ulpment I	nspections		
	Activ	vity	Current	Budget**	Next	Year
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Total transmission circuits.	<u>19.5</u>	19.5	<u>NA</u>	<u>NA</u>	<u>19.5</u>	<u>NA</u>
(B) Planned transmission circuit inspections ***	19.5	19.5	NA	NA	<u>19.5</u>	NA
(C) Completed transmission circuit *** inspections.	<u>19.5</u>	<u>19.5</u>	<u>NA</u>	<u>NA</u>	<u>19.5</u>	<u>NA</u>
(D) Percent of transmission circuit inspections completed. *	<u>100%</u>	<u>100%</u>	<u>NA</u>	<u>NA</u>	<u>100%</u>	<u>NA</u>
(E) Planned transmission substation inspections	4	<u>4</u>	NA	NA	<u>4</u>	<u>NA</u>
(F) Completed transmission substation * inspections.	<u>4</u>	<u>4</u>	<u>NA</u>	<u>NA</u>	<u>4</u>	<u>NA</u>
(G) Percent transmission substation inspections completed.*	<u>100%</u>	<u>100%</u>	<u>NA</u>	<u>NA</u>	<u>100%</u>	<u>NA</u>
(H) Planned transmission equipment inspections (other equipment).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
(I) Completed transmission equipment inspections (other equipment).	NA	NA	<u>NA</u>	NA	<u>NA</u>	<u>NA</u>
(J) Percent of transmission equipment inspections completed (other equipment).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	NA

Transmission Circuit, Substation and Other Equipment Inspections

* Inspections performed were visual

** Current accounting system does not provide data to this level

*** 6 yr. climbing inspection completed in 2012

v	Acti	vity	Current	urrent Budget**		t Year
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Total transmission tower structures.	4	4	NA	NA	4	NA
(B) Planned transmission tower structure Inspections *	4	<u>4</u>	NA	<u>NA</u>	<u>4</u>	NA
(C) Completed transmission tower structure inspections. *	<u>4</u>	<u>4</u>	<u>NA</u>	<u>NA</u>	<u>4</u>	NA
(D) Percent of transmission tower structure inspections completed.	100%	<u>100%</u>	<u>NA</u>	NA	<u>100%</u>	NA

Transmission Tower Structure Inspections

* Inspections performed were visual ** Current accounting system does not provide data to this level

· · · · ·	Acti	vity	Current	t Budget	Next	Year
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Total number of transmission poles. *	297	297	NA	NA	NA	NA
(B) Number of transmission poles strength tested.	NA	NA	NA	NA	NA	NA
(C) Number of transmission poles passing strength test.	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
(D) Number of transmission poles failing strength test (overloaded).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
(E) Number of transmission poles failing strength test (other reasons).	<u>NA</u>	<u>NA</u>	<u>NA</u>	NA	<u>NA</u>	<u>NA</u>
(F) Number of transmission poles corrected (strength failure).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
(G) Number of transmission poles corrected (other reasons).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	NA
(H) Total transmission poles replaced.	NA	NA	NA	NA	NA	NA

Transmission Pole Inspections

*FPUC includes wood transmission poles in the eight year ground-line condition inspection and treatment program.

Initiative #4 – Storm Hardening of Existing Transmission Structures

NE Division's 138 KV transmission system was constructed using concrete poles, steel poles, and steel towers. The construction generally complies with storm hardening requirements. The structures will continue to be inspected as outlined in Initiative #3 - Six Year Transmission Structure Inspection Program to ensure the integrity of the system.

The 69 KV transmission system consists of a total of 219 poles of which 43 are concrete poles. All installations met the NESC code requirements in effect at the time of construction. A policy of replacing existing wood poles with concrete has been in place for some time. This policy requires that when it becomes necessary to replace a wood pole due to construction requirements or concerns with the integrity of the pole, a concrete pole that meets current NESC codes and storm hardening requirements will be utilized.

There was no storm hardening projects performed on transmission poles or structures during 2013. However, in 2012 the NE division conducted the six year transmission climbing inspection outlined in initiative #3. There were 31 wooden transmission poles identified for replacement. In 2013 two additional poles were added for replacement bringing the total to 33 poles. A project plan was developed to replace these poles. The poles will be replaced with concrete transmission structures during the beginning of 2014.

NW Division currently has no transmission structures.

	Activity		Current	t Budget	Next Year	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Transmission structures scheduled for hardening.	0	0	0	0	0	0
(B) Transmission structures hardening completed.	0	0	0	0	0	0
(C) Percent transmission structures hardening completed.	0	0	0	0	0	0

Hardening of Existing Transmission Structures

Initiative #5 – Geographic Information System

FPUC has a GIS mapping system for both divisions. The systems are ESRI based using ArcGIS to identify the distribution and/or transmission facilities overlaid on a GIS land base. The systems locate the facilities on the land base and allow the users to enter data updates for all existing or new physical assets within the system. The system has proven to be a reliable and valuable tool for the engineering of new construction or existing system maintenance projects.

The system also interfaces with the Customer Information System to function as a Customer Outage Management System (OMS). Implementation of the OMS has resulted in significant improvement in data collection and retrieval capability for analyzing and reporting reliability indices.

The GIS is being used as an integral part of the data collection for many of the programs mentioned in this update. The information, now available in the GIS, will be instrumental in conducting future pole inspections and joint use audits. In addition, the OMS will serve as a valuable tool for use in post storm forensic analysis.

In 2013 FPUC completed the upgrade and installation of a new GIS mapping system which has integrated multiple utility systems (gas, electric, propane, etc) into one system. The migration of data began in 2012 and was completed by the end of 2013. In addition, a new and improved version of the OMS system was also installed in 2013. This OMS will be further enhanced in 2014 to enable customer outage calls to be automatically logged into the system. There is a potential for a temporary setback in the quality and timeliness of data collection during the transition.

Initiative #6 - Post-Storm Data Collection and Forensic Analysis

FPUC has established a forensics oversight team to coordinate communications, schedule data collection activities, and final reporting requirements. Our plans are to utilize a consultant, Osmose Utility Services, to collect, analyze, and report on field data collected which will be entered into the FPUC Outage Management System (OMS). FPUC will utilize standard reporting forms for submitting forensic data to the FPSC.

The following is a copy of the FPUC "FORENSIC DATA COLLECTION AND REPORTING" procedure:

FORENSIC DATA COLLECTION AND REPORTING

PURPOSE:

To set standards and responsibilities for the collection, assessment, and reporting of storm related damage to FPUC transmission, substation, and distribution structures and equipment. To accomplish these tasks in an orderly manner, safely, and with a minimum of interference with the process of system restoration following a storm.

PROCESS:

A minimum of 72 hours prior to the storm; FPU will initiate the forensic process by alerting team members both in-house and external of the impending event. All contact information will be verified for accuracy and all equipment will be checked to make sure it is in good working order.

48 hours prior to the storm; begin the process of accessing where the storm is most likely to strike and determine the best locations for forensic teams. Inform team members of more specific information as it becomes available.

24 hours prior to the storm; notify all team members of actual crew personnel, mobilization plan, safety procedures, and reporting instructions.

After the storm; perform a forensic investigation at each location encountered that meets reportable criteria. Damage locations to include, but are not limited to poles, wires, crossarms, insulators, transformers, reclosers, capacitor banks, cutouts, any other equipment that is damaged or has caused a customer outage.

Damage areas will be determined and teams dispatched utilizing FPU's outage management system, reports from customers, and reports from restoration crews.

RESPONSIBILITIES:

An FPUC Forensic Team Leader will be assigned and will be responsible for managing the overall forensic effort. This will include tracking storm progress, coordinating team deployment, communication with local ERT Centers, review findings, and generating final reports.

Florida Public Utilities Company will utilize Osmose Utility Services to provide forensic investigative teams that will be responsible for safely collecting information on storm damage. Damaged facilities are defined as broken poles, leaning poles, broken or downed wires, damaged line equipment, and any other incident that has caused a customer outage.

REPORTING:

All post storm forensic data collected will be entered in standard forms. The form allows both overhead and underground damage to be entered and data must be entered separately for each incident. Pictures of damages from multiple views will be taken and included for clarity and additional assessment.
Exhibit MC/DS-3 Page 54 of 131 <u>Initiative #7 – Reliability Performance of Overhead vs Underground Systems</u>

FPUC collects outage data attributed to overhead or underground equipment failure in order to evaluate the associated reliability indices. OH & UG adjusted reliability indices are reported for each Division and for FPUC system total.

During 2013, there were no projects in the NE Division to convert overhead facilities to underground However, the local government approached FPUC to discuss undergrounding some of the overhead facilities associated with the storm hardening projects planned for construction during 2012. FPUC agreed to take another look at the projects as soon as the local government officials made a formal request for preliminary cost estimates. As of the end of 2013, no formal request was received by FPUC. The two NE Division storm hardening projects submitted in the FPUC 2010-2012 Storm Hardening Plan have been placed on hold pending input from local government. Two new storm hardening projects are under development for the NE Division and were included in the FPUC 2013-2015 Storm Hardening Plan.

During 2013 there was no OH to UG conversions in the NW Division. However, two storm hardening projects took place in the NW division. Distribution facilities along Hartsfield Rd were relocated along the county ROW and storm hardened in the process. The Malone feeder between Greenwood and Malone began at the end of 2013 and will be complete mid-2014.

2013 - Reliability	Indicators B	y UG	& OH -	FPUC To	otal (Adjusted)
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Cause	Number of Average Outage Duration Events (N) (L-Bar)		CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
ОН	1,102	6.75	86.37	157.271	1.821	7,438		
UG	22	54.03	104.83	20,127	192	1,189		
	1124	7.67	88.13	177,398	2,013	8,627	6.31	0.07

Total No. of Customers at end of 2013 ==>

1

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
102 South Fletcher	18	118.15	109.48	76,419	698	2,127		
110 Plantation Roadside	1	138.25	138.25	138	1	138		
111 Plantation Fieldside	1	54.57	54.57	546	10	55		
209 Fifteenth Street	7	78.74	92.50	6,845	74	551		
210 Buss Tie	8	103.81	139.26	432,830	3,108	831		
211 Jasmine Street	9	98.21	97.18	72,110	742	884		
212 Eleventh Street	17	109.01	53.60	276,041	5,150	1,853		
214 Clinch Drive	24	97.16	72.19	24,473	339	2,332		
215 Sadler, Nectarine, So.14th	13	88.48	66.28	7,291	110	1,150		
310 Bonnieview	7	96.58	46.46	44,228	952	676		
311 Bailey	9	70.33	69.16	20,332	294	633		
	147	98.60	80.76	1,169,821	14,486	14,495	75.43	0.93

Total No. of Customers at end of 3==>

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2013 - Reliability Indicators	By (UG) - FPUC N	Ξ (Adjusted)
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Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
102 South Fletcher	2	35.23	13.84	1,190	86	70		
110 Plantation Roadside	2	69.16	58.52	293	5	138		
111 Plantation Fieldside	1	396.15	396.15	1,188	3	396		
209 Fifteenth Street	1	50.43	50.43	50	1	50		
210 Buss Tie	1	117.55	117.55	118	1	118		
211 Jasmine Street	5	188.87	240.34	2,644	11	944		
215 Sadler, Nectarine, So.14th	1	26.00	26.00	1,300	50	26		
310 Bonnieview	1	99.93	99.93	100	1	100		e antes
311 Bailey	5	160.46	112.37	9,664	86	802		
	19	139.24	67.81	16,547	244	2,646	1.07	0.02

Total No. of Customers at end of 2013 ==>

20 1	2013 - Reliability Indicators By (OH) - FPUC NW (Adjusted)										
Cause	Number of Average Outage Duration Events (N) (L-Bar)		CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI			
Altha	71	104.76	86.37	157 271	1 921	7 429					
Blountstwn	12	99.06	104.83	20 127	1,021	1 180					
Bristol	63	60.81	104.00	94 029	1 902	3,103					
College	119	89.24	67.74	295.810	4 367	10 619					
Cottondale	121	85.50	96.88	605 623	6 251	10,015					
Dogwood Ht	23	66.21	69.14	14 934	216	1 523					
Family Dol	1	69.30	69.30	69	1	69					
Greenwood	128	96.55	141.17	877 683	6.217	12 358					
Hospital	41	108,91	127.31	193 643	1 521	4 465					
Hwy 90e	83	82.77	121.48	165,212	1,360	6 870					
Hwy 90w	25	106.82	87.73	33,512	382	2.671					
Ind Park	2	159.46	227.38	10,459	46	319					
Indian Spr	80	90.64	80.21	107,161	1,336	7.251					
Prison	6	80.22	96.65	1.063	11	481		-			
Railroad	35	93.20	132.12	512,242	3.877	3.262					
South St	145	88.78	70.58	482,381	6,835	12,873					
	955	89.60	98.29	3,571,222	36,335	85,565	283.39	2.88			

Total No. of Customers at end of 2013 ==>

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2013 - Reliability Indicators By (UG) - FPUC NW (Adjusted)										
Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI		
College	1	199.67	199.67	4,393	22	200				
Indian Spr	1	326.83	326.83	7,190	22	327				
Railroad	1	145.73	145.73	146	1	146				
	3	224.08	260.64	11,729	45	672	0.93	0.00		

Total No. of Customers at end of 2013 ==>

12,602

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Initiative #8 – Utility Company Coordination with Local Governments

FPUC actively participates with local governments in pre-planning for emergency situations and in coordinating activities during emergency situations. Current practice is to have FPUC personnel located at the county EOC's on a 24 hour basis during emergency situations to ensure good communications.

FPUC has continued involvement with local governments regarding reliability issues with emphasis on both undergrounding and vegetation management. All parties have continued to cooperate in order to address vegetation management issues in a cost effective manner when possible so that overall reliability impacts are minimized.

FPUC and the City of Marianna have worked together to complete a project of undergrounding in the downtown area of Marianna and are planning further projects. Although these projects have improved aesthetics as the major goal, they will provide a reliability case study area that can be used in future undergrounding analysis.

Initiative #9 – Collaborative Research

FPUC is participating with the Public Utility Research Center (PURC) along with other investor owned, cooperative, and municipal electric utilities in order to perform beneficial research regarding hurricane winds and storm surge within the state. PURC has demonstrated the ability to lead and coordinate multiple groups in research activities. FPUC will continue to support this effort but does not intend to conduct any additional research at this time.

The benefits of the research work among the utilities and PURC include increased and sustained collaboration and discussion among the members of the Steering Committee, greater knowledge of the determinants of damage during storm and non-storm times, greater knowledge and data from wind collection stations and post-hurricane forensics in the State of Florida, and continued state-to-state collaboration with others in the Atlantic Basin Hurricane Zone.

For 2013, research focused on undergrounding, wind data collection, and public outreach. The Steering Committee is preparing the next steps in these research areas.

The 2014 report follows on the next page.

Report on Collaborative Research for Hurricane Hardening

Provided by

The Public Utility Research Center University of Florida

To the

Utility Sponsor Steering Committee

February 2014

I. Introduction

The Florida Public Service Commission (FPSC) issued Order No. PSC-06-00351-PAA-EI on April 25, 2006 (Order 06-0351) directing each investor-owned electric utility (IOU) to establish a plan that increases collaborative research to further the development of storm resilient electric utility infrastructure and technologies that reduce storm restoration costs and outages to customers. This order directed IOUs to solicit participation from municipal electric utilities and rural electric cooperatives in addition to available educational and research organizations. As a means of accomplishing this task, the IOUs joined with the municipal electric utilities and rural electric cooperatives in the state (collectively referred to as the Project Sponsors) to form a Steering Committee of representatives from each utility and entered into a Memorandum of Understanding (MOU) with the University of Florida's Public Utility Research Center (PURC). This MOU was recently extended by the Research Collaboration Partners through December 31, 2015.

PURC manages the work flow and communications, develops work plans, serves as a subject matter expert, conducts research, facilitates the hiring of experts, coordinates with research vendors, advises the Project Sponsors, and provides reports for Project activities. The collaborative research has focused on undergrounding, vegetation management, hurricane-wind speeds at granular levels, and improved materials for distribution facilities.

This report provides an update on the activities of the Steering Committee since the previous report dated February 2013.

Page 1 of 3 - Report on Collaborative Research for Hurricane Hardening

II. Undergrounding

The collaborative research on undergrounding has been focused on understanding the existing research on the economics and effects of hardening strategies, including undergrounding, so that informed decisions can be made about undergrounding policies and specific undergrounding projects.

The collaborative has refined the computer model developed by Quanta Technologies and there has been a collective effort to learn more about the function and functionality of the computer code. PURC and the Project Sponsors have worked to fill information gaps for model inputs and significant efforts have been invested in the area of forensics data collection. Since the state has not been affected by any hurricanes since the database software was completed, there is currently no data. Therefore, future efforts to refine the undergrounding model will occur when such data becomes available.

In addition, PURC has worked with doctoral and master's candidates in the University of Florida Department of Civil and Coastal Engineering to assess some of the interrelationships between wind speed and other environmental factors on utility equipment damage. PURC has also been contacted by engineering researchers at other universities with an interest in the model, though no additional relationships have been established. In addition to universities, PURC was contacted by researchers at the Argonne National Laboratory who expressed interest in modeling the effects of storm damage. The researchers ultimately chose to develop a deterministic model, but did use many of the factors that the Collaborative have attempted to quantify. Every researcher that contacts PURC cites the model as the only non-proprietary model of its kind.

The research discussed in last year's report on the relationship between wind speed and rainfall is still under review by the engineering press. Further results of this and related research can likely be used to further refine the model.

III. Wind Data Collection

The Project Sponsors entered into a wind monitoring agreement with WeatherFlow, Inc., in 2007. Under the agreement, Florida Sponsors agreed to provide WeatherFlow with access to their properties and to allow WeatherFlow to install, maintain and operate portions of their wind monitoring network facilities on utility-owned properties under certain conditions in exchange for access to wind monitoring data generated by WeatherFlow's wind monitoring network in Florida. WeatherFlow's Florida wind monitoring network includes 50 permanent wind monitoring stations around the coast of Florida, including one or more stations located on utility-owned property. The wind monitoring agreement expired in early 2012; however, the wind, temperature, and barometric pressure data being collected at these stations is being made available to the Project Sponsors on a complimentary basis.

IV. Public Outreach

In last year's report we discussed the impact of Hurricane Sandy on greater interest in storm preparedness. PURC researchers discussed the collaborative effort in Florida with the engineering departments of the state regulators in Pennsylvania, Maryland, New York, and New Jersey. While all of the regulators and policymakers showed great interest in the genesis of the collaborative effort, and the results of that effort, they have not, at this point, shown further interest in participating in the research effort.

On April 15, 2013, the *Wall Street Journal* published a special section entitled 'Big Issues: Energy' which featured authors promulgating the "Yes" or "No" position to various questions surrounding the energy industry. One of those questions was "Should Utilities Be Required to Bury Power Lines to Protect Them?", and the editors of the *Journal* asked PURC Director of Energy Studies Ted Kury to contribute the "No" position. In October, Kury and Dr. Roger Anderson of Columbia University (who had provided the "Yes" position), revisited their print debate as the keynote session of the 2013 EEI/NRECA Utility Siting Workshop in Richmond, Virginia.

V. Conclusion

In response to the FPSC's Order 06-0351, IOUs, municipal electric utilities, and rural electric cooperatives joined together and retained PURC to coordinate research on electric infrastructure hardening. The steering committee has taken steps to extend the research collaboration MOU so that the industry will be in a position to focus its research efforts on undergrounding research, granular wind research and vegetation management when significant storm activity affects the state.

Initiative #10 - Natural Disaster Preparedness and Recovery Program

FPUC will utilize the plan to prepare for storms annually and will ensure all employees are aware of their responsibilities The primary objective of the Disaster Preparedness and Recovery Plan is to provide guidelines under which Florida Public Utilities Company will operate in emergency situations. This information is contained with the Emergency Procedures that are updated on an annual basis, if required. The following objectives are included to ensure orderly and efficient service restoration.

- 1. The safety of employees, contractors and the general public will have the highest priority.
- 2. Early damage assessment is required in order to develop manpower requirements.
- 3. Request additional manpower as soon as conditions and information indicate the need.
- 4. Provide for orderly restoration activities in order to provide efficient and rapid restoration.
- 5. Provide all logistical needs for employees and contractors.
- 6. Provide ongoing preparation of our employees, buildings, equipment and support function in advance of an emergency.
- 7. Provide support and additional resources for employees and their families should they need assistance to address injury or damage as a result of the emergency situation.

Based on the location of the storm, the division office in that area will be designated as the operations center and all restoration and logistical activities will be coordinated from that location. Restoration activities will be handled in the following manner:

- 1. During the early stages of the emergency, restoration will be handled in the usual manner. All service will be restored as soon as possible.
- 2. As the storm intensifies and trouble reaches major proportions, the main restoration activities will be limited to keeping main feeders energized by clearing trouble without making repairs.
- 3. When the intensity of the storm is such that work can no longer be done safely, all work will cease and personnel will report to the office or other safe locations.
- 4. When the storm has subsided to a reasonable level and it is safe to begin restoration activities damage assessment and restoration of main feeders to critical customers will begin.
- 5. Restoration activities will continue in an effort to restore service in the following manner:
 - a) Substations
 - b) Main feeders to critical customers
 - c) Other main feeders
 - d) Undamaged primary
 - e) Damaged primary, secondary, service, street lights, security lights

These guidelines are not intended to prevent responding to emergency situations. Any life threatening emergency will be handled immediately, in such a manner as to not endanger the lives of others.

Communication efforts with local governments, County EOC's and the media will be a key in ensuring a safe and efficient restoration effort. Key personnel will be designated as the media liaison and will ensure that communications regarding the status of the restoration activities are available on a scheduled basis.

Emergency Procedures for both divisions were updated during 2014 and are included in this section of the report.



FLORIDA PUBLIC UTILITIES COMPANY

NORTHWEST FLORIDA DIVISION

2014 EMERGENCY PROCEDURES

1. Objective

The primary objective of the procedure is to provide guidelines under which the Northwest Florida Division of Florida Public Utilities Company will operate in emergency conditions. The following objectives will ensure orderly and efficient service restoration.

- A. The <u>safety</u> of employees, contractors and the general public will have the highest priority.
- B. Early damage assessment is required in order to develop manpower requirements.
- C. Request additional manpower as soon as conditions and information indicate the need.
- D. Provide for orderly restoration activities in order to provide efficient and rapid restoration.
- E. Provide all logistical needs for employees and contractors.
- F. Provide ongoing preparation of our employees, buildings, equipment and support function in advance of an emergency.
- G. Provide support and additional resources for employees and their families should they need assistance to address injury or damage as a result of the emergency situation.

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1. ORGANIZATIONAL CHART



3. EMERGENCY PERSONNEL POLICY

As a public utility we provide essential services for our customers and the general public. Therefore, the purpose of the Company's Emergency Personnel Policy is to encourage employees to make every reasonable effort to report to work. Each employee performs an essential role in the Company's operation and it's important that you report to duty as scheduled during an emergency. Restoring and maintaining services after a major storm is a difficult job and requires everyone's best efforts. Of necessity, employees may be required to assist other departments or perform functions outside of their normal daily work assignment. It will take every employee's cooperation before, during and after an emergency.

- A. If you are on the job when the storm approaches, your supervisor will inform you of your storm assignment. Employees not directly involved in maintaining services <u>may</u> be released to go home before the storm threatens safe travel.
- B. If you are off-duty, call your immediate supervisor as soon as possible after an emergency condition is announced. An Emergency Condition Warning is usually given within 24 hours of occurrence. Your supervisor will inform you as to where and when you'll be needed prior to, during, and after the storm. If your supervisor is not available call his/her immediate supervisor or the Northwest Florida Office. This requirement applies to <u>all</u> electric division employees when an emergency threatens any of the Company's electric service area.
- C. During an emergency, the company will maintain a small workforce to monitor the emergency and address emergency conditions that may exists. This workforce will be located at a safe location and work closely with the Counties served EOCs. The company will determine what workforce is required and will consider utilizing those employees who volunteer for this type of work. The General Manager, Engineering Manager, Line and Service Supervisors will form the basis of this group. Other employees will be included based on the severity and timing of the emergency.
- D. All employees are strongly encouraged to have a personal evacuation plan and know what to do during an emergency condition that impacts the service area. The plan should take into consideration the magnitude of the emergency and the significance of the actions that may be necessary. The plan should ensure that the employee and their family are safely out of harm's way while still allowing the employee to respond as required when the emergency conditions subside to a manageable level.
- E. The company plans to move much of the transportation equipment to separate locations to ensure one event does not cause damage to the fleet. Employees are encouraged to volunteer to take certain vehicles with them prior to the emergency and use them to return to work as soon as possible after the emergency conditions subside to a manageable level. The company will determine how the transportation equipment is distributed among the volunteer employees.
- F. After the emergency passes, all personnel not on duty during the storm will report as soon as possible to their supervisor or his/her designate by telephone. In the event the telephones are not working or you are unable to communicate with your supervisor or the company office, report in person to your regular work station as soon as possible during daylight hours.
- G. EMPLOYEES ARE TO MAKE EVERY <u>REASONABLE</u> EFFORT TO REPORT TO WORK. IT'S UNDERSTOOD THAT THERE WILL BE INSTANCES WHERE EMPLOYEES JUST CAN'T GET TO WORK. IF YOU ARE UNABLE TO REPORT TO WORK MAKE EVERY EFFORT TO CONTACT YOUR SUPERVISOR TO REPORT YOUR ABSENCE.
- H. Personal emergencies are a common result of a major hurricane, but unless approved by your Supervisor, will not be acceptable as an excuse for not reporting to work. Evacuation from a hurricane threatened area to a remote location from which you cannot promptly return to your home is also not acceptable as a reason for not reporting to work.
- I. The Company will endeavor to provide assistance and shelter to employees and their immediate families should an employee need or request assistance.

J. Unless emergency conditions warrant, employees will not be required to work in excess of sixteen (16) consecutive hours.

The success of the emergency plan requires the cooperation and efforts of all of our employees. Employees may be required to return from their vacation or Company sponsored travel. Therefore, it will be the responsibility of each supervisor to determine the location of each of their employees on Company sponsored trips to facilitate their recall if conditions warrant their return when the emergency plan is implemented. Employees who are on vacation will notify, by telephone, their supervisors of their location and availability when an emergency threatens to strike our service area. Supervisors will consult with their department head to determine the feasibility and need to recall employees from vacation or Company sponsored trips. All employees are essential for the continued operation of the Company obligations and Company objectives.

The Company will develop information which will assist employees and their families before, during and after the storm. The General Manager, Northwest Florida will be responsible for obtaining the information and communicating this information to the employees. The Company will attempt to provide assistance to the employees and their families during emergency situations if needed.

4. <u>GENERAL RESTORATION GUIDELINES</u>

These general guidelines are issued to provide overall guidance as to emergency system restoration activities. These guidelines will be followed as much as practical in emergencies caused by hurricanes, tornadoes, ice storms and other natural disasters.

These guidelines are not intended to nor will they put in jeopardy the <u>safety</u> of any employee or their family. Dependent upon the intensity of the storm as determined by the company's management, employees will be required to report to work as instructed. If the intensity of the storm is such that weather conditions will be extremely severe, only a skeleton crew will be present at the work location. All others will report for duty as soon as conditions subside to a reasonable level. Those on vacation will be expected to report for duty.

The Northwest Florida office building was designed to withstand 100 mph sustained winds. Should winds be expected to significantly exceed these ratings, alternative locations will be identified and restoration activities will be relocated to an appropriate facility.

Restoration activities will be handled in the following manner:

- A. During the early stages of the emergency, restoration will be handled in the usual manner. All service will be restored as soon as possible.
- B. As the storm intensifies and trouble reaches major proportions, the main restoration activities will be limited to keeping main feeder energized by clearing trouble without making repairs.
- C. When the intensity of the storm is such that work can no longer be done safely, all work will cease and personnel will report to the office or other safe location.
- D. When the storm has subsided to a reasonable level and it is safe to begin restoration activities damage assessment and restoration of main feeders to critical customers will begin.
- E. Restoration activities will continue in an effort to restore service in the following manner:
 - 1) Substations
 - 2) Main feeders to critical customers
 - 3) Other main feeders
 - 4) Undamaged primary
 - 5) Damaged primary, secondary, service, street lights, security lights

These guidelines are not intended to prevent responding to emergency situations. Any life threatening emergency will be handled immediately, in such a manner as to not endanger the lives of others.

Each employee and contractor should maintain good customer relations during restoration activities. Customer service will continue to be a high priority and every reasonable effort should be made to satisfy our customers.

Press releases and public announcements should be made only by designated company management personnel.

5. Emergency Safety Precaution

<u>All Rules in the Safe Practices Manual Should be Observed.</u> However, in order to point out some particular precautions which should be observed during storms, the following instructions listed below should receive special emphasis:

A. <u>SIZING UP WORK:</u>

Before undertaking any job, the job should be thoroughly discussed and all personnel should understand what is to be done, how it is to be done, and the following:

- 1) Voltage and position of all wires, or cables, and the sources or source of energy.
- 2) That the work in hand can be done safely.
- 3) That there is a sufficient amount of each kind of protective equipment on hand to thoroughly protect the working position and the work man.
- 4) They should consider the ground and traffic conditions and arrange to protect and guard these against all hazards.

B. INSULATION:

In cases of trouble following storms, all wires, regardless of normal voltage, are to be considered as being at primary voltage and are not to be handled except with protective equipment because of the danger of crosses between primary and secondary circuits.

C. DISTRIBUTION CIRCUITS ON OR NEAR TRANSMISSION POLES:

If it is necessary to work on the conductors of a distribution circuit carried on or near transmission line poles with the transmission circuit energized and normal, any work on the conductors of the distribution circuits must be done between sets of grounds or else the distribution circuit must be worked and treated as an energized circuit. To determine positively that the lines to be worked are de-energized, test or investigation must be made before grounds are applied.

If the transmission line is also out of service and apparently in trouble, it must be considered as a possible source from which the distribution circuit may be energized, and it must be definitely determined that the transmission circuit as well as the distribution circuit is de-energized and grounded and the source or sources of supply are open and proper clearance obtained before the distribution circuit may be worked as de-energized.

D. <u>STREET LIGHTING WIRES:</u>

Street lighting wires shall be considered energized at all times and the workman shall protect himself against them with proper protective equipment even when circuits are normally de-energized. Such a line is liable to become energized by accidental induction or lightning and sometimes street lighting wires become crossed with other energized wires.

E. <u>FUSE CUT-OUT CLEARANCE:</u>

When a distribution circuit is to be de-energized and cleared for working on conductors or other equipment by the opening of a fuse cut-out, either of the enclosed or open type, the fuse holder or tube is to be removed completely from the fuse assembly. The removed fuse holder or tube is to be placed at a safe and conspicuous location away from the fuse cut-out as an indication to other employees that the fuse cut-out shall continue in this open position until the work is completed. In addition, a red "hold" switch tag (with Lineman's name) should be attached to the pole in a conspicuous location and then removed when work is completed.

F. REQUIREMENTS FOR USE OF RUBBER PROTECTIVE APPARATUS:

In case of trouble following storms, all wires, regardless of normal voltage, are to be considered as being at primary voltage and are not to be handled except with protective equipment because of danger of crosses between primary and secondary circuits.

- Energized Conductors Rubber gloves must always be worn when working on energized lines or energized conductors or equipment up to 15,000 volts between conductors.
- Working position Rubber gloves must be put on before coming in reach of energized conductors when work is done on conductors or protective equipment is to be installed.

Because of the possibility of high voltage existing, rubber gloves must be worn until the conductor is grounded on primary circuits and on street lighting circuits.

<u>Care of Rubber Protective Apparatus</u> - At each job, before a workman puts on his rubber gloves, he should test each glove mechanically for cuts and weak spots by rolling it up tightly, beginning at the gauntlet. All of this type equipment, when not in use, must be stored in dry proper containers or compartment provided for this purpose.

G. <u>SWITCHING ORDERS</u>:

In all switching orders, the switches shall be referred to by their <u>numbers</u> and not by the name of the circuit which they control. The sequence in which the switch numbers are given, in the order, shall indicate the sequence of the switching operation. For example, an order given: "open switches 502-509 and close switches 511-502" shall be executed as follows: first, open switch 502; second, open switch 509; third, close switch 511; fourth, close switch 502.

NO DEVIATION FROM THIS RULE WILL BE PERMITTED.

To avoid misunderstandings and to prevent accidents, all orders concerning switching operations, or the handling of lines and equipment must be repeated to the person giving name, and <u>identity</u> of person giving order secured. Likewise, the operator giving an order must secure <u>identity</u> of person to whom it is given.

H. <u>SWITCHING ORDER:</u>

All switching orders must be written on a piece of paper by the person receiving same, and this written order must be carried by the person while doing the switching. *In no case shall anyone attempt to execute a switching order from memory.*

I. <u>HIGH WATER:</u>

During periods of high water involving lines or equipment, patrolmen shall not attempt to swim sections of the patrol which may be submerged. Necessary patrols over flooded areas must be done with boats and in such instances men engaged in these patrols shall wear suitable life belts or jackets.

J. BROKEN CONDUCTORS:

Before climbing pole, check for broken conductors which may be in contact with pole. Clear before climbing.

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6. <u>Annual Preparations</u>

General Manger, Northwest Florida

- A. Review emergency procedure prior to May 1 and update as necessary.
- B. Review employee assignments with all personnel prior to June 1.
- C. Update status of emergency crew assistance (Contractors, NW Florida, SEE, Gulf Power, WFEC, etc.).
- D. Schedule and conduct half day emergency procedure training sessions prior to July 1.
- E. Ensure storm shutters, laundry facilities and cooking facilities are available.

Engineering Manager

- A. Check all communication equipment for proper operation. Check spare equipment and parts.
- B. Check material quantities and emergency stock prior to June 1. Begin necessary purchasing of emergency stock approved for purchase prior to an emergency.
- C. Update and have on hand the following:
 - Storm safety precautions
 - 2) General operating instructions
 - 3) Distribution maps
 - Single line switching maps
 - 5) City and county maps
- D. Have necessary emergency material delivered prior to June 1.

Logistics

- A. Update the list of critical customers by town/county. Group the critical customers by town/county by classification:
 - 1) Hospitals and clinics
 - 2) Public utilities
 - 3) Municipal and state emergency service
 - 4) Communication and broadcasting services
 - 5) Major food storage/processing facilities
 - 6) Disaster shelter and motels
 - Correctional facilities
 - 8) Airport
- B. Update phone list for employees, law enforcement, emergency management, city/towns, utilities, contractors, tree trimming, personnel, news media, PSC, DCA, EDC, GEO, etc.
- C. Review emergency telephone arrangements and make additional preliminary arrangements.
- D. Have "Emergency Vehicle" cards for vehicles.
- E. Update status of thirty (30) motel rooms necessary for emergency/contract crews.
- F. Locate sources of food/water for crews and office personnel. Identify local and out of town caterers.
- G. Update status of building security firm.

- H. Locate sources for provision of the following Division office supplies.
 - 1) Three day supply of food and water. (See section 22, Logistics for List of Supplies)
 - Supply of air mattress/cots.
 - Portable AM/FM radios with batteries.
 - Laundry services/supplies.
 - 5) First aid supplies.
 - 6) Twenty (20) flashlights with batteries.
 - 7) Linen service.
 - 8) Miscellaneous supplies post storm shelter
- I. Update the procedure of the Lockbox Operation.

Line and Service Supervisors

- A. Review safety precautions with all line crew personnel prior to June 1.
- B. Have control room and all necessary information and equipment ready for prompt setup. Phone jacks, radio transmitter connection and distribution map are minimum requirements.
- C. Conduct annual refresher training for personnel required to operate the SCADA System and Customer Outage System.
- D. Review status of all transportation equipment and have repairs made.
- E. Update status of remote storeroom site and trailer(s).
- F. Update status of emergency fuel suppliers, on site fuel and mobile fuel suppliers.
- G. Update status of vehicle repair facilities

General Manager, Northwest Florida

- A. Monitor the emergency.
- B. Begin making preparations for obtaining emergency assistance from other utilities and contractors.
- C. Check the status of personnel on vacation.
- D. Handle all media request.
- E. Inform all employees as to assignments and emergency information.
- F. Consult with FPUC President concerning activation of Division Emergency Procedures.
- G. Consult with Senior Staff concerning assistance from other divisions (i.e. mechanics, storeroom, media, family assistance, IT/Communications. Personnel from other divisions will be identified and mobilized. They will move as close as practical to Northwest Florida and then proceed to the office as soon after the emergency as travel can be accomplished safely. This location may change dependent upon the situation.
- H. Obtain special job number for all emergency related work.

Line and Service Supervisors

- A. Have all vehicles stocked with all necessary emergency materials and fuel.
- B. Check emergency stock levels and fuel supplies.
- C. Review plan to supply power to office and warehouse facility.
- D. Check all communication equipment.
- E. Review safety precautions with all personnel.
- F. Review line department job assignments with personnel and pass out necessary forms, information.
- G. Have all hazardous conditions corrected and construction jobs stabilized.
- H. Verify emergency generator is fully fueled and operable with back-up fuel available.
- I. Make arrangements for a boat and trailer suitable for construction.
- J. Ensure all vehicle repairs are made and final arrangements with vehicle repair facilities confirmed.
- K. Check on emergency generators and secure additional generators if needed.

Logistics

- A. Arrange for additional petty cash and cash advances (if necessary).
- B. Arrange with telephone company additional lines if necessary.
- C. Ensure all computers are backed up and secured.
- D. Ensure all paperwork/documents are filed and secured properly.
- E. Provide control room with customer list, addresses, phone numbers and account numbers.
- F. Work with HR department and personnel from other divisions to provide assistance to employees and their families. Assistance may include work to prevent further damage to homes, care for children; work with contractors or insurance companies and provide food/lodging/clothing, etc.
- G. Make definite arrangements for contract crew lodging.
- H. Make definite arrangements for food/water/drinks for all personnel.
- Purchase food supply for office/warehouse prior to storm (if the severity of the storm warrants this).
- J. Make arrangements for an abundant supply of ice.
- K. Make definite arrangements for building security.
- L. Make definite arrangements for Division Office supplies (See Annual Preparations, Logistics Manager, and Item E.)

Engineering Manager

- A. Provide distribution maps, procedures, etc. as necessary.
- B. Ensure SCADA and Mapping System is backed up and operating.
- C. Begin constant monitoring customer outages and SCADA system.
- C. Ensure SCADA system repeaters have auxiliary power source and/or generator.
- D. Monitor time/material needs of contractors.
- E. Assemble for safety briefing.

General Manager, Northwest Florida

- A. Be located at the Northwest Florida office and constantly monitor the situation and restoration process.
- B. Keep media sources informed.
- C. Begin activating additional services that will be needed during the restoration process.

Engineering Manager

- A. Be located at the Northwest Florida office and constantly monitor the situation and restoration process.
- B. Coordinate overall restoration process.
- C. Process customer outage system analysis and monitoring SCADA system to determine outage locations.
- D. Activate control room.

Logistics

- A. Be located at the Northwest Florida office and coordinate the answering and processing of telephone calls.
- B. Coordinate assistance to employees and their families.
- C. Have food and drinks available to all employees.
- D. Work with General Manager and Operations Manager and begin making final logistical arrangements for outside crews.

Line and Service Supervisors

- A. Be located at the Northwest Florida office
- B. Work with General Manager and Engineering Manager to determine restoration requirements.

9. <u>After the Emergency</u>

General Manager, Northwest Florida

- A. Determine manpower requirement from information provided by Others. Contact WPB concerning the situation, if possible, and advise whether or not the additional personnel should continue to the Northwest Florida.
- B. Begin making request for additional manpower to contractors.
- C. Keep the media informed until such time that the Manager of Communications is on site. At that time, the Manager of Communications will work with the General Manager to keep the Media informed.

Engineering Manager

- A. Initiate damage assessment teams.
- B. Prioritize and schedule the restoration process.
- C. Make assignments and dispatch crews as necessary in order to ensure orderly and efficient restoration.
- D. Provide damage assessment to General Manager.
- E. Provide updates to General Manager as needed concerning restoration progress.
- F. Monitor manpower and equipment requirements and update General Manager as required.
- G. Keep a list of all company and outside crews and their locations.
- H. Monitor storeroom and remote storeroom for proper operation and inventory. Analyze manpower requirements.

Logistics

- A. Provide assistance and serve as liaison to employees and their families.
- B. Make final and definite arrangements for lodging, fuel, meals, snacks, coffee, drinks, etc. for all employees and contract employees.
- C. Check-in all outside crews and log the personnel and equipment included. Provide assistance with lodging, meals, etc. and keep up with crew locations.
- D. Provide assistance as needed.
- E. Ensure building security firm is operating at office.
- F. Ensure Division office supplies are in place if needed.
- G Ensure caters are available as needed.

Line and Service Supervisors

- A. Determine and assign appropriate manpower and equipment for each outage situation.
- B. Work with General Manager and Operations Manager to determine restoration requirements.
- C. Provide outside crews with all necessary information and SAFETY INFORMATION.
- F. Ensure all documents are completed prior to material leaving the storeroom and storeroom yard.
- G. Monitor and provide assistance in repairing vehicles.

10. Operating Procedure

These instructions are intended to give the employee working on the line information as to the general procedure to be followed under hurricane conditions.

The Line and Service Supervisors will review these instructions with their employees each year so that they may become familiar with the details. This should be done before July 1, each year.

A. Before the Storm

All operating personnel should be instructed as to:

- 1) Safety and operating procedures to be followed during the storm.
- 2) Where and when materials and supplies will be available.
- 3) Their assigned areas and supervisor.
- 4) Any provisions made for feeding and lodging.
- 5) Work days will normally be two shifts. Each shift will consist of at least 12 hours but could be 16 hours.
- 6) The necessity of dividing line crews for clearing and minor repairs.
- 7) Radio and telephone communication procedures with appropriate list of call letters and telephone numbers.

B. During the Storm

1) First Stage - Repairing All Cases Reported

In order to reduce the over-all outage time to customers who may be interrupted at the beginning of the storm, trouble will be handled in a normal manner during the early stages.

2) Second Stage - Clearing Trouble From the Lines

When the volume of trouble increases to the point where large areas are interrupted, the Line and Service Supervisors will instruct crews to clear trouble from the lines without making repairs in order to maintain service to essential customers and feeders.

a. Secondary or service wires may be cleared by cutting the conductor away from energized lines or by opening the transformer cut-out.

b. Damaged primary conductors may be cleared by cutting and <u>rolling back</u> a primary jumper or conductor at the crossarm or by sectionalizing switching if applicable.

3) Third Stage - De-energizing Main Lines

When the winds reach the point where it is no longer safe for crews to continue clearing operations all restoration activities will cease. The Line and Service Supervisors may instruct crews to de-energize main line feeders at substations if necessary to clear extremely hazardous conditions.

C. After the Storm

Discuss with Safety Coordinator on safety concerns/near miss during restorations.

1) <u>Sequence of Restoration</u>

The sequence of restoration after the winds subside to a safe working level will be as follows:

- a. Substations
- b. Essential customers
- c. Feeders
- d. Undamaged primaries (fuse replacement only)
- e. Damaged primaries
- f. Secondaries
- g. Services
- h. Street lights

2) Line Patrols

All distribution lines which have "locked out" due to storm to prevent further damage must not be re- energized until patrolled and cleared of primary faults.

11. Telephone Operators Guide

During any major interruption our customers will naturally be concerned about falling wires, burning wires, defrosting refrigeration and even their daily routines in which electricity plays a part. The most important test we have is maintaining good relations during these emergencies. Those employees answering telephones must keep this in mind - be calm, pleasant and sympathetic with the customer and at the same time getting the necessary information needed to clear dangerous conditions and restore service as soon as possible, giving as much information to the customer that is available.

Outlined below is a suggested procedure to be used during three different phases of an interruption (The General Manager or Engineering Manager will determine when Phase 1 begins and when movement to Phase 2 and 3 is indicated):

<u>Phase 1</u> - will be in effect until the time of the first trouble call until it is evident that there is widespread damage in the area.

<u>Phase 2</u> - will be in effect following Phase 1 until damage evaluations have been made and estimate of the time required to make major repairs.

<u>Phase 3</u> - will begin in an area where an estimate of the time required to make major repairs is available and will continue until all trouble is clear.

Your supervisor will advise you when conditions change from one phase to another in accordance with the routines outlined below:

Suggested Answering Routine to be used by All Operators

Phase 1 - Early Trouble Prior to Extensive Damage

- 1. "Florida Public Utilities, May we help you please."
 - a. If no lights, no power, lights dim, ask: "What is your name, address and telephone number please?"
 - b. If wire down, pole broken, tree on a line, ask:
 - 1) "Is the wire burning?"

- 2) "Are your lights working?"
- 3) "We hope to be able to make repairs shortly. Thank you very much for calling."

Phase 2 - Extensive Damage Evident But Estimate of Repair Time Not Available

- 1. "Florida Public Utilities, May we help you please."
 - a. If no lights, no power, lights dim, ask: "What is your name, address and telephone number please?"
 - b. If wire down, pole broken, tree on a line, ask:
 - "Is the wire burning?"
 - "Are your lights working?"
 - 3) "Our electric system has suffered considerable damage in your area and we haven't been able to make an estimate of the time required for repairs. Our crews are working now and if your service has not been restored by (morning/afternoon) please call again. Thank you."

Phase 3 - Damage Evaluated and Repair Time Estimated

- 1. "Florida Public Utilities, May we help you please."
 - a. If no lights, no power, lights dim, ask: "What is your name, address and telephone number please?"
 - b. If wire down, pole broken, tree on a line, ask:
 - 1) "Is the wire burning?"
 - 2) "Are your lights working?"
 - 3) "We have crews working on the lines which serve your area and repairs should be made by (<u>time</u>). If your electricity us not on by that time, please call again. Thank you."

Operators Guide

You will be relieved for meals, etc., and at the end of your shift.

Remember a properly handled telephone conversation with a customer can create an immeasurable amount of good will. When conversing with customers, keep the following points in mind:

- 1. Be courteous to each customer.
- 2. Give him as much information as is available of the restoration work.
- 3. Record each call and report the information vital to restoring the customer's service.
- 4. Handle each call as briefly as possible.
- 5. Thank the customer for calling.
- 6. Do not give the news media information. If a request for new information is received, record the name of the individual, news organization, telephone number and specific request. Inform the caller that a company representative will return the call. The information should be sent immediately to the General Manager, Northwest Florida.
- 7. During an emergency condition, some customers will contact the company for reasons that do not pertain to the emergency. These calls should be recorded and the exact customer needs should be stated in the remarks column. These calls may include disconnections, reconnections, etc., or may be a personal call to an employee. After the contact has been recorded, the completed form should be given directly to the supervisor.

Entering Outages

Each customer call will be recorded in the Outage Management System. The information entered should be entered accurately to ensure the system operates properly. The information entered will be stored as a permanent record and will be used to analyze the nature of the outages.

Should emergency situations come to your attention, please notify a supervisor. The method of this documentation will be determined.

12. Media/Public Information Guide

In order to monitor all information given to media and public sources, only the General Manager, Northwest Florida, Manager of Communications or their designee will make press releases. If other employees are asked by media or public agencies for information, politely ask them for contact information so the General Manager, Northwest Florida or Manager of Communications can provide them the latest information.

13. Warehouse Procedure

During an emergency, material is vital to promptly and efficiently restore service to all customers. It is therefore important to monitor all stock levels to ensure adequate supplies are on-hand and if stock levels get low, be able to quickly order additional materials.

All material taken from the storeroom or remote storeroom will have the appropriate documentation completed before being removed from the stores area. The stores personnel will ensure this is followed.

Only authorized personnel should be in the stores area. Stores personnel will monitor those in the stores area to ensure compliance.

14. Lockbox Procedure

The section will involve that information and other procedures necessary to ensure that the Lockbox operation continues to operate during any emergency that may occur.

Annual

- 1. The Customer Care Manager will update information regarding the Lockbox operations.
- The Lead Customer Service Representative will update information regarding the locations of Bank of America locations should it be necessary to take deposits to other banks if the courier service is not available. This may also be necessary should courier service be disrupted due to other reasons.
- The General Manager, Northwest Florida will initiate conference call with the President, Controller, IT Director, Customer Relations Director, Customer Care Manager and others as needed to discuss alternatives should a disaster disrupt operations in NW Florida.
- 4. Information on contingency locations will be updated by the Customer Care Manager.

Prior to the Emergency

- The Logistics Manager will contact the post office to determine mail delivery schedules and alternatives. Rerouting of mail may be required and involve the Customer Relations Director notification of billing contractor.
- The General Manager, Northwest Florida will initiate conference call with the President, Controller, IT Director, Customer Relations Director, NW Florida Logistics Manager and others as needed to setup alternative plans for processing payments.
- The group will decide on the appropriate contingency plan necessary based on the emergency situation and begin contingency operations.

4. The Logistics Manager will ensure that protective covering is available and installed on all Lockbox equipment and server to ensure damage, if any, is minimized.

After the Emergency

Contingency Plan #1

- Mail will be delivered to the Marianna Post Office and personnel will be used immediately to continue to
 process payments. These personnel will not participate in restoration activities but will be solely responsible for
 Lockbox operations. If required additional personnel will be added to current staffing.
- 2. If courier service is not available beginning on the first day of processing, personnel will be sent to BOA locations capable of processing encoded checks to make deposits. The deposits will be sent on the morning following the days work. Preferably, the deposit will be delivered to the BOA location at 2262 North Monroe St. in Tallahassee. This and other locations will be verified on an annual basis.
- 3. Information concerning daily processing will be updated on a daily basis. This may be accomplished as normally handled, by sending the information via internet from a remote location or by mailing a CD overnight mail to the IT director to be input from WPB.

Contingency Plan #2

- Due to the damage to the NW FL facilities, processing is not available. Mail will be picked up at the Marianna Post office and forwarded to Central Florida for processing. The mail may be delivered by local personnel to Lake City where Central Florida personnel will pick up the mail. The personnel form the two divisions will meet at Exit #82 on Interstate 75 (Interstate 75 and Highway 90) and exchange the mail.
- 2. If mail can be forwarded in an efficient manner prior to the emergency, all payments will go directly to the Central Florida office. This may not be a good alternative due to the issues with the USPS.
- Central Florida personnel will process the mail manually using personnel as needed. Deposits will be made normally on a daily basis.
- 4. As soon as NW FL is capable of processing payments normally, payment processing will be handled normally.

Contingency Plan #3

- Due to the inability of the Corporate Office to accept updated information from the Lockbox, it will be necessary to send payment information to a remote location.
- 2. NW FL will continue to process payments normally and make deposits accordingly.
- 3. The IT Director will provide NW FL with the appropriate directions on where to send the information concerning payments. This information will be added to this procedure when it becomes available.
- 4. All information on payments will be saved to a CD on a daily basis and stored in a safe place. If possible a hard copy of the information should also be printed and stored in a safe place.

15. Personnel Backup Contingencies

Should the following personnel not be available during the emergencies, personnel in the positions listed below that position will fill in as needed.

<u>General Manager, Northwest Florida</u> Engineering Manager Service Supervisor Line Supervisor

Engineering Manager Service Supervisor Line Supervisor

Logistics Manager Energy Conservation Representative 16. Employee Assignments

TENTATIVE SCHEDULE

6:00	DAY SHIFT	NIGHT SHIFT				
6:00	AM Reporting Time		200 PM Reporting Time			
	OFFICE		OFFICE			
Lynwood Tanner	General Manager, NW	Donna Fowler	Stores Supervisor			
Steve Toole	Engineering Manager	Pam Thomas	Telephone			
Janine Roye	Logistics Lead	Sue Pitas	Telephone			
Mason Brock	Logistics	Stephen Amos	Telephone			
Shane Magnus	Engineering	Donnie Tew	Engineering /Cust. Outages			
Sally Jones	Customer Care Supervisor					
Kim Hall	Telephone		SERVICE CREWS			
Laura McCoy	Telephone	Brady Foran	Crew Leader			
		Stephen Amos	Apprentice Lineman			
SERV	/ICE / LINE CREWS					
Jerry Lewis	Line Supervisor					
Darryl Grooms	Crew Leader	PATROLMAN/GUIDE				
Woody Hall	Senior Lineman	Claude Holden	Patrol/Guide			
James Ussery	Senior Lineman					
Alvin Foran	Senior Lineman					
Kevin Harris	Lineman					
Jeremy Hill	Lineman					
Andy Bevis	Lineman					
Chris Allen	Apprentice Lineman					
Bobby See	IMC Technician I					
John Griffin	IMC Technician I					
	STORES		<u>.</u>			
Donna Fowler	Stores Supervisor	7				
Doug Jones	Warehouseman	-				
PATR	OL/GUIDE/SAFETY	1				
Rhondon Gray	SAFETY					
Virginia Nail	Patrol/Guide					
Kate Jones	Patrol/Guide		a1			

17. Emergency Assistance List

Company	Contact	Telephone	Available Resources
Gulf Power Company	Andy McQuagge	(850) 872-3220	Crews
West Florida Electric Coop	Bill Rimes	(850) 263-6518	Crews
FPU-Fernandina Beach	Bill Grant	(904) 277-1957	Crews
Davey Tree	Russell Brooks	(352) 279-8622	Tree Crews
DaveyTree	Russell Brooks	(228) 396-5810	Tree Crews
City of Tallahassee		(850) 599-5811	Crews
Talquin Electric Coop		(850) 627-7651	Crews
Gulf Coast Electric Coop		(850) 877-6166	Crews
Public Service Commission	Joseph Jenkins	(850) 488-8501	
Public Service Commission	Bob Trapp	(850) 488-8501	
Red Simpson Inc	John Simpson	(318) 487-1074	Crews
Florida Electric Power Coord Group	R J Midulla	(813) 289-5644	Crews
Mastec	Copper Nelson	(850) 519-0664	Crews
Utilicon	Gene Holley	(478) 348-3233	Crews
		(850) 890-0131 cell	
		(850) 638-7129 hom :	
Harper Electric	Mark Harper	(334) 222-7022	
······		(334) 222-7854	
		(334) 343-1703 cell	
Vehicle Repairs Assistance			
Сотрану	Contact	Telephone	Available Resources
Altec Industries Inc		(205) 458-3850	Mechanical Repairs
Altec Industries Inc		(205) 458-3857	Mechanical Repairs
Altec Industries Inc	_	(205) 458-3889	Mechanical Repairs
Altec Industries Inc		(205) 458-3849	Mechanical Repairs
Altec Industries Inc		(205) 458-3848	Mechanical Repairs
Auto Clinic	Office	(904) 482-6632	Mechanical Repairs
Auto Clinic	Mike Krieser	(850) 569-8475	Mechanical Repairs
Auto Clinic		258-6274	Mechanical Repairs
Dale Brannon	Dale Brannon	352-4613 shop	Wrecker
		(850) 573-0275 cell	Wrecker
		×	

18. Emergency Stock Requirements

Bin #	Description	Quantity Required	Quantity On Hand
31-1320	Wire, #4 AAAC Bare	25,000	
31-1550	Wire, #4 AL Triplex	10,000	
31-1590	Wire, #1/0 AL Triplex	10,000	
31-1650	Wire, #2 AL Quad	1,000	
31-1670	Wire, #1/0 AL Quad	1,000	
31-1690	Wire, #4/0 AL Quad	1,000	
31-1720	Wire, 3/8 Guy	3,000	
35-1160	Arrester, MOV, Line	75	
35-1165	Arrester, MOV, Riser	25	
35-2710	Cut-out, Fused, 100A	48	
35-2720	Cut-out, Load Break, 200 A	24	
35-2860	Guy Grip, 3/8 Galv	100	
35-2975	Insulator, Pin Type, 7500 V	100	
35-3030	Insulator, Horizontal, 35 V	25	
35-3110	Insulator, Suspension	100	
35-3115	Insulator, Fiberglass Rod 12"	50	
35-3120	Insulator, Fiberglass Rod 5'	25	
35-3470	Pin, Fiberglass Stand Off	100	
35-3520	Pole, 30'/6	30	
35-3550	Pole, 40'/4	30	
35-3575	Pole, 45'/3	25	
35-4039	Ties, #4 Side	50	
35-4060	Ties, #477 Side	50	
35-4068	Ties, #4 Wrap lock	100	
35-4100	Ties, #477 Wrap lock	50	
37-1005	Clamp, Dead-end #6-#2 Service	. 200	
37-1020	Clamp, Dead-end #1/0 Service	100	
37-1390	Connector, H Type, WR-159	1,000	
37-1400	Connector, H Type, WR-189	1,000	
37-1405	Connector, H Type, WR-289	200	
37-1410	Connector, H Type, WR-279	100	
37-1420	Connector, H Type, WR-379	100	
37-1430	Connector, H Type, WR-419	100	
37-1440	Connector, H Type, WR-399	150	
37-1456	Connector, H Type, WR-885	100	
37-1460	Connector, H Type, WR-835	100	
37-1620	Connector, Vise Action, #6 Cu	100	
37-1630	Connector, Vise Action, #4 Cu	100	
37-1650	Connector, Vise Action, #2 Cu	100	
37-2192	Sleeves, Auto Splice, #4 AL	500	
37-2200	Sleeves, Auto Splice, #1/0 AL	50	
37-2208	Sleeves, Auto Splice, #3/0 AL	25	
37-2210	Sleeves, Auto Splice, #4/0 AL	25	
37-2218	Sleeves, Auto Splice, 336 AL	100	
37-2225	Sleeves, Auto Splice, 477 AL	150	

Bin #	Description	Quantity Required	Quantity On Hand
37-2550	Sleeves, Triplex Neutral, #4 AL	100	
37-2560	Sleeves, Triplex Neutral, #2 AL	75	
37-2610	Splice, Guy	50	
37-2740	Stirrup, #4	100	
39-1170	Fuse Link, 2 1/2 Amp	150	
39-1190	Fuse Link, 4 Amp	100	
39-1220	Fuse Link, 7 Amp	50	
39-1230	Fuse Link, 10 Amp	150	
39-1240	Fuse Link, 15 Amp	100	
39-1250	Fuse Link, 20 Amp	25	
39-1260	Fuse Link, 25 Amp	25	
39-1270	Fuse Link, 30 Amp	25	
39-1280	Fuse Link, 40 Amp	25	
39-1290	Fuse Link, 50 Amp	25	
39-1300	Fuse Link, 60 Amp	25	
91-1090	Transformer, 15 KVA	20	
91-1100	Transformer, 25 KVA	15	
91-1110	Transformer, 37.5 KVA	5	
91-1120	Transformer, 50 KVA	5	

19. Transportation and Equipment

TRUCK#	ITEM DESCRIPTION	X	Γ¥.	Z	GPS	VEHICLE	DATE	BY	CONTACT/
					UNSILATEDD	OPERABLE			COMMENTS
810	Fork Lift		-					1	
859	Pole Trailer								
860	Material Trailer								
861	Combination Pole Trailer								
862	Wire Retrieving Trailer								
863	Wire Pulling Trailer								
969	Freightliner/Derrick								
979	Freightliner/Derrick							1	
968	Material Handler/Freightliner							-	
980	Bucket Truck								
977	GMC Pick-Up Truck (Magnus)								
982	Pick-Up Truck (Griffin)								
991	Rav4(Jones)								
990	Rav4 (Nail)	_							
957	Toyota Pre-Runner (Tew)			-				-	
954	Altec Material Handler								
974	Altec Material Handler								
956	Chevy Pickup (Flag)								

959	Toyota Tundra (Spare)				
985	Ford Pickup (Tanner)				
983	Altec Service Material Handler				
962	GMC Savanna Van (See)				14
965	Altec Material Handler			 	
986	Ford Pickup (Lewis)				
989	Toy. Pickup (Holden)				
865	Signboard				
866	Trailer				
978	GMC Pickup (Toole)				
987	Ford Exp. (Shelley)				
984	Toyota Rav4 (Brock)				
992	Chevy Pickup (Gray)				
		+ + +	 	 	

Note: X = Operational Y = Material Z = Fuel

20. Critical Customer List

A. Hospitals, Clinics, Nursing Homes

Name	Address	Telephone	Contact Person
Jackson Hospital	800 Hospital Dr.	526-2200	Larry Meese
Marianna Convalescent Ctr.	805 5th Ave.	482-8091	Johnnie Cloud
The Nursing Pavilion	710 3rd Ave.	526-3191	Greg Mitchell

B. Public Utilities

Name	Address			Telephone	Contact
Person					
Marianna Waste Water		2832 Davey St.	482-4353		Jim Dean
Sunland Waster Water T.P.		3693 Industrial Park			"
Park St. Pump Station		2988 Park St.			"
Davis Field Pump Station		4457 South St.	н		"
Sheffield Pump Station		3325 Old US Rd.			"
Marianna Well #5		Clinton & Noland St.			"
Marianna Well #6		Ninth Av. & Third St.			п
Marianna Well #1		Hwy 90 W/ Pool			н
Marianna Public Work		4168 South St.			"
Marianna Gas Department					

C. Major Disaster Shelters/Motels

Name	Address	Telephone	Contact Person	
Best Western 2086 Hwy 71	526-5666			
Comfort Inn	2175 Hwy 71	526-5600		
Exective Inn	4113 Lafayette	526-3710		
Best-Value Inn 4168 Lafayette	482-4973			
Chipola Jr. College	3094 College Dr.	526-2761		
Cottondale High School	2680 Levy St	482-9821	Steve Benton	
Malone High School	5361 North St	482-9950	Steve Benton	
Marianna High School	Caverns RD.	482-9605	Steve Benton	
Marianna Middle School	4144 South St.	482-9609	Steve Benton	
Riverside Elementary	2958 Cherokee St.	482-9611	Steve Benton	
Golson Elementary	4258 Second Av.	482-9607	Steve Benton	
Microtel	4959 Whitetail Dr.	526-5005	Harkins	
Hampton Inn	2185 Hwy 71	526-1006	D Thompson	
Budget Inn	4135 Lafayette St	482-2700	R Shah	
Fairfield Inn	4966 Whitetail Dr.	482-2578		
Ramada Limited	4655 E. Hwy 90	526-3251		
Comfort Inn	2214 Hwy 71	482-7112		
Marianna Inn	2222 Hwy 71	526-2900		
D. Municipal and State Emergency Services

Name	Address	Telephone	Contact Person
Florida Highway Patrol	3613 Hwy 90	482-9512	Lt. Moore
Jackson Co. Sheriff Dept.	4012 Lafayette St	482-9624	L. Roberts
Cottondale Police Dept.	2659 Front St.	352-4361	Watford
Marianna Police Dept.	2890 Green St.	526-3125	H. Bagett
Jackson Co. Fire & Rescue	Industrial Park Dr.	482-9669	R Brown
Alford Fire Dept.	1768 Georgia St	638-8657	B Yongue
Cottondale Fire Dept.	2669 Front St.	911	A DA CARACTER AND A CARACTER AND A
Malone Fire Dept.	5187 Ninth Ave.	911	M Padget
Marianna Fire Dept.	4425 Clinton St.	482-2414	N. Lovett
Emergency Management		482-9683	Andreason
Emergency Management	12.0 5	573-1058	Andreason

E. Communication and Broadcasting Services

Name	Address	Telephone	Contact Person
WTOT/WJAQ Radio	4376 Lafayette St	482-3046	D Moore
Jackson County Floridan	4403 Constitution Ln	526-3614	V. Roberts
WMBB	Panama City	850-769-2313	M. McAfee

F. Major Food Storage/Processing Facilities

Name	Address	Telephone	Contact Person
Malone IGA	5417 10th St.	569-2635	_
Grocery Outlet	Lafayette St.	526-5528	D. Pendergrass
Sunshine Food-Greenwood	S. Main	594-1286	
Winn Dixie	4478 Lafayette St	482-5303	Russ
Daffin Food Service	2867 Estes	482-4026	J. Milton
Walmart Superstore	Highway 71	526-5744	M. Gilmore
Save-a-lot	4700 Hwy 90	526-4700	

G. Correction Facilities

Name	Address	Telephone	Contact Person
Arthur G. Dozier School	4111 South St	482-9700	R. McKay
Marianna Work Camp		482-9561	
Federal Correctional (FCI)	3625 FCI Rd	526-2313	L. Gross

H.

Airports

Name	Address	Telephone	Contact Person
Chipola Aviation Inc.	3633 Industrial Park Dr	482-8480	H. Foran
Panhandle Aviation	Greenwood	594-3224	
Marianna Airport/ Ind. Park	Industrial Park Dr.	482-2281	

*EMERGENCY FUEL

24HRS. DONALD CUTCHINS (h)352-2906 ©573-1505

STORM/FUEL SHORTAGE (w) 482-7003 © 643-8925

Name	Address	Telephone
Allen, Chris	3601 Guinea Runway, Marianna , Fl. 32448	693-4301
Amos, Stephen	2982 Dixon, Marianna, Fl. 32446	557-0800
Bevis, Andy	3400 Riley Drive, Marianna, Fl 32448	557-6484
Brock, Mason	2970 Chase Way, Marianna, FL 32446	557-0180
Foran, Alvin	16846 NW CR 379A, Bristol, FL 32321	643-2582
Foran, Brady	2948 Gardenview Rd Cottondale, FL 32431	579-4238
Fowler, Donna	PO Box 1250, Marianna, Fl. 32446	557-3495
Gray, Rhondon	PO Box 31 Cottondale, FL 32431	557-6490
Griffin, John	2776 Kynesville Road, Cottondale, FL 32431	579-2479
Grooms, Darryl	3568 Flat Rd Greenwood, FL 32443	209-7144
Hall, Kim	3791 Old Cottondale Rd, Marianna, FL 32448	526-3144
Hall, Woody	3791 Old Cottondale Rd, Marianna, FL 32448	526-3144
Hill, Jeremy	3158 Swaills Rd, Alford, FL 32420	326-0266
Harris, Kevin	2341 Cycle Lane, Cottondale, FL 32431	579-0101
Holden, Claude	2126 Tanner Rd Marianna, FL 32448	526-2664
Jones, Doug	PO Box 654, Malone, Fl. 32445	569-2836
Jones, Kate	25404 NW Bowden Rd., Altha, Fl. 32421	762-2984
Jones, Sally	22473 NW Goodwin Rd., Altha, Fl 32421	762-8366
Lewis, Jerry	15869 NW Pea Ridge Road, Bristol, FL 32321	643-5797
Magnus, Shane	16405 Castile Ave., Panama City Beach 32413	209-3493
McCoy, Laura	2694 Old Airbase Road, Marianna, FL 32448	526-2998
Nail, Virginia	5701 Nubbin Ridge Rd., Greenwood, Fl. 32443	594-7570
Pitas, Carolyn (Sue)	3270 NW Stone Ave, Altha FL 32421	762-9540
Roye, Janine	2850 Paulding Court, Alford, Fl. 32420	579-4754
See, Bobby	2679 Dock Rd, Cottondale, FL 32431	579-4467
Shelley, Buddy	3849 Hwy 90, Marianna, Fl. 32446	557-6480
Tanner, Lynwood	P. O. Box 6401, Marianna, FL 32447	579-4679
Tew, Donnie	4951 Carousel Loop, Marianna, FL 32448	482-4126
Thomas, Pamela	3350 Plantation Circle, Marianna, FL 32446	482-2847
Toole, Steve	915 Daniel Dr., Alford, Fl. 32420	579-4455
Ussery, James	2510 Railroad St., Cottondale, FL 32431	352-3928

21. Address and Telephone Listing of Active Employees

22. Emergency Telephone List

A.	Telephone Repair Century Link (Wilton Crawford)	526-3481 or (611)
В.	Radio Repair Verizon (Jerry Fox)	(850) 867-9633
C.	Gulf Power Company Pensacola Dispatcher Panama City Dispatcher Storm Coordinator Mike Menk (Southern Company) Andy McQuagge	444-6517 872-3261 785-8305 (205)257-2599 / (205)515-2066 mobile 872-3220
D.	Emergency Management	
	Jackson County (Rodney Andreason) """" Calhoun County (Don O'Bryan) Liberty County (Jerry Butler) State Office (Eric Torbett)	482-9633 536-4500 674-8075/5161 643-3477 413-9911
E.	Law Enforcement - 911	
	Jackson County Calhoun County Liberty County Marianna Greenwood Malone Cottondale Alford Altha Bristol Blountstown Bascom Florida Highway Patrol	482-9624 / 482-9648 674-5049/4275 643-2235 526-3125 482-9648 482-9648 352-4361 482-9648 762-3900 643-2235 674-5987 482-9648 482-9512
F.	Ambulance - 911	
	Jackson County Calhoun County Liberty County	482-9669 / 482-9668 674-5411 643-2235
G.	News Media	
	WTOT/WJAQ (Don Moore) Jackson County Floridan WTVY-Channel 4 TV/Dothan WJHG-Channel 7 TV/Panama City WMBB-Channel 13 TV/Panama City	482-3046 526-3614 (334)792-3195 234-2125 / 526-5727 763-6000 / 482-8007

23.

Logistics

City/County Officials H.

Jackson County	482-9633
Calhoun County	674-4545
Liberty County	643-5404
Alford	579-4684
Bascom	569-2234
Cottondale	352-4361
Greenwood	594-1216
Malone	569-2308
Marianna	482-4353
Altha	762-3280
Bristol	643-2261
Blountstown	674-5488

Public Service Commission I.

Tim Devlin, Dir. Economic Regulation	413-6900
Dan Hoppe, Dir, Auditing and Safety	413-6480
Joseph Jenkins	413-6626
Bob Trapp	413-6632
Roland Floyd	413-6676
Connie Kummer	413-6701

Motels:		Air Mattress/Cots:		
Best Western	526-5666	Loftin's Rental Center		526-4680
Comfort Inn	526-5600	North Florida Rentals		526-7368
Microtel	526-5005	Laundry & Linen Servic	es/Supplies:	
Executive Inn	526-3710	UniMac Express Laundry		482-6504
Hampton Inn	526-1006	Nifty Cleaners		482-2825
Holiday Inn Express	526-2900			
Ramada Limited	526-3251	First Aid Supplies:		
Best Value Inn	482-4973	Waco Drugs 482-5781	Kelson Drugs	526-2839
		Paramore's 482-3924 CVS	Watson's	482-4035
Restaurants:				
Captain D's	482-6230	Firehouse Subs	482-5883	
Beef O Bradys	482-0002	San Marcos	482-0062	
Fortune Cookie	526-3735	Pizza Hut	482-5900	
Jim's Buffet & Grill	526-2366	Gazebo Rest.	526-1276	
Madison's Warehouse	526-4000			
Dairy Queen	482-1055			
Sonny's Barbecue	526-7274	Catering:		
Ruby Tuesday	526-7100	Sweet Stuff Bakery	526-2250	
Waffle Iron	526-5055	1.5		
Zaxby's	633-4545			
The Oaks	526-1114			
Hungry Howies	526-7878			
Ruby Tuesday	526-7100			
Waffle Iron	526-5055			
Zaxby's	633-4545			
The Oaks	526-1114			
Hungry Howies	526-7878			

Food Stores:

Daffin Food Service	482-4026
Grocery Outlet	526-5528
Walmart Superstore	526-5744
Malone IGA	569-2635
Winn Dixie	482-5303

Water Supply:

FPU (Co. generator to supply water) Nantze Springs Water Co. 800-239-7873

Service Stations:

Big Little Store	526-5743
Cottondale Texaco	352-2804
Marianna Texaco	482-6105
Hartsfield Mini-Mart	482-4545
K & M Expressway	526-5575
McCoy's Chevron	526-2921
Marianna Chevron	526-2183
Marianna Truck Stop	526-3303
Mike's Texaco, Malone	569-2401
Nugget Oil	482-8585
Sangaree BP	482-5241
Murphy USA	482-6149
Stoney's	482-2028
Tom Thumb	482-4842

Necessary Supplies for Northwest Florida Office:

Food Items:

Qua
151
50 0
5 ja
3 ga
10 0
10
3 pa
10
4 ba
1 ba
3 ea
5 bo

Supplies:

Item Paper Plates Plastic Utensils Garbage Bags Paper Towels Serving Utensils Quantity 5 loafs 6 Gallons 6 gallons 0 cases 0 packs 0 packs 0 pounds 6 bags 6 bag 6 each 6 boxes

Quantity 10 packs 5 packs 5 boxes 20 rolls 10 each ItemQPeanut Butter55Bottle Size Water1Milk55Soft drinks (Miscellaneous)2Margarine66Crackers1Cheddar Cheese55Potato Chips (miscellaneous)66Tomatoes1Mayonnaise4Ketchup3Bagels2

526-7701

482-5303

800-765-4908

205-323-8751

526-2241

482-323

482-6632

526-5744

Cellular Phones:

Vehicle Repair Facilities: Baker Equipment

Flashlights (20 w/batteries):

Mayer Electric (Additional)800-216-6712

Portable AM/FM Radios w/batteries:

Altec Industries Inc

Beall Tire Co

Quantity on hand

Auto Clinic

WalMart

Thompson Tractor Co

Verizon

Ice Supply:

Winn Dixie

- Item Paper Bowls Aluminum Foil Foil Pans/Trays Dish Towels and Rags Dish Soap
- Quantity 5 jars 100 bottles 5 gallons 20 two liter bottles 6 each 10 boxes 5 blocks 6 bags 1 bag 4 each 3 each 2 packs
- Quantity 5 packs 10 boxes 15 each 10 each 3 each

24. Service Plan to Supply Power to FPU Offices

During an emergency it is imperative that power be restored to the office/complex located at 2825 Pennsylvania Av. as soon as possible. Also of the utmost importance is to ensure the feeder to the building is maintained in optimum working order at all times. This includes tree trimming, replacing deteriorated poles, replacing defective equipment, etc.

After an emergency in which power is lost to the office/warehouse, someone will immediately go to the Marianna Substation in order to determine the status of the breaker #9854 (South St Feeder). That feeder will also be patrolled to determine what will be needed to restore service to the office/warehouse. All available personnel will be utilized to restore power.

If required, downstream switches should be opened so that power may be restored to the warehouse as soon as possible.

25. Damage Assessment Plan

After a major storm or emergency occurs it will be necessary to access the damage to the system as quickly and accurately as possible. The following shows the assignments for a quick visual system inspection which is to be performed as soon after the storm/emergency as possible.

General Manager, Northwest Florida

Check Hospital feeder from the hospital to Marianna Substation. Check Marianna Substation.

Safety Coordinator

Check Chipola Substation. Check along Old US Rd to Hwy 90.

Service Supervisor

Check along Kelson Av to Penn Av then down Penn Av to the office.

Line Supervisor

Check Caverns Rd Substation. Check along Hwy 71 South to Hwy 90 then south on West Caledonia to South St then west on South St to Penn Av then north on Penn Av. to the warehouse.

Engineering Manager

Check along Hwy 90 from Marianna Substation to Penn Ave.

26. Damage Assessment Form

The Damage Assessment Form to be completed and returned as soon as possible after the storm/emergency. To ensure proper planning it is essential that this form be completed neatly, accurately and completely.



FLORIDA PUBLIC UTILITIES COMPANY

NORTHEAST FLORIDA DIVISION

2014 Emergency procedures

1. <u>OBJECTIVE</u>

The primary objective of the procedure is to provide guidelines under which the Northeast Florida Division of Florida Public Utilities Company will operate in emergency conditions. The following objectives will ensure orderly and efficient service restoration.

- A. The safety of employees, contractors and the general public will have the highest priority.
- B. Early damage assessment is required in order to develop manpower requirements.
- C. Request additional manpower as soon as conditions and information indicate the need.
- D. Provide for orderly restoration activities in order to provide efficient and rapid restoration.
- E. Provide all logistical needs for employees and contractors.
- F. Provide ongoing preparation of our employees, buildings, equipment and support function in advance of an emergency.
- G. Provide support and additional resources for employees and their families should they need assistance to address injury or damage as a result of the emergency situation.



DAY SHIFT		SHIFT 2014			
BILL GF	RANT	ST	ORM DIRECTOR		JORGE PUENTES
CHRIS I	HEBRT	ENGI	NEERING DIRECTO	R	SHANE MAGNUS
RICH CI	RIGGER	OPERATIONS DIRECTOR			TBD*
ROGER	LACHARITE	LO	LOGISTICS DIRECTOR PATTI TH		PATTI THORNTON
TOM M	M MOEN		SAFETY		TBD*
ILL	BE	FILLED	FROM	AVAILABLE	RESOURCES

2. STORM MODE ORGANIZATIONAL CHART

3. EMERGENCY PERSONNEL POLICY

As a public utility we provide essential services for our customers and the general public. Therefore, the purpose of the Company's Emergency Personnel Policy is to encourage employees to make every reasonable effort to report to work. Each employee performs an essential role in the Company's operation and it's important that you report to duty as scheduled during an emergency. Restoring and maintaining services after a major storm is a difficult job and requires everyone's best efforts. Of necessity, employees may be required to assist other departments or perform functions outside of their normal daily work assignment. It will take every employee's cooperation before, during and after an emergency.

- A. If you are on the job when the storm approaches, your supervisor will inform you of your storm assignment. Employees not directly involved in maintaining services <u>may</u> be released to go home before the storm threatens safe travel.
- B. If you are off-duty, call your immediate supervisor as soon as possible after an emergency condition is announced. An Emergency Condition Warning is usually given within 24 hours of occurrence. Your supervisor will inform you as to where and when you'll be needed prior to, during, and after the storm. If your supervisor is not available call his/her immediate supervisor or the Northeast Florida Office. This requirement applies to <u>all</u> electric, natural gas and propane division employees when an emergency threatens any of the Company's electric service areas.
- C. After the emergency passes, all personnel not on duty during the storm will report as soon as possible to their supervisor or his/her designate by telephone. In the event the telephones are not working or you are unable to communicate with your supervisor or the company office, report in person to your regular work station as soon as possible during daylight hours.
- D. EMPLOYEES ARE TO MAKE EVERY <u>REASONABLE</u> EFFORT TO REPORT TOWORK. IT'S UNDERSTOOD THAT THERE WILL BE INSTANCES WHERE EMPLOYEES JUST CAN'T GET TO WORK. EMPLOYEES WHO DO NOT REPORT TO WORK WILL NOT BE PAID. IF YOU ARE UNABLE TO REPORT TO WORK MAKE EVERY EFFORT TO CONTACT YOUR SUPERVISOR TO REPORT YOUR ABSENCE. DISCIPLINARY ACTION UP TO AND INCLUDING DISCHARGE MAY BE TAKEN AGAINST EMPLOYEES WHO DO NOT REPORT TO WORK WITHOUT JUST CAUSE.
- E. Personal emergencies are common results of a major hurricane but, unless life threatening, will not be acceptable as an excuse for not reporting to work. Evacuation from a hurricane threatened area to a remote location from which you cannot promptly return to your home is also not acceptable as a reason for not reporting to work.
- F. The Company will endeavor to provide assistance and shelter to employees and their immediate families should an employee need or request assistance.
- G. Unless emergency conditions warrant, employees will not be required to work in excess of sixteen (16) consecutive hours.

The success of the emergency plan requires the cooperation and efforts of all of our employees. Employees may be required to return from their vacation or Company sponsored travel. Therefore, it will be the responsibility of each supervisor to determine the location of each of their employees on Company sponsored trips to facilitate their recall if conditions warrant their return when the emergency plan is implemented. Employees who are on vacation will notify, by telephone, their supervisors of their location and availability when an emergency threatens to strike our service area. Supervisors will consult with their department head to determine the feasibility and need to recall employees from vacation or Company sponsored trips. All employees are essential for the continued operation of the Company obligations and Company objectives.

The Company will develop information which will assist employees and their families before, during and after the storm. The Electric Operations Manager, Northeast Florida will be responsible for obtaining the information and communicating this information to the employees. The Company will attempt to provide as much assistance as practical to the employees and their families during emergency situations.

However, it is the responsibility of each employee to develop a personal plan that can be quickly implemented in case a storm impacts our area. This plan should involve the protection of family and property which can be put into action quickly and allow for compliance with the above mentioned requirements. Every effort will be made to allow employees time off prior to a storm to make preparations for the event.

4. <u>GENERAL RESTORATION GUIDELINES</u>

These general guidelines are issued to provide overall guidance as to emergency system restoration activities. These guidelines will be followed as much as practical in emergencies caused by hurricanes, tornadoes, ice storms and other natural disasters.

These guidelines are not intended to nor will they put in jeopardy the safety of any employee or their family. Dependent upon the intensity of the storm as determined by the company's management, employees will be required to report to work as instructed. If the intensity of the storm is such that weather conditions will be extremely severe, only a skeleton crew will be present at the work location. All others will report for duty as soon as conditions subside to a reasonable level. Those on vacation will be expected to report for duty.

The Northeast Florida office building was designed to withstand 160 mph sustained winds. Should winds be expected to significantly exceed these ratings, alternative locations will be identified and restoration will be relocated to an appropriate facility.

Restoration activities will be handled in the following manner:

- A. During the early stages of the emergency, restoration will be handled in the usual manner. All service will be restored as soon as possible.
- B. As the storm intensifies and trouble reaches major proportions, the main restoration activities will be limited to keeping main feeders energized by clearing trouble without making repairs.
- C. When the intensity of the storm is such that work can no longer be done safely, all work will cease and personnel will report to the office or other safe location. Ariel work will not be conducted when wind speed reach 40 miles per hour.
- D. When the storm has subsided to a reasonable level and it is safe to begin restoration activities damage assessment and restoration of main feeders to critical customers will begin.
- E. Restoration activities will continue in an effort to restore service in the following manner:
 - 1) Substations
 - 2) Main feeders to critical customers
 - Other main feeders
 - 4) Undamaged primary
 - 5) Damaged primary, secondary, service, street lights, security lights

These guidelines are not intended to prevent responding to emergency situations. Any life threatening emergency will be handled immediately, in such a manner as to not endanger the lives of others.

Each employee and contractor should maintain good customer relations during restoration activities. Customer service will continue to be a high priority and every reasonable effort should be made to satisfy our customers.

Press releases and public announcements should be made only by designated company management personnel.

5. <u>EMERGENCY ELECTRIC SAFETY PRECAUTIONS</u>

<u>All Rules in the Safety Manual should be observed.</u> However, in order to point out some particular precautions which should be observed during storms, the following instructions listed below should receive special emphasis:

ALL incoming crews must have a safety briefing as soon as practical upon arrival. This will be to introduce them to our system and inform them of our expectations.

A. SIZING UP WORK:

Before undertaking any job, a job briefing should be thoroughly discussed and all personnel should understand what is to be done, how it is to be done, and the following:

- 1. Voltage and position of all wires, or cables, and the sources or source of energy.
- 2. That the work at hand can be done safely.
- 3. That there is a sufficient amount of each kind of protective equipment on hand to thoroughly protect the working position and the work man.
- They should consider the ground and traffic conditions and arrange to protect and guard these against all hazards.

B. INSULATION:

In cases of trouble following storms, all wires, regardless of normal voltage, are to be considered as being at primary voltage and are not to be handled except with protective equipment because of danger of crosses between primary and secondary circuits.

C. DISTRIBUTION CIRCUITS ON OR NEAR TRANSMISSION POLES:

If it is necessary to work on the conductors of a distribution circuit carried on or near transmission line poles with the transmission circuit energized and normal, any work on the conductors of the distribution circuits must be done between sets of grounds or else the distribution circuit must be worked and treated as an energized circuit. To determine positively that the lines to be worked are de-energized, test or investigation must be made before grounds are applied.

If the transmission line is also out of service and apparently in trouble, it must be considered as a possible source from which the distribution circuit may be energized, and it must be definitely determined that the transmission circuit as well as the distribution circuit is de-energized and grounded and the source or sources of supply are open and proper clearance obtained before the distribution circuit may be worked as de-energized.

D. STREET LIGHTING WIRES:

Street lighting wires shall be considered energized at all times and the workman shall protect himself against them with proper protective equipment even when circuits are normally de-energized. Such a line is liable to become energized by accidental induction or lightning and sometimes street lighting wires become crossed with other energized wires.

E. FUSE CUT-OUT CLEARANCE:

When a distribution circuit is to be de-energized and cleared for working on conductors or other equipment by the opening of a fuse cut-out, either of the enclosed or open type, the fuse holder or tube is to be removed completely from the fuse assembly. The removed fuse holder or tube is to be placed at a safe and conspicuous location away from the fuse cut-out as an indication to other employees that the fuse cut-out shall continue in this open position until the work is completed. In addition, a red "hold" switch tag (with Lineman's name) should be attached to the pole in a conspicuous location and then removed when work is completed.

F. REQUIREMENTS FOR USE OF RUBBER PROTECTIVE APPARATUS:

In case of trouble following storms, all wires, regardless of normal voltage, are to be considered as being at primary voltage and are not to be handled except with protective equipment because of danger of crosses between primary and secondary circuits.

- 1. Energized Conductors Rubber gloves must always be worn when working on energized lines or energized conductors or equipment up to 15,000 volts between conductors.
- 2. Working position Rubber gloves must be put on before coming in reach of energized conductors when work is done on conductors or protective equipment is to be installed.

Because of the possibility of high voltage existing, rubber gloves must be worn until the conductor is grounded on primary circuits and on street lighting circuits.

<u>Care of Rubber Protective Apparatus</u> - At each job, before a workman puts on his rubber gloves, he should test each glove mechanically for cuts and weak spots by rolling it up tightly, beginning at the gauntlet. All of this type equipment, when not in use, must be stored in dry proper containers or compartment provided for this purpose.

G. SWITCHING ORDERS:

In all switching orders, the switches shall be referred to by their <u>numbers</u> and not by the name of the circuit which they control. The sequence, in which the switch numbers are given, in the order, shall indicate the sequence of the switching operation. For example, an order given: "open switches 502-509 and close switches 511-502" shall be executed as follows: first, open switch 502; second, open switch 509; third, close switch 511; fourth, close switch 502.

NO DEVIATION FROM THIS RULE WILL BE PERMITTED.

To avoid misunderstandings and to prevent accidents, all orders concerning switching operation or the handling of lines and equipment must be repeated to the person giving name, and <u>identity</u> of person giving order secured. Likewise, the operator giving an order must secure <u>identity</u> of person to whom it is given. (three part communication)

H. SWITCHING ORDER:

All switching orders must be written on a piece of paper by the person receiving same, and this written order must be carried by the person while doing the switching. In no case shall anyone attempt to execute a switching order from memory.

I. HIGH WATER:

During periods of high water involving lines or equipment, patrolmen shall not attempt to swim sections of the patrol which may be submerged. Necessary patrols over flooded areas must be done with boats and in such instances men engaged in these patrols shall wear suitable life belts or jackets.

J. BROKEN CONDUCTORS:

Before climbing pole, check for broken conductors, which may be in contact with pole. Clear before climbing.

6. <u>ANNUAL PREPARATIONS</u>

Electric Operations Manager

- A. Review emergency procedure prior to May 1 and update as necessary.
- B. Review employee assignments with all personnel prior to June 1.
- C. Update status of emergency crew assistance (Contractors, NW Florida, SEE, etc.).
- D. Schedule and conduct half day emergency procedure training sessions prior to July 1. Written documentation is to be retained when training is complete.
- E. Ensure storm shutters, laundry facilities and cooking facilities are available.

Assistant Electric Operations Manager

- A. Check all communication equipment for proper operation. Check spare equipment and parts.
 - B. Check material quantities and emergency stock prior to June 1. Begin necessary purchasing of emergency stock approved for purchase prior to an emergency.
 - C. Review safety precautions with all line crew personnel prior to June 1.
 - D. Have necessary emergency material delivered prior to June 1.
 - E. Review status of all transportation equipment and have repairs made.
 - F. Update status of remote storeroom site and trailer(s).
 - G. Update status of emergency fuel suppliers, on site fuel and mobile fuel suppliers.
 - H. Update status of vehicle repair facilities.

Propane Operations Manager

- A. Check all communication equipment for proper operation. Check spare equipment and parts.
- B. Check material quantities and emergency stock prior to June 1. Begin necessary purchasing of emergency stock approved for purchase prior to an emergency.

- C. Review safety precautions with all propane personnel prior to June 1.
- D. Have necessary emergency material delivered prior to June 1.
- E. Review status of all transportation equipment and have repairs made.
- F. Update status of emergency fuel suppliers, on site fuel and mobile fuel suppliers.
- G. Update status of vehicle repair facilities.

Natural Gas Operations Supervisor

- A. Check all communication equipment for proper operation. Check spare equipment and parts.
- B. Check material quantities and emergency stock prior to June 1. Begin necessary purchasing of emergency stock approved for purchase prior to an emergency.
- C. Review safety precautions with all natural gas personnel prior to June 1.
- D. Have necessary emergency material delivered prior to June 1.
- E. Review status of all transportation equipment and have repairs made.
- F. Update status of emergency fuel suppliers, on site fuel and mobile fuel suppliers.
- G. Update status of vehicle repair facilities.

Customer Care / Logistics Manager

- A. Update the list of critical customers by town/county. Group the critical customers by town/county by classification:
 - 1) Hospitals and clinics
 - 2) Public utilities
 - Municipal and state emergency service
 - Communication and broadcasting services
 - 5) Major food storage/processing facilities
 - 6) Disaster shelter and motels
 - 7) Correctional facilities
 - 8) Airport
- B. Update phone list for employees, law enforcement, emergency management, city/towns, utilities, contractors, tree trimming, personnel, news media, PSC, DCA, EDC, GEO, etc.
- C. Review emergency telephone arrangements and make additional preliminary arrangements.
- D. Update status of thirty (30) motel rooms necessary for emergency/contract crews.
- E. Locate sources of food/water for crews and office personnel. Identify local and out of town caterers.
- F. Update status of building security firm.
- G. Locate sources for provision of the following Division office supplies.

1. Three days' supply of food and water. (See section 22, Logistics for List of Supplies)

- 2. Supply of air mattress/cots.
- 3. Portable AM/FM radios with batteries.
- 4. Laundry services/supplies.
- 5. First aid supplies.
- 6. Twenty (20) flashlights with batteries.
- 7. Linen service.
- 8. Miscellaneous supplies post storm shelter.
- H. Update status of ten (10) cellular phones.
- I. Update the procedure of the Office Operation.

Engineering

- A. Update and have on hand the following:
 - 1. Storm safety precautions
 - 2. General operating instructions
 - 3. Distribution maps
 - 4. Single line switching maps
 - 5. City and county maps
- B. Have control room and all necessary information and equipment ready for prompt setup. Phone jacks, internet connection and distribution map are minimum requirements.
- C. Conduct annual refresher training for personnel required to operate the Customer Outage System.

7. INITIATE STORM MODE PLAN

Electric Operations Manager

- A. Monitor the emergency.
- B. Begin making preparations for obtaining emergency assistance from other utilities and contractors.
- C. Check the status of personnel on vacation.
- D. Handle all media request by relaying contact information to Aleida, Bonnie or Mike.
- E. Inform all employees as to assignments and emergency information.
- F. Consult with the Executive Team concerning activation of Division Emergency Procedures.
- G. Consult with Executive Team concerning assistance from other divisions (i.e. mechanics, storeroom, media, family assistance, IT/Communications). Personnel from other divisions will be identified and mobilized. They will move as close as practical to Northeast Florida and then proceed to the office as soon after the emergency as travel can be accomplished safely. This location may change dependent upon the situation.
- H. Obtain special job number for all emergency related work.

- I. Make determination on when to release personnel to go home and provide instructions to employees.
- J. Ensure contact with JEA is established.

Assistant Electric Operations Manager

- A. Have all vehicles stocked with all necessary emergency materials and fuel.
- B. Monitor time/material needs of contractors.
- C. Check emergency stock levels and fuel supplies.
- D. Review plan to supply power to office and warehouse facility.
- E. Check all communication equipment.
- F. Review safety precautions with all personnel.
- G. Review job assignments with personnel and pass out necessary forms, information.
- H. Have all hazardous conditions corrected and construction jobs stabilized.
- I. Verify emergency generator is fully fueled and operable with back-up fuel available.
- J. Make arrangements for a boat and trailer suitable for construction.
- K. Ensure all vehicle repairs are made and final arrangements with vehicle repair facilities confirmed.
- L. Check on emergency generators and secure additional generators if needed.
- M. Secure all material in the warehouse yard.

Propane Operations Manager

- A. Have all vehicles stocked with all necessary emergency materials and fuel.
- B. Monitor time/material needs of contractors.
- C. Check emergency stock levels and fuel supplies.
- D. Review plan to supply power to bulk plant using backup power supplies.
- E. Check all communication equipment.
- F. Review safety precautions with all personnel.
- G. Review job assignments with personnel and pass out necessary forms, information.
- H. Have all hazardous conditions corrected and construction jobs stabilized.
- I. Verify emergency generator is fully fueled and operable with back-up fuel available.

- J. Ensure all vehicle repairs are made and final arrangements with vehicle repair facilities confirmed.
- K. Secure all material in the warehouse yard.
- L. Install Storm Shutters on all offices with the help of natural gas.
- M. Place plastic covering over all electronic or sensitive equipment and secure as necessary.

Natural Gas Operations Supervisor

- A. Have all vehicles stocked with all necessary emergency materials and fuel.
- B. Monitor time/material needs of contractors.
- C. Check emergency stock levels and fuel supplies.
- D. Review plan to supply power to bulk plant using backup power supplies.
- E. Check all communication equipment.
- F. Review safety precautions with all personnel.
- G. Review job assignments with personnel and pass out necessary forms, information.
- H. Have all hazardous conditions corrected and construction jobs stabilized.
- I. Verify emergency generator is fully fueled and operable with back-up fuel available.
- J. Ensure all vehicle repairs are made and final arrangements with vehicle repair facilities confirmed.
- K. Secure all material in the warehouse yard.

Customer Care / Logistics Manager

- A. Arrange for additional petty cash and cash advances (if necessary).
- B. Arrange with telephone company additional lines if necessary.
- C. Review assignments with personnel.
- D. Ensure all computers are backed up and secured.
- E. Ensure all paperwork/documents are filed and secured properly.
- F. Provide control room with customer list, addresses, phone numbers and account numbers.
- G. Work with HR department and personnel from other divisions to provide assistance to employees and their families. Assistance may include work to prevent further damage to homes, care for children, to work with contractors or insurance companies and provide food/lodging/clothing, etc.
- H. Make definite arrangements for contract crew lodging.
- I. Make definite arrangements for food/water/drinks for all personnel.

- J. Purchase food supply for office/warehouse prior to storm (if the severity of the storm warrants this).
- K. Run the hurricane report from ORCOM.
- L. Make arrangements for an abundant supply of ice.
- M. Make definite arrangements for building security.
- N. Make definite arrangements for Division Office supplies (See Annual Preparations, Logistics Manager, and Item E.)
- O. Place plastic covering over all electronic or sensitive equipment and secure as necessary.

Engineering

- A. Provide distribution maps, procedures, etc. as necessary.
- B. Ensure Mapping System is backed up and operating.
- C. Begin constant monitoring customer outages.

8. INITIAL STAGE OF THE EMERGENCY

Electric Operations Manager

- A. Be located at the Northeast Florida Operations Center (if possible) and constantly monitor the situation and restoration process.
- B. Keep internal media sources informed.
- C. Plan for additional services that will be needed during the restoration process to include damage assessment teams and mutual assistance crews.
- D. Activate control room.

Assistant Electric Operations Manager

- A. Be located at the Northeast Florida Operations Center (if possible) and constantly monitor the situation and restoration process.
- B. Coordinate overall restoration process.
- C. Begin analyzing trouble.
- D. Ensure employees that may be working are secure when wind gusts reach 40 miles per hour.
- E. Work with Operations Manager to determine restoration requirements.

Propane Operations Manager

- A. Be located at the Northeast Florida Operations Center (if possible) and constantly monitor the situation and restoration process.
- B. Activate propane restoration process.
- C. Coordinate with Engineering.

Natural Gas Operations Supervisor

- A. Be located at the Northeast Florida Operations Center (if possible) and constantly monitor the situation and restoration process.
- B. Activate propane restoration process.
- C. Coordinate with Engineering.

Customer Care / Logistics Manager

- A. Be located at the Northeast Florida Operations Center (if possible) and coordinate the answering and processing of telephone calls.
- B. Coordinate assistance to employees and their families.
- C. Have food and drinks available to all employees.
- D. Work with Operations Manager and begin making final logistical arrangements for outside crews.

Engineering

- A. Be located at the Northeast Florida Operations Center (if possible) and Continue processing customer outage system analysis and monitoring system to determine outage locations.
- B. Work with Operations Manager to determine restoration requirements.
- C. Provide periodic outage updates to the PSC and Nassau County EOC.

9. LOCAL STORM MODE

Storm Director

A. Determine manpower requirement from information provided by Operations Director and Engineering Director. Contact the Executive Team concerning the situation, if possible, and advise whether or not the additional personnel should continue to the Northeast Florida office. If communications are not possible, the President will determine whether or not the team should continue to Northeast Florida or will return home.

- B. Activate additional services that will be needed during the restoration process to include damage assessment teams and mutual assistance crews.
- C. Keep the media informed until such time that the Manager of Communications is available. At that time, the Manager of Communications will work with the Storm Director to keep the Media informed.

Operations Director

- A. Initiate damage assessment teams.
- B. Prioritize and schedule the restoration process.
- C. Make assignments and dispatch crews as necessary in order to ensure orderly and efficient restoration.
- D. Provide damage assessment to Storm Director.
- E. Provide updates to Storm Director as needed concerning restoration progress.
- F. Monitor manpower and equipment requirements and update Storm Director as required.
- G. Keep a list of all company and outside crews and their locations.
- H. Determine and assign appropriate manpower and equipment for each outage situation.
- I. Provide outside crews with all necessary information and safety information.
- J. Monitor storeroom and remote storeroom for proper operation and inventory. Analyze manpower requirements.
- K. Ensure all documents are completed prior to material leaving the storeroom and storeroom yard.
- L. Monitor and provide assistance in repairing vehicles.

Propane Operations Manager

- A. Make assignments and dispatch crews as necessary in order to ensure orderly and efficient restoration.
- B. Provide damage assessment to Storm Director.
- C. Provide updates to Storm Director as needed concerning restoration progress.
- D. Monitor manpower and equipment requirements and update Storm Director as required.
- E. Keep a list of all company and outside crews and their locations.
- F. Determine and assign appropriate manpower and equipment for each situation.
- G. Provide outside crews with all necessary information and safety information.
- L. Monitor and provide assistance in repairing vehicles.

Natural Gas Operations Supervisor

- A. Make assignments and dispatch crews as necessary in order to ensure orderly and efficient restoration.
- B. Provide damage assessment to Storm Director.
- C. Provide updates to Storm Director as needed concerning restoration progress.
- D. Monitor manpower and equipment requirements and update Storm Director as required.
- E. Keep a list of all company and outside crews and their locations.
- F. Determine and assign appropriate manpower and equipment for each situation.
- G. Provide outside crews with all necessary information and safety information.
- L. Monitor and provide assistance in repairing vehicles.

Customer Care / Logistics Director

- A. Coordinate the answering of telephone calls.
- B. Provide petty cash and pay bills as needed.
- C. Contact critical customer if the restoration time will be lengthy.
- D. Provide assistance and serve as liaison to employees and their families.
- E. Make final and definite arrangements for lodging, fuel, meals, snacks, coffee, drinks, etc. for all employees and contract employees.
- F. Check-in all outside crews and log the personnel and equipment included. Provide assistance with lodging, meals, etc. and keep up with crew locations.
- G. Provide assistance as needed.
- H. Ensure building security firm is operating at office.
- I. Ensure Division office supplies are in place if needed.
- J. Ensure caters are available as needed.

Engineering Director

- A. Continue processing customer outage system analysis and monitoring the system to determine outage locations.
- B. Work with Storm Director and Operations Director to determine restoration requirements.
- C. Provide periodic outage updates to the PSC and Nassau County EOC.

10. Operating Procedure

These instructions are intended to give the employee working on the line information as to the general procedure to be followed under hurricane conditions.

The Electric Operations Manager and Customer Service Manager will review these instructions with their employees each year so that they may become familiar with the details. This should be done before July 1of each year.

A. BEFORE THE STORM

All operating personnel should be instructed as to:

- 1. Safety and operating procedures to be followed during the storm.
- 2. Where and when materials and supplies will be available.
- 3. Their assigned areas and supervisor.
- 4. Any provisions made for feeding and lodging.
- 5. Work days will normally be two shifts. Each shift will consist of at least 12 hours but could be 16 hours.
- 6. The necessity of dividing line crews for clearing and minor repairs.
- 7. Internet and telephone communication procedures with appropriate list of telephone numbers.

B. DURING THE STORM

1) First Stage - Repairing All Cases Reported

In order to reduce the over-all outage time to customers who may be interrupted at the beginning of the storm, trouble will be handled in a normal manner during the early stages.

2) Second Stage - Clearing Trouble From the Lines

In order to maintain service to essential customers and feeders; when the volume of trouble increases to the point where large areas are interrupted, the Supervisor will instruct crews to clear trouble from the lines without making repairs.

- a. Secondary or service wires may be cleared by cutting the conductor away from energized lines or by opening the transformer cut-out.
- b. Damaged primary conductors may be cleared by cutting and <u>rolling back</u>, a primary jumper or conductor at the cross arm or by sectionalizing switching, if applicable.
- 3) Third Stage De-energizing Main Lines

When the winds reach the point where it is no longer safe for crews to continue clearing operations all restoration activities will cease. The Line Supervisor may instruct crews to de-energize main line feeders at substations if necessary to clear extremely hazardous conditions.

C. AFTER THE STORM

1) Sequence of Restoration

The sequence of restoration after the winds subside to a safe working level will be as follows:

- a. Transmission
- b. Substations
- c. Essential customers

- d. Feeders
- e. Undamaged primaries (fuse replacement only)
- f. Damaged primaries
- g. Secondaries
- h. Services
- i. Street lights

2) Line Patrols

To prevent further damage, all distribution lines, which have "locked out" due to the storm, must not be re-energized until patrolled and cleared of primary faults.

11. TELEPHONE OPERATORS GUIDE

During any major interruption our customers will naturally be concerned about falling wires, burning wires, defrosting refrigeration and even their daily routines in which electricity plays a part. The most important test we have is maintaining good relations during these emergencies. Those employees answering telephones must keep this in mind - be calm, pleasant and sympathetic with the customer and at the same time getting the necessary information needed to clear dangerous conditions and restore service as soon as possible, giving as much information to the customer that is available.

Outlined below is a suggested procedure to be used during three different phases of an interruption (The Director of Electric or Electric Operations Manager will determine when Phase 1 begins and when movement to Phase 2 and 3 is indicated):

<u>Phase 1</u> - will be in effect until the time of the first trouble calls are worked or until it is evident that there is a widespread damage in that area.

<u>Phase 2</u> - will be in effect following Phase 1 until damage evaluations have been made and estimate of the time required for making major repairs.

<u>Phase 3</u> - will begin in an area where an estimate of the time required to make major repairs is available and will continue until all trouble is clear.

Your supervisor will advise you when conditions change from one phase to another in accordance with the routines outlined below:

Suggested Answering Routine to be used by All Operators

Phase 1 - Early Trouble Prior to Extensive Damage

- 1. "Florida Public Utilities, May we help you please."
 - a. If no lights, no power, lights dim, ask: "What is your name, address and telephone number please?"
 - b. If wire down, pole broken, tree on a line, ask:
 - "Is the wire burning?"
 - 2) "Are your lights working?"
 - 3) "We hope to be able to make repairs shortly. Thank you very much for calling."

Phase 2 - Extensive Damage Evident But Estimate of Repair Time Not Available

1. "Florida Public Utilities, May we help you please."

- a. If no lights, no power, lights dim, ask: "What is your name, address and telephone number please?" b.
 - If wire down, pole broken, tree on a line, ask:
 - 1) "Is the wire burning?"
 - 2) "Are your lights working?"
 - 3) "Our electric system has suffered considerable damage in your area and we haven't been able to make an estimate of the time required for repairs. Our crews are working now and if your service has not been restored by (morning/afternoon) please call again. Thank you."

Phase 3 - Damage Evaluated and Repair Time Estimated

- "Florida Public Utilities, May we help you please." 1.
 - If no lights, no power, lights dim, ask: "What is your name, address and telephone number a. please?"
 - b. If wire down, pole broken, tree on a line, ask:
 - 1) "Is the wire burning?"
 - 2) "Are your lights working?"
 - 3) "We have crews working on the lines which serve your area and repairs should be made by (time). If your electricity us not on by that time, please call again. Thank vou."

Operators Guide

You will be relieved for meals, etc., and at the end of your shift.

Remember a properly handled telephone conversation with a customer can create an immeasurable amount of good will. When conversing with customers, keep the following points in mind:

- 1. Be courteous to each customer.
- 2. Give him/her as much information as is available of the restoration work.
- 3. Record each call and report the information vital to restoring the customer's service.
- 4. Handle each call as briefly as possible.
- 5. Thank the customer for calling.
- 6. Do not give the news media information. If a request for new information is received, record the name of the individual, news organization, telephone number and specific request. Inform the caller that a company representative will return the call. The information should be sent immediately to the Electric Operations Manager, Northeast Florida.
- 7. During an emergency condition, some customers will contact the company for reasons that do not pertain to the emergency. These calls should be recorded and the exact customer needs should be stated in the remarks column. These calls may include disconnections, reconnections, etc., or may be a personal call to an employee. After the contact has been recorded, the completed form should be given directly to the supervisor.

Entering Outages

Each customer call will be recorded in the Outage Management System (OMS). The information entered should be entered accurately to ensure the system operates properly. The information entered will be stored as a permanent record and will be used to analyze the nature of the outages.

Should emergency situations come to your attention, please notify a supervisor. The method of this documentation will be determined.

12. MEDIA/PUBLIC INFORMATION GUIDE

In order to monitor all information given to media and public sources, only the Electric Operations Manager, Northeast Florida, Manager of Communications or their designee will make press releases. If other employees are asked by media or public agencies for information, politely ask them to contact the Electric Operations Manager, Northeast Florida or Manager of Communications for the latest information.

13. WAREHOUSE PROCEDURE

During an emergency, material is vital to promptly and efficiently restore service to all customers. It is therefore important to monitor all stock levels to ensure adequate supplies are on-hand and if stock levels get low, be able to quickly order additional materials.

All material taken from the storeroom or remote storeroom will have the appropriate documentation completed before being removed from the stores area. The stores personnel will ensure this is followed.

Only authorized personnel should be in the stores area. Stores personnel will monitor those in the stores area to ensure compliance.

14. OFFICE PROCEDURE

This section will involve that information and other procedures necessary to ensure that the Office operation continues to operate during any emergency that may occur.

Annual

- 1. The Customer Service Manager will update information regarding the Office operations.
- 2 Information about the contingency plan will be updated by the Customer Service Manager each year.

Prior to the Emergency

- 1. The Electric Operations Manger and Customer Service Manager will decide on the appropriate contingency plan necessary based on the emergency situation and begin contingency operations.
- 2. The Customer Service Manager will ensure that protective covering is available and installed on all Office equipment and server to ensure damage, if any, is minimized.

After the Emergency

Contingency Plan #1

1. Due to the damage to the NE FL facilities, all mail and payments will go directly to the Northwest Florida office. This may not be the best alternative due to the issues with the USPS but is the most practical.

- 2. NW Florida personnel will process the mail using personnel as needed. Deposits will be made normally on a daily basis.
- 3. As soon as NE FL is capable of processing payments normally, payment processing will be handled normally.

Contingency Plan #2

- 1. Due to the inability of the Corporate Office to accept updated information from the Office, it will be necessary to send payment information to a remote location.
- 2. NE FL will continue to process payments normally and make deposits accordingly.
- 3. The IT Director will provide NE FL with the appropriate directions on where to send the information concerning payments. This information will be added to this procedure when it becomes available.
- 4. All information on payments will be saved to a CD on a daily basis and stored in a safe place. If possible a hard copy of the information should also be printed and stored in a safe place.

15. Personnel Backup Contingencies

Should the following personnel not be available during the emergencies, personnel in the positions listed below that position will fill in as needed.

Director of Electric Electric Operations Manager

Electric Operations Manager Assistant Electric Operations Manager

<u>Propane Operations Manager</u> Natural Gas Operations Supervisor

Engineering Technical Projects Manager

<u>Customer Care Manager</u> Customer Care Supervisor

16. <u>EMPLOYEE ASSIGNMENTS</u>

	TERTATIVE	CONEDULE			
	AY SHIFT	NIGHT SHIFT			
Beg	IN AT 6:00 AM	Begin a	t 6:00 PM		
	OFFICE	OF	FICE		
Buddy Shelley Bill Grant Jorge Puentes	Electric Operations Mgr. Technical Projects Mgr.	Patti Thornton Mia Goins	Customer Care Supervisor Telephone		
Mark Cutshaw	Technical Projects Director	Leslie Zambrano	Telephone		
Roger LaCharite	Customer Service Manager	Lynn Britton	Logistics		
Greg Blazina	Propane Manager	Curtis Boatwright	Engineering		
Mary Atkins	Engineering	Chris Hebert	Engineering		
David Richardson	Logistics	SERVIC	E CREWS		
Linda Winston	Logistics	Shannon Wagner	Crew Leader		
Rena Williams	Telephone	Vacant	Apprentice		
Linda Gamble	Telephone		_		
Renee Bolyard	Telephone	OFFICE/PATE	ROLMAN/GUIDE		
Waldron Hamilton	Telephone				
Susan Beale	Telephone	Jevon Brown	Telephone/Patrolman		
LIN	NE CREWS				
Rich Crigger	Assistant Elect Ops Mgr.	PROPANE	OPERATIONS		
Steve Taylor	Senior Lineman	Vacant	Service Tech. B		
Clint Brown	Senior Lineman	Terry Simmons	Gas Utility Worker		
Billy Clardy	Crew Leader	NATURAL GAS	OPERATIONS		
Donnie Maxwell	Lineman	George Speerin	Supervisor		
Parrish Kildow	Senior Lineman	Rod Calhoun	Service Tech		
SER	VICE CREWS	-			
Al Harris	Senior Lineman	DAY SHIFT	(CONTINUED)		
Vacant	Lineman	Begin a	t 6:00 AM		
Dean Montgomery	Lineman	Degina	0.00 / 10		
Justin Beverly	Lineman	Natural Gas	Operations		
Jeff Hindsley	IMC Tech	925 Vot 21.927 67 1827	total barry waar of		
		Cedric Mitchell	Service Tech		
James McDaniel	IMC Tech				
	STORES				
Roger Reed (FR)	Stores Supervisor	PROPANE	DPERATIONS		
Randy Moore (FR)	Warehouse Assistant	Dave Pluta	Service Tech. A		
	. 	James Moore	Service Tech. B		
		Jody Montgomery	Gas Utility Worker		
PATRO	DLMAN/GUIDE				
Lewis Peacock	Patrolman/Guide	Tors Maan	SAFETY		
Sarah Davis	Patrolman/Guide	I om Moen	Sarety, Training & Compliance		
Brandy Baldwin	Patrolman/Guide		Compliance		
,					

TENTATIVE SCHEDULE

17.

EMERGENCY ASSISTANCE LIST

Company		Contact	Telephone	Available Resources
Southeast Electric Exch	nange	Scott Smith	(404) 233-1188	Crews
			(404) 357-6800 cell	
		Jim Collins	(404) 229-2301 cell	
FPU-Marianna		Lynwood Tanner	(850) 209-3409	Crews, Tree Crews, Support
		Jerry Lewis	(850) 209-8898	
ATT		Scott Miller	(904) 407-2569	Engineering
(10 %, 0.00E)			(904) 238-8263 cell	
		Marvin Fisher	(904) 727-1544	Engineering
			(904) 403-1894	
Comcast		Mike Jackson	(904) 626-2400	Day contact
			1-855-962-852531HFC	After hours answering serv.
Quantas/Dillard Smi	th	Brian Imsand	(423) 490-2206	Crews
Pike Electric Coop		Barry McCarthy	(912) 258-0645 cell	Crews
		bmccarty@pike.cor	(850) 632-5769 home	
Public Service Commis	ssion	Rick Moses (EOC)	(850) 431-6582	Primary contact
	and the second second		(850) 408-4757 cell	
PSC		Tom Ballinger	(850) 413-6680	Backup contact
Florida Electric Power Coo	rd Group	R J Midulla	(813) 289-5644	Crews
Mastec		Ron Martin	(904) 562-2135	Crews
C & C Powerline	3	Rick Springer	(904) 751-6020	Crews
		rick@ccpowerline.	(904) 759-4703	
Davey		Mike Mittiga	(407) 383-0648 mobile	Tree Crews
Asplundh	ī	Ronnie Collins	(352) 256-2370 cell	Tree Crews
JEA		Dispatcher	(904) 665-7152	Power Supply
Vehicle Repairs Assistance				
Company	Contact		Telephone	Available Resources
Altec	Bobby Ki	nittel	(352) 303-3894	Service Technician Supervis
Altec	Bobby.kn	ittle@altec.com	1-877-462-5832	
Altec	Joe Oshei	m	(205) 458-3445	Mobile Service Tech
	cell		(229) 375-9696	
Auto Masters Fleet Services	David Str	ingfield	(904) 716-1601	Owner
	Gary Sun	ley	(904) 838-3038	Sales Manager
	Rey Marc	uez	(904) 483-5449	Vice President
Carter Auto	Tommy C	Carter	(904) 491-8255	Repairs and Tires
First Coast Fab.	Doug Wo	lf	(904) 261-7611	Welding And Machine Work
General Truck	Howard J	ohnson	(904) 588-5423	Crane Repairs and Parts
Maudlin International Trucks	Jerry Gree	en	(904)509-0012	Truck repairs and Parts
	Jason Cor	reia	(904) 783-9822	Service Manager
Moeller	George M	loeller	(904) 415-2094	Vehicle Repairs and Welding
Napa	Tom Cox		(904) 261-4044	Parts and Tools
Power Pro-Tech	Jimmy Ev	ans	(800) 437 4474	Generator Repairs
Generator & HVAC Service	James Sta	mper	1-800-437-4474	8 th and Lime locations
			321-274-8578	
	Onsite En	nergency	888-218-0298	780 Amelia Island Pkwy
			678-566-2439	-
Tiresoles	Scott Mc	Alpine	(904) 378-0090	Main Office
	Pat Demia	inenko	(954) 354-1810	Operations Manager
			Cell (904) 610-9498	, C

18. EMERGENCY STOCK REQUIREMENTS

Bin#	Description	Qty Required	Qty On Hand	Order *
31-1065	WIRE,#8 BARE SOL SD CU TIE WIRE (SPOOL)	1000	2500	
31-1095	WIRE,#6 CU SD SOLID POLY,TX RISER WIRE (SPOOL)	1000	750	3000
31-1115	WIRE,#4 BARE SOL CU SD OH (SPOOL)	1000	990	2000
31-1310	WIRE,#4 AL OH SOFT TIE (SPOOL)	1000	2616	
31-1350	WIRE,1/0 BARE STD AL OH (AZUSA)	1000	10535	
31-1410	WIRE,4/0 BARE STD AL OH (ALLIANCE)	1000	23686	
31-1460	WIRE,396.4 BARE STD AL OH (CANTON)	1000	12625	
31-1470	WIRE,#477 BARE STD AL OH (COSMOS)	1000	5564	
31-1475	WIRE,#636 BARE STD AL OH (ORCHID)	1000	9742	
31-1479	WIRE,#2 AL DUPLEX OH (DOBERMAN/XLP)	1000	9500	1222
31-1480	WIRE,#6 AL DUPLEX OH (COIL)(SHEPPARD)	600	1850	
31-1580	WIRE,1/0 TRIPLEX OH (COIL)(GAMMARUS)	1000	3000	4000
31-1585	WIRE,1/0 TRIPLEX OH (REEL)(GAMMARUS)	1000	5650	
31-1610	WIRE,4/0 STD TRIPLEX AL OH (LAPAS)	500	1125	
31-1660	WIRE,1/0 QUAD AL OH (SHETLAND)	200	990	
31-1715	WIRE, GUY 3/8 BEZINAL COATED	1000	2500	
33-1030	WIRE,#2 AL URD 15KV	3000	6960	
33-1050	WIRE,4/0 INS STD AL URD 15KV	6000	11230	
33-1070	WIRE,750MCM AL URD 15 KV	3000	5292	
35-1040	ANCHOR SCREW 5' X 10"	10	61	
35-1050	ANCHOR SCREW 8' X 10"	10	37	
35-1145	ARRESTOR, LIGHTNING, SILICONE 9 KV	20	64	
35-2060	BRACKET, MOUNTING, AL ONE CUTOUT &	20	24	30
35-2065	BRACKET MOUNTING AL	20	40	50
35 2005	BRACKET, SINGLE INSUL, FIBERGLASS,	20	30	277724
35 2073	PDACKET MOUNTING AL HEAVY DUTY	10	15	
35-2080	CLAMP CPOUND POD 5/8"	20	260	
35-2650	COUPLING GROUND ROD 5/8, CU CLAD(NON-	50	157	100
35 2661	COVED SERVICE SI FEVE #C2	200	<u>810</u>	100
35-2001	COVER, SERVICE SLEEVE #C2	200	362	200
35-2002	COVER,H-TAP #C5	200	239	200
35-2005	CUTOUT SILICONE SEACOAST	50	56	42
35-2717	FUSEHOLDER 200A CUTOUT	20	26	44
35_2719	FUSEHOLDER 100A CUTOUT	10	11	25
35_2925	CHARD LINE 336 4 MCM AL OD ACSD	30	61	43
35-2840	CUARD LINE 477 MCM AL OR ACSR	30	49	
35-2040	CUARD SOURDEL	10	49	25

35-3014	INSULATOR, UPRIGHT 35 KV SILICONE	30	100	48
	INSULATOR, HORIZ MOUNT 35KV SILICONE			1
35-3025	INT BASE	60	71	96
35-3040	INSULATOR, POST TYPE 88KV W/CLAMP	12	20	
35-3085	INSULATOR, SUSPENSION SILICONE 25 KV	20	31	36
35-3120	INSULATOR, GUY STRAIN 8 FT	10	13	20
35-3121	INSULATOR, GUY STRAIN 8 FT 36000 LB	10	105	
35-3245	MOUNT,TX,BRACKET, SINGLE PHASE	10	25	
35-3260	MOUNT,TX CLUSTER AL ABOVE 3-50KVA	4	6	
35-3520	POLE,30 CL 6 CP	15	18	
35-3530	POLE,35 CL 4 CP	10	14	5 day
35-3545	POLE,40 CL 3 PP	10	13	
35-3550	POLE,40 CL 1 PP	15	19	
35-3575	POLE,45 CL 3	15	9	
35-3579	POLE,45 CL H1	5	5	
35-3590	POLE,55 CL H1	1	6	
35-3760	ROD-GROUND COPPER CLAD 5/8" X 8' NON- THRD	30	404	
35-3945	SWITCH, UNDERSLUNG	6	8	
35-3946	SWITCH,INLINE	6	14	
37-1000	CLAMP, DEADEND, #6-#4 AL SERVICE WEDGE	20	181	
37-1020	CLAMP, DEADEND, #2-1/0 AL SERVICE WEDGE	40	88	200
37-1040	CLAMP, DEADEND, 4/0 AL SERVICE WEDGE	40	147	200
37-1250	CLAMP,PARA GR #2 STD AL	50	181	
37-1260	CLAMP,PARA GR #1/0 STD AL W/SS BOLTS	50	187	
37-1270	CLAMP,PARA GR 4/0 STD AL	50	88	
37-1290	CLAMP,PARA GR 350-477 AL OR 336-397 ACSR	50	120	
37-1380	CONN.H-TYPE (WR9)	50	287	
37-1390	CONN.H-TYPE (WR159)	100	247	
37-1400	CONN.H-TYPE (WR189)	100	200	200
37-1415	CONN.H-TYPE (WR259)	100	150	200
37-1420	CONN.H-TYPE (WR379)	100	539	
37-1425	CONN.H-TYPE (WR399)	100	264	250
37-1430	CONN.H-TYPE (WR419)	100	79	100
37-1455	CONN.H-TYPE (NB500-40)	30	224	
37-1456	CONN.H-TYPE (NB500)	30	126	
37-1620	CONNVISE ACTION #6 CU	100	593	
37-1630	CONN VISE ACTION #4 CU	100	202	400
37-1640	CONNVISE ACTION 6 SOL #2 SOL CU	100	702	300
37-1650	CONNVISE ACTION 2 SOL-#2 STD CU	100	522	500
37-1660	CONNECT-VISE ACTION 2/0 SOL -1/0 STD CU	100	206	450
37-1670	CONN VISE ACTION 1/0 SOL -1/0 STD CU	100	101	350
37-1710	CONN LIPD FLOOD SEAL 4 DOSITION	30	39	550
37 1712	CONNITY OF COSITION	25	38	
5/-1/15	COM, IA, OR, OFOSITION	25	100	

37-1770	DEADEND,AUTOMATIC SS #2 STD CU	20	132	
37-1780	DEADEND, AUTOMATIC SS 1/0 STD CU	20	48	
37-1785	DEADEND, AUTOMATIC SS 2/0 STD CU	10	87	
37-1790	DEADEND, AUTOMATIC SS 4/0 STD CU	20	107	
37-1800	DEADEND, AUTOMATIC SS #2 STD AL	20	100	
37-1810	DEADEND, AUTOMATIC SS 1/0 STD AL	20	56	
37-1840	DEADEND, AUTOMATIC SS 4/0 STD AL	20	31	
37-1850	DEADEND, AUTOMATIC SS 394.6 AL	20	82	
37-1855	DEADEND, AUTOMATIC SS 477 AL	20	68	
37-1891	DEADEND,FULL TENSION,COMP477 AL W/2 HOLE LUG	15	44	
37-1892	DEADEND, FULL TENSION, COMPRESSION 636	15	18	
37-1970	LUG, TERM, URD 2/0 AL 2-HOLE	50	100	
37-1980	LUG,TERM,URD 4/0 AL 1-HOLE	50	222	
37-2120	SLEEVE,AUTO SPLICE #8 STD-#6 SOL CU	20	64	
37-2130	SLEEVE,AUTO SPLICE #6 STD-#4 SOL CU	20	59	
37-2141	SLEEVE,AUTO SPLICE #2 STD CU	20	255	
37-2161	SLEEVE,AUTO SPLICE 1/0 CU	20	241	
37-2190	SLEEVE,AUTO SPLICE 4/0 STR CU	20	44	
37-2340	SLEEVE, SERVICE 2/0-2/0 AL/ACSR (IKL47)	100	106	100
37-2350	SLEEVE,SERVICE 4/0-1/0 AL (IKL66)	100	178	
37-2360	SLEEVE,SERVICE 4/0-2/0 AL (IKL67)	100	122	100
37-2370	SLEEVE,SERVICE 4/0-4/0 AL (IKL69)	100	133	
37-2375	SLEEVE,SERVICE 350-350 AL	50	111	
37-2430	SLEEVE, FULL TENSION #2 STD AL	20	256	
37-2450	SLEEVE, SERVICE FULL TENSION 1/0 STD AL	20	195	
37-2480	SLEEVE, PRIMARY FULL TENSION 4/0 AL	20	113	
37-2515	SLEEVE, PRIMARY FULL TENSION 397.5(396.4)	20	29	
37-2530	SLEEVE, PRIMARY FULL TENSION 477 AL	20	47	
37-2535	SLEEVE, PRIMARY FULL TENSION 636 AAC	20	65	
37-2665	SPLICE KIT, URD 15KV #2 STD AL	12	58	
37-2670	SPLICE KIT,URD 15KV-2/0 AL	17	43	
37-2680	SPLICE KIT,URD 15KV-4/0 AL	12	36	
37-2690	SPLICE KIT, URD 15KV 750 AL	12	35	
37-2820	TERMINAL,PIN #2STD AL	50	116	300
37-2830	TERMINAL,PIN 1/0 STD AL	50	220	
37-2835	TERMINAL,PIN 2/0 STD AL	50	31	20
37-2840	TERMINAL,PIN 4/0 STD AL	50	80	
37-2845	TERMINAL,PIN 350 AL	10	59	
37-2850	TERMINAL,PIN 500 AL	10	64	
39-1220	FUSE LINK 7 AMP QA	75	117	50
39-1240	FUSE LINK 15 AMP QA	50	167	
39-1260	FUSE LINK 25 AMP QA	50	117	50
39-1270	FUSE LINK 30 AMP OA	75	137	

39-1290	FUSE LINK 50 AMP QA	75	180	25
39-1320	FUSE LINK 75 AMP QA	25	69	25
39-1330	FUSE LINK 100 AMP QA	25	73	
41-1114	KITS, TERM OH FOR 2/0 AL	10	38	
41-1115	KITS, TERM OH FOR #2 AL	20	20	10
41-1120	KIT, TERM SILICONE FOR #2 AL	10	29	
41-1125	KIT,TERM OH,SILICONE FOR 4/0 AL	20	27	
41-1148	ELBOW,LOAD BREAK TERMINATOR #2 W/TEST POINT	20	64	
41-1150	ELBOW,LOAD BREAK, URD, 2/0 AL,15KV W/TEST POINT	10	34	
41-1160	TERMINATOR,LOAD BREAK 4/0 W/TEST POINT	20	107	
41-1195	STRAP, MOUNTING, TERMINATOR, #2,2/0 & 4/0	50	67	
41-1200	VAULT,SECONDARY,PEDESTAL	6	26	12
N/S	#2 Extended Repair Elbows	12	OK	
N/S	#2/0 Extended Repair Elbows	12	ОК	
N/S	#4/0 Extended Repair Elbows	12	OK	
N/S	EXTENDED SPLICE REPAIR KIT,#2 STR,3M QS II	5	6	
N/S	EXTENDED SPLICE REPAIR KIT,2/0,3M QS II	10	14	
N/S	EXTENDED SPLICE REPAIR KIT,4/0,3M QS II	5	8	
NS 35-1185	ATTACHMENT, DOWN GUY	20	20	50
NS 35-1186	ATTACHMENT,DOWN GUY (POLE PLATE) WOOD 35MLB	10	ок	
NS 35-1187	ATTACHMENT, DOWN GUY CONCRETE 35MLB	10	OK	
NS 35-1350	BOLT, DOUBLE ARMING, GALV 5/8 X 18	30	OK	
NS 35-1360	BOLT, DOUBLE ARMING, GALV 5/8 X 20	20	OK	
NS 35-1430	BOLT, DOUBLE ARMING, GALV 3/4 X 22	20	OK	
NS 35-1480	BOLT, DOUBLE UPSET, GALV 5/8 X 12	20	ОК	
NS 35-1640	BOLT, MACHINE, GALV 5/8 X 10	100	70	100
NS 35-1650	BOLT, MACHINE, GALV 5/8 X 12	100	20	200
NS 35-1660	BOLT, MACHINE, GALV 5/8 X 14	100	190	
NS 35-1800	BOLT, MACHINE, GALV 3/4 X 20	50	ОК	
NS 35-1810	BOLT, MACHINE, GALV 3/4 X 22	50	OK	
NS 35-1820	BOLT, MACHINE, GALV 3/4 X 24	50	ОК	
NS 35-1850	EYELET, 3/4" HOLE	50	75	400
NS 35-2245	CLAMP SUPPORT FOR #2,1/0,4/0 CU	50	ОК	
NS 35-2255	CLAMP SUPPORT FOR #2,1/0,4/0 AL	50	OK	
NS 35-2265	CLAMP SUPPORT 394.6-477 AL	50	ОК	
NS 35-2375	CLEVIS, SECONDARY EXTENSION	20	ОК	
NS 35-2780	EYELET, THIMBLE ANGLE 5/8"	20	ОК	25
NS 35-2895	GUY GRIP,3/8", BEZINAL COATED (352895)	100	10	200
NS 35-3130	LAG SCREW - 1/2"X4" GALV.	150	500	
NS 35-3290	NUT EYE.GALV 5/8	30	30	50
		20	0.1	

NS 35-3320	NUT,THIMBLE EYE 5/8	20	ОК	
NS 35-3881	STRAP, CONDUIT OR PIPE 2" STAINLESS STEEL	40	OK	100
NS 35-3886	STRAP, CONDUIT OR PIPE 3" STAINLESS STEEL	40	ОК	
NS 35-3970	TAPE,SCOTCH #23-2	20	OK	
NS 35-4020	TAPE, VINYL	50	OK	400
NS 35-4030	THIMBLE, GUY WIRE 3/8	200	OK	
NS 35-4335	WASHER, DOUBLE COIL 5/8"	200	OK	
NS 37-1865	DEADEND,AUTO,SLIDE OPENING WEDGE #4- 4/0	50	ок	
NS 37-1868	DEADEND,AUTO,SLIDE OPENING WEDGE 4/0- 600	50	ОК	
	Transformer, Pad Mount 100 KVA	7	6	
	Transformer, Pad Mount 50 KVA	7	12	
	Transformer, Pad Mount 75 KVA	7	6	

*As of 5/5/10

19. TRANSPORTATION AND COMMUNICATION EQUIPMENT

Unit #	Tag / Mo.	Year	Model	Body Type	Dept. Code	Employee	comments
691A	GBP243	1982		Trailer	EL451	Reel Trailer	
692A	GBP172	1982		Trailer	EL451	Reel Trailer	
705A	GBP174	1992		Trailer	EL452	Equipment Trailer	
708A	GBP225	1998		Trailer	EL452	Equipment Trailer	
740	GBP672	1995	4700	Bucket	EL452	Parrish Kildow	
747	GBP673	1998	4800	Bucket	EL451	Donnie Maxwell	
754	GBP383	1999		Trailer	EL451	Reel Trailer	
755	GBP444	1999		Trailer	EL451	Reel Trailer	
763A	GBC971	2000		Trailer	EL452	Equipment Trailer	
774	GBP445	2001	Ranger	Comp. P/U	WH450	Roger Reed	
785	GBF903	2001		Trailer	MK412	BBQ Trailer	
786	GBC996	2002		Trailer	EL451	Lawn Maint Trailer	
790	GBP173	2003	CZ12KP	Trailer	EL451	Pole Trailer	
792	GBP902	2004	4300	Bucket	EL452	Steve Taylor	
795	K413CK	2006	Trail Blazer	SUV	CS411	Patti Thornton	
796	T004DR	2006	Silverado	Pickup	EL451	On-Call	
798	GA4363	2005	7400	Digger Derrick	EL452	Poles and transformers	
804	GBP667	2008	4300	Bucket	EL451	Billy Clardy	
810	GBP661	2011	4300	Bucket	EL451	Clint Brown	
811	GBC917	2010	F-150	Pickup	SM711	Tom Moen	
812	GBC945	2010	Ranger	Comp. P/U	EN450	Curtis Boatright	
813	693NVX	2010	F-150	Pickup	EL450	Jorge Puentes	
814	694NVX	2010	F-150	Pickup	EL451	Spare	
817	GBC976	2011	Ranger	Comp. P/U	EL452	Lewis Peacock	
818	GBC974	2011	Ranger	Comp. P/U	EL452	Brandy Baldwin	-
819	GBC980	2011	Ranger	Comp. P/U	EL452	Sarah Davis	
820	GBC973	2011	Ranger	Comp. P/U	EL452	Jevon Brown	
821	GBC988	2011	F-350	Utility	EN450	Jeff Hindsley	
822	GBC9 57	2012	F-550	Utility	EL451	Shannon Wagner	
824	W396 YD	2012	Escape Hybrid	SUV	MK412	David Richardson	
825	GA1943	2012	M2-106	Bucket	EL451	Al Harris	
826	BMDJ06	2013	Explorer	SUV	GM440	Mark Cutshaw	
827	BMDJ20	2012	F-150	Pickup	EN450	William Grant	
828	BMDJ19	2012	F-150	Pickup	EL451	Rich Crigger	
829	GBC970	2013	F-150	Pickup	EN450	Chris Hebert	
830	T005DR	2013	Fusion	Sedan	CS411	Roger LaCharite	

831	GBF938	2013	F-250	Utility	EN450	Jeff Hindsley	
832	GA9255	2013	M2-106	Bucket	EL451	Spare	
833	GA9256	2014	M2-106	Digger Derrick	EL451	Spare	_
834	GBC968	2013	185DPQ	Trailer	EL451	Air Compressor	
155	GBU483	2004	F550	Utility Welder	OP450	NE Gas Ops Spare	
213	GBC953	2010	Express 2500	Van	OP450	NE Gas Ops On-Call	
229	GBF936	2013	F-150	Pickup	OP450	George Speerin	
823	GBC8 83	2012	F-550	Utility	OP450	Dave Pluta	
787	GA4431	2002	4300	Bobtail	PR450	Spare	
793	GBQ063	2005	BC/M2	Bobtail	PR450	James Moore	-
797	GBZ814	2006	F550	Utility	PR450	Dave Pluta	
803	GA0302	2008	4300	Bobtail	PR450	Terry Simmons	_
805	GBC966	1982		Trailer	PR450	Equipment Trailer	
806	GBC897	2000	HSE16	Trailer	PR450	Equipment Trailer	
807	GBF941	2001	F550	Utility	PR450	On-Call Truck	
815	GBZ807	2006	RF6101	Trailer	PR450	Equipment Trailer	
		2007		Forklift	WH450		
		2012		Forklift	WH450		
		1994		Generator	EL451		
		2001		Excavator	EL452		
		2009		Mower	EL451		_
		2006		Generator	PR450		_
		2000		Compress	PR450		_
		2001		Trencher	PR450		
20. CRITICAL CUSTOMER LIST

A. Hospitals, Clinics, Nursing Homes

Name	Address	Telephone		Contact Person
Baptist Medical Center - Nassau	1700 East Lime St	321-3500 (n	nain)	Wayne Arnold
Amelia Island Care Center	2700 Atlantic Ave	261-5518	5	Sharon Jamison
		753-3575 H	ome	
Quality Health	1625 Lime St	261-0771		Steve Jordan
		225-2351 (Ans	swer service)	
Nassau County Health Dept.	30 South 4 th St.	548-1860 or 54	48-1800	Eugina Seidel
Savannah Grand	1900 Amelia Trace Ct. 32	21-0898	Cell 662-4568	TammiHolland
Home 321-3478				
Osprey Village	76 Osprey Village Dr.	277-3337 x11	Cell 753-2435	5 Dana Sargent
Jane Adams House	1550 Nectarine St	261-9494	Cell 583-3526	Jeanett Adams

B. Public Utilities - Major Resorts

Name	Address		Tele	phone	Contact Person
Fernandina Waste Water/	Water	1007 South 5th St	277-7380 Ext. 224	753-1412 (cell)	John Mandrick
Nassau Utilities		5390 First Coast Hwy	261-0822 261-9452	491-7330	Doug Hewett After Hours
			753-2989 plant		Danny White
Florida Power and Light			(800) 226-3545		1994-999 4 - 24 2022
AIP - Security			277-5914	491-4445	Alan Barker
Ritz Carlton			277-1100	753-2122 cell	Tom Gagne
		120			
ATT		1910 S. 8 th St.	407-2569 (904) 23	8-8263(cell)	Scott Miller
			727-1544 (904) 40	3-1894(cell)	Marvin Fisher

C. Major Disaster Shelters/Motels

Name	Address	Telephone	Contact Person
Nassau Holiday	Hwy 17, Yulee	225-2397	
Amelia Hotel	1997 So. Fletcher Ave	261-5735	
Amelia South Condo's	3350 So. Fletcher Ave	261-7991	
Beachside Motel	3172 So. Fletcher Ave	261-4236	
Elizabeth Pointe Lodge	98 So. Fletcher Ave.	277-4851	
Days Inn	2707 Sadler Road	277-2300	
Hardee Elementary	2200 Susan Drive	491-7936	
F. B. High School	435 Citrona Drive	491-7937	
F.B. Middle School	315 Citrona Drive	491-7938	
Southside Elementary	1112 Jasmine St.	491-7941	
Yulee Elementary	86083 Felmore Rd.	225-5192	
Yulee High School	85375 Miner Rd.	225-8641	
Yulee Middle School	85439 Miner Rd.	491-7944	
Yulee Primary	Goodbread Road	491-7945	
Hampton Inn	2549 Sadler Road	321-1111	
Holiday Inn	76071 Sidney Place	849-0200	
Hampton Inn (downtown)	19 South 2nd St	491-4911	
Comfort Suites	2801 Atlantic Ave.	261-0193	

D. Municipal and State Emergency Services

Name	Address	Telephone	Contact Person
Florida Highway Patrol	Jacksonville	695-4115	Keith Gaston
American Red Cross	NE Chapter	358-8091	
Fernandina Police Dept.	Lime St.	277-7342	Dispatcher
Dept. of Transportation	Jacksonville	360.5400	
Chemtrec		1-800-424-9300)
Chlorine Institute		1-703-741-5760)

E. Communication and Broadcasting Services

Name	Address	Telephone	Contact Person
WOKV Radio		245-8866	Rich Jones
	Cel	1 718-7503	
WQIK Radio		636-0507	
WAPE Radio		245-8500/01	Tim Clarke

F. Major Food Storage/Processing Facilities

Name	Address	Telephone	Contact Person
Publix Super Market	1421 So. 14 th St	277-4911	
Winn Dixie Stores	1722 So. 8th St	277-2539	
Hedges Meat Shoppe	Hwy 17 South	225-9709	
Winn Dixie (Yulee)	22 Lofton Sq	261-6100	
Harris Teeter	4800 1st Coast Hwy	491-1213	
Super WalMart	SR 200	261-9410	
G. Correction Facilities			
Name	Address	Telephone	Contact Person
Nassau House	1781 Lisa Ave.	277-4244	
H. <u>Airports</u>			
Name	Address	Telephone	Contact Person
McGill Aviation Inc.	F.B. Airport	261-7890	Sean McGill
G. News Media			
Name	Address	Telephone	Contact Person
Fernandina Newsleader	261-3696 Fax	261-3698	

21. ADDRESS AND TELEPHONE LISTING OF ACTIVE EMPLOYEES

<u>Name</u>	Address	<u>Telephone</u>
Atkins, Mary	111 S. 11th St.	753-3208
Baldwin, Brandy	30970 Paradise Commons unit 316	556-0595
Beale, Susan	86189 Augustus Ave	225-0416
Beverly, Justin	45673 Pickette St, Callahan	370-9596
Blazina, Greg	115 Pineapple Ct., Longwood, Fl	407-339-5649
Boatright, Curtis	768 Wax Wing Lane	261-6988
Bolyard, Renee	96032 Inlet Cove Court	261-2123
Britton, Lynn Brown, Clint	Kingsland, Ga	248-252-7370
Brown, Jevon	86175 Courtney Isle Way #1210 Yulee	572-2132
Calhoun Rod	1887 White Sands Way	432-8255
Clardy Bill	97067 Lee Rd. Yulee	261-4269
Crigger Rich	32402 Suppy Parke Dr	891-0892
Cutshaw Mark	32547 Willow Parke	491-7107
Davis Sarah	2137 Oak Ridge Drive	891-8108
Gamble Linda	96090 Hidden Marsh Lane	277-8682
Goins Mia	1417 Holly Drive	352-0672
Grant, Bill	1714 Park Ave	491-7898
Harris, Alfonzo	96081 Baker Dr., Yulee	430-6142
Hebert, Chris	23904 Crescent Parke Dr.	277-3444
Hindsley, Jeff	1812 Reatta Ln	261-7952
Kildow, Parrish	2698 Forrest Dr #A8	912-387-6371
LaCharite, Roger	22 Long Point Drive	321-4262
Maxwell, Donnie	411 So. 5th St	583-1536
McDaniel, James	Fernandina Beach, Fl	753-3153
Moen, Tom	1603 Geddes Lane	310-9522
Montgomery, Dean	96681 Chester Rd, Yulee	415-3086
Montgomery, Jody	96132 Blackrock Rd. Yulee	753-0889
Moore, James	812 Parkview Place West	432-8354
Moore, Randy	76276 Dove Rd. Yulee	225-8769
Peacock, Lewis	86309 Yulee Hills Rd, Yulee	572-2186
Pluta, Dave	9/158 Castle Ridge Dr. Yulee	321-1343
Puentes, Jorge	86125 Moriches Drive	430-2011
Reed, Roger	2202 High Rigger Ct	261-3160
Speerin, George	2651 First Ave	548-0499 386-785-4506
Simmons, Terry	622 Spanish Way E	261-0321
Taylor, Steve	1621 Highland St.	261-8738
Thornton, Patti	2035 Bridal Rd.	261-8294
Wagner, Shannon	679 Grove Park Cir	748-3076
Williams, Rena	2034 Russell Road	491-6283
Winston, Linda	96075 Starlight Lane, Yulee	583-4210
Zambrano, Leslie	2135 Cumberland Ct.	556-5451

22. Emergency Telephone List

A.	Telephone Repair			
	AT & T	(904) 238-8263	Scott Miller	
		(904) 403-1894	Marvin Fisher	
	Comcast (Cabling & repair)	(904) 626-2400 cell	(Day) Mike Jackso	on
		1-855-962-8525	(After hours)	
Β.	Cell Phones			
	IT	(302) 736-7810	Joe Abba	
C	Indronwille Electric Authority	900 692 5542		
C.	Dispatahor	800-085-5542	-	
	Dispatcher Supervisor	(904) 665-4806) 	
	Storm Coordinator	(904) 665-4150	Allen Putnam	
	Storm Coordinator	(904) 665-7143	Garry Baker	
	SOC (System Operation Center)	(904) 665 4804	Kicky Erixton	
	SUC (System Operation Center)	(904) 000-4800		ATOD
D	Switching Activity (all)	(904) 277-1478	TURBINE OPER	ATOK
D.	Emergency Management	(004)549 4090	TDD	
	Nassau County	(904)348-4980	IBD	
E.	Law Enforcement - 911			
	Nassau County	225-0331	Sheriff-Bill Le	eper
	F.B. City	277-7342	City Police Chie	f – James Hurley
F	Ambulance 011			
r. G	News Media			
О.	Itews Media			
	WJWB-Channel 17 Jacksonville	641-1700	Fax 642-7201	
	WJXT-Channel 4 Jacksonville	399-4000	Fax 393-9822	
	WTLV-Channel 12 Jacksonville	633-8808	Fax 633-8899	
	WTEV-Channel 47 Jacksonville	564-1599	Fax 642-5665	
ц	City/County Officials			
п.	City/County Officials			
	Nassau County Office	491-7380		
	Danny Leeper	(H) 261-8029	430-3868 Cell	County Commissioner
	Stacy Johnson	(H) 261-1154	583-2746 Cell	County Commissioner
	Walter Boatright	(H) 879-2564	753-0141 Cell	County Commissioner
	County Manager)	(W) 491-7380	Ted Selby	
	Susan Steger – City Mayor	(W) 277-0788	206-0572 Cell	(H) 261-4372
	Michael Czymbor - City Manager	(W) 277-7305	753-4330 Cell	(H) 310-6182
	Jason Higginbotham - City Fire Chief		753-4293 Cell	
	James Hurley - City Police Chief -	(W) 277-7344	753-4244 Cell	
I.	Public Service Commission			
	Director	(800) 342-3552		
	Dan Hoppe-Director	(850) 413-6802		
	Mark Futrell-Director	(850) 413-6692		
T	Conceptor Bonois			
J.	See Emergency Assistance List Section	n 17		
	See Emergency Assistance Elst Secto	*** * * *		
К.	FPUC NE Substations			
	Stepdown	277-1974		
	JL Terry	277-1973		
	AIP	277-1975		

23. LOGISTICS

Motels:			
Amelia Hotel	261-5735	1997 South Fletcher Ave.	
Nassau Holiday Motel	225-2397	U.S. 17 South	,
Amelia South Condo	261-7991	3350 So. Eletcher Ave	
Elizabeth Point Lodge	277-4851	98 So Eletcher Ave	
Days Inn	277-2300	2707 Sadler Road	
Hampton Inn	321-1111	2630 Sadler Road	
Hampton Inn Doumtourn	401 4011	10 South 2nd Street	
Comfort Inn	491-4911	19 South 2 Street	
Comfort Inn	261-0193	2801 Atlantic Ave.	
Country Inn	225-3855	462577 SR 200	
Restaurants:			
Applebee's	206-4300	2006 South 8th Street	
Baxter's	277-4503	4919 1 st Coast Huay	
Florida House	491-3322	22 South 3 rd Street	
Sonny's BBO	261 6622	2742 South 5 Suber	
Sound 2 PPC	201-0032	2742 30. 8 31.	
123 147 142 147			
Barbara Jean's	277-3700	960030 Gateway Blvd.	
Huddle House	261-2933	1855 S. 8 th St	
Murrays Grill	261-2727	SR 200	
Chilis	225-8666	SR 200	
Food Stores:			
Harris Teeter's	491-1213		
Tianis recti s	491-1215		
Publix	277-4911		
Winn Dixie	277-2539		
Winn Dixie (Yulee)	261-6100		
Super WalMart	261-9410		
Cellular Phones			
Verizon call Joe	Abba IT (302) 736-7810		
cuir voo	100011 (002) 100 1010		
Water Supply:		Ice Supply:	
Fernandina City of to supp	ly water	Winn Dixie	277-2539
Nantze Springs Water Co.	800-239-7873		
Sarryiga Stations		Vahiala Danair Facilitian	
Flash Foods Store's	261 6562	venicie Repair Facilities:	
Flash Foods Store's	201-0303	A lass To doots in a To a	(5(1) (9(9550 West Dala Dala
Sonoco	277-2384	Altec Industries Inc	(561) 686-8550 West Palm Beach
		Maudin International	(904) 783-9822
Rental Equipment			
United Rental	(904)757-9393	Cable Davenport Cell#	(904)759-8257
Flashlights (20 w/batterie	es):	Quantity on hand	20072233
		WalMart (Additional)	261-5306
Portable AM/FM Radios	w/batteries:		
	WalMart	261-5306	
		Walmart (Yulee)	261-9410

24. SERVICE PLAN TO SUPPLY POWER TO FPU OFFICES

During an emergency it is imperative that power be restored to the office/complexes located at 780 Amelia Island Parkway and 911 South 8th Street as soon as possible. Also of the utmost importance is to ensure the feeder to the building is maintained in optimum working order at all times. This includes tree trimming, replacing deteriorated poles, replacing defective equipment, etc.

After an emergency in which power is lost to the office at 911 S. 8th Street, Operations will dispatch a crew to the Terry Substation in order to determine the status of the OCB# 214. That feeder will also be patrolled to determine what will be needed to restore service to the office. Available personnel will be utilized to restore power.

If required, downstream switches should be opened so that power may be restored to the office as soon as possible.

Situation 1:

Terry Substation energized. Feeder OCB# 214 disabled. Ride line to determine the location of the fault. If extensive, open dead end jumpers as far from the substation as possible to maintain service to the office at 911 S. 8th Street.

Situation 2:

Stepdown Substation energized. Open OCB# 214 at Terry Substation and open OCB# 310 at Stepdown Substation, close pole switch number 780 at Clinch Drive and Bonnieview Road. Close OCB# 310. Feeder OCB# 310 should hold the load, if not, shed some load.

The Operations Center at 780 Amelia Island Pkwy is served from an underground feeder #312 from Stepdown Substation. If power is lost, a gas powered total building generator will provide backup service until the problem is resolved.

25. POST-STORM DATA COLLECTION AND FORENSIC ANALYSIS

FPUC will employ contractors to perform both the post-storm data collection and forensics analysis should a significant storm occur. The contractors will be provided with system mapping information and requested to collect post-storm damage information on areas as defined by the company. The areas will be selected in order to survey the areas in which the most damage occurs in order to gain the most information.

Damage will be identified so that the cause of the outage is identified as it relates to trees, wind, debris, conductor failure, pole failure, etc. which will be identified on the map. Depending upon the degree of damage, forensic analysis may be collected during this process. However, if the damage is extensive the forensics analysis will be performed as soon as possible after the post-storm data collection is completed.

Data collected during the collection process will be analyzed after completion of all storm related work has been completed. This analysis will summarize the type damage and failure modes of outages in order to determine methods to improve reliability in the future.

Exhibit MC/DS-4 Page 1 of 1

Florida Public Utilities Reliability Metrics

YEAR	SAIDI	CAIDI	SAIFI	L-BAR
2009	218.4	108.81	2.01	116.74
2010	127.03	89.53	1.42	77.45
2011	172.65	89.39	1.93	92.54
2012	152	102.43	1.48	92.75
2013	169.66	93.31	1.82	91.97





Docket 140025-EI

2014 and 2015 Capital Projects

Upgrade the Greenwood to Malone Distribution Feeder		\$300,000
Purchase and install an Electronic Recloser		\$25,000
Construct the extension of underground feeder #312		\$550,000
Replace 34 damaged wood transmission poles with concrete poles		\$1,180,000
Replace substation batteries at AIP substation		\$25,000
Purchase and install 40 MVA Substation Transformer at JL Terry Su	ıb.	\$915,500
Upgrade underground electric system at Gateway to Amelia		\$100,000
Upgrade distribution feeder to Hospital in Marianna		\$120,000
Install Rayonier Load Bank		\$800,000
Relocate and upgrade Rayonier 69 KV Transmission Line		\$1,600,000
Construct substation at Rayonier		\$1,400,000
Purchase 2,500 KW Mobile Generator		\$1,000,000
Decayed Pole Replacements		\$1,130,000
	Total	\$9,145,500

Exhibit MC/DS-6

Docket 140025-EI

Florida Public Utilities

Year End Update Safety Statistics

Preventable Accidents/Incidents - 10 Total as of 12/31/13 (2012 - 22, 2011 - 27)

- Vehicle 6
- Injury 2
- General Liability 2

Vehicle Incidents - 31 (Includes Cracked Windshields and Mirrors)

- Reportable 12
- Preventable 6
- Number of Miles Driven 4,047,505
- Accident Rate 2.96478942

Year	Vehicle Incidents	Reportable Accidents	Preventable Accidents	Miles Driven	Accident Rate
2011	35	14	11	3,504,339	3.995047282
2012	32	14	14	3,714,671	3.768839825
2013	31	12	6	4,047,505	2.96478942

OSHA Recordable Injuries 12/31/13

- Recordable 5
- Incident Rate 1.699848763
- DART Rate 1.019909258
- DART Severity Rate 15.97857837
- Hours Worked 588,287

Year	OSHA Recordable	Incident Rate	DART Rate	DART Severity Rate	Hours Worked
2010	33	10.0844	3.9726	65.3964	645,470
2011	19	6.5609	3.4458	34.9039	578,536
2012	16	5.7838	3.2534	61.4528	553,269
2013	5	1.6998	1.0199	15.9785	588,287

COMPANY: FLORIDA PUBLIC UTILITIES Consolidated Electric Division DOCKET NO.: 140025-El

Northeast Florida

Summary of all proposed changes in rates and rate classes, detailing current and proposed classes of outdoor lighting services Exhibit MC/DS-7 Page 1 of 4 Witness: Mark Cutshaw

.

			Present Rates - Outdoor Lighting							Proposed Rates - Outdoor Lighting					
Type of Facility	Est. Monthly KWH	Facility Charge	Energy Charge	Maint. Charge	Base Monthly Charge	Fuel Conserv. Charge	Total Monthly Charge	Facility Charge	Energy Charge	Maint. Charge	Base Monthly Charge	Fuel Conserv. Charge	Total Monthly Charge	Base Percent Increase	Total Percent Increase
100w HPS Cobra Head-OL	41	\$6.10	\$1.58	\$0.96	\$8.64	\$2.14	\$10.78	\$6.34	\$1.83	\$1.88	\$10.05	\$2.14	\$12.19	16.3%	13.1%
175w MV Cobra Head -OL	72	\$1.44	\$2.72	\$0.52	\$4.68	\$3.76	\$8.44	\$1.19	\$3.15	\$1.04	\$5.38	\$3.76	\$9,14	15.0%	8.3%
400w MV Cobra Head-OL	154	\$4.39	\$5.82	\$0.89	\$11.10	\$8.05	\$19.15	\$1.31	\$6.74	\$1.12	\$9.17	\$8.05	\$17.22	-17.4%	-10.1%
1000w HPS Flood -OL2	405	\$16.38	\$15.61	\$2.19	\$34.18	\$21.17	\$55.35	\$18.99	\$18.09	\$2.54	\$39.62	\$21.17	\$60.79	15.9%	9.8%
1000w MH Flood - OL2	405	\$15.20	\$15.61	\$2.03	\$32.84	\$21.17	\$54.01	\$17.51	\$18.09	\$2.48	\$38.08	\$21.17	\$59.25	16.0%	9.7%
1000w MH Vert Shoebox - OL2	405	\$21.31	\$15.61	\$2.69	\$39.61	\$21.17	\$60.78	\$24.70	\$18.09	\$3.12	\$45.91	\$21.17	\$67.08	15.9%	10.4%
100w HPS Amer Rev-OL2	41	\$8.10	\$1.58	\$1.15	\$10.83	\$2.14	\$12.97	\$8.23	\$1.83	\$2.78	\$12.84	\$2.14	\$14.98	18.6%	15.5%
100w HPS Cobra Head-OL2	41	\$6.10	\$1.58	\$0.96	\$8.64	\$2.14	\$10.78	\$6.34	\$1.83	\$1.88	\$10.05	\$2.14	\$12.19	16.3%	13.1%
100w HPS SP2 Spectra -OL2	41	\$18.18	\$1.58	\$3.16	\$22.92	\$2.14	\$25.06	\$21.07	\$1.83	\$3.66	\$26.56	\$2.14	\$28.70	15.9%	14.5%
100w MH SP2 Spectra -OL2	41	\$18.04	\$1.58	\$2.20	\$21.82	\$2.14	\$23.96	\$20.91	\$1.83	\$2.55	\$25.29	\$2.14	\$27.43	15.9%	14.5%
150w HPS Acorn-OL2	61	\$14.42	\$2.34	\$1.83	\$18.59	\$3.19	\$21.78	\$16.72	\$2.71	\$2.12	\$21.55	\$3.19	\$24.74	15.9%	13.6%
150w HPS ALN 440 -OL2	61	\$21.46	\$2.34	\$2.34	\$26.14	\$3.19	\$29.33	\$24.88	\$2.71	\$3.03	\$30.62	\$3.19	\$33.81	17.1%	15.3%
150w HPS Am Rev-OL2	61	\$8.31	\$2.34	\$1.14	\$11.79	\$3.19	\$14.98	\$7.70	\$2.71	\$3.79	\$14.20	\$3.19	\$17.39	20.4%	16.1%
175w MH ALN 440 -OL2	71	\$21.60	\$2.75	\$2.66	\$27.01	\$3.71	\$30.72	\$25.73	\$3.19	\$2.22	\$31.14	\$3.71	\$34.85	15 3%	13.4%
175w MH Shoebox -OL2	71	\$16.62	\$2.75	\$2.15	\$21.52	\$3.71	\$25.23	\$19.27	\$3.19	\$2.49	\$24.95	\$3.71	\$28.66	15.9%	13.6%
200w HPS Cobra Head -OL2	81	\$9.32	\$3.13	\$0.42	\$12.87	\$4.23	\$17.10	\$8.31	\$3.63	\$2.14	\$14.08	\$4.23	\$18.31	9.4%	7 1%
250w HPS Cobra Head -OL2	101	\$11.21	\$3.88	\$1.46	\$16.55	\$5.28	\$21.83	\$9.07	\$4.50	\$3.36	\$16.93	\$5.28	\$22.21	2 3%	1 7%
250w HPS Flood -OL2	101	\$8.49	\$3.88	\$1.34	\$13.71	\$5.28	\$18.99	\$9.98	\$4.50	\$2.05	\$16.53	\$5.28	\$21.81	20.6%	14.8%
250w MH Shoebox-OL2	101	\$17.69	\$3.88	\$2.40	\$23.97	\$5.28	\$29.25	\$20.51	\$4.50	\$2.78	\$27.79	\$5.28	\$33.07	15.9%	13.1%
400w HPS Cobra Head -OL2	162	\$8.43	\$6.26	\$1.34	\$16.03	\$8.47	\$24.50	\$9.21	\$7.26	\$2.35	\$18.82	\$8.47	\$27.29	17.4%	11.4%
400w HPS Flood - OL2	162	\$13.08	\$6.26	\$1.66	\$21.00	\$8.47	\$29.47	\$15.16	\$7.26	\$1.92	\$24.34	\$8.47	\$32.81	15.9%	11.3%
400w MH Flood OL2	162	\$8.81	\$6.26	\$1.39	\$16.46	\$8.47	\$24.93	\$10.29	\$7.26	\$1.88	\$19.43	\$8.47	\$27.90	18.0%	11.9%
10' Alum Deco Base-OL2		\$13.50			\$13.50		\$13.50	\$15.77			\$15,77		\$15.77	16.8%	16.8%
13' Decorative Concrete-OL2		\$10.36			\$10.36		\$10.36	\$12.01			\$12.01		\$12.01	15.9%	15.9%
18' Fiberglass Round-OL2		\$6.86			\$6.86		\$6.86	\$8.48			\$8.48		\$8 48	23.6%	23.6%
20' Decorative Concrete-OL2		\$11.75			\$11.75		\$11.75	\$13.59			\$13.59		\$13.59	15.7%	15.7%
30' Wood Pole Std-OL2		\$3.95			\$3.95		\$3.95	\$4.55			\$4.55		\$4.55	15.2%	15.2%
35' Concrete Square-OL2		\$11.45			\$11.45		\$11.45	\$13.44			\$13.44		\$13.44	17.4%	17.4%
40' Wood Pole Std - OL2		\$7.85			\$7.85		\$7.85	\$9.10			\$9.10		\$9.10	15.9%	15.9%
30' Wood pole		\$3.53			\$3.53		\$3.53	\$4.09			\$4.09		\$4.09	15.9%	15.9%
Purchased Power Adjustment		\$0.05218													

Conservation

\$0.00010

Summary of all proposed changes in rates and rate classes, detailing current and proposed classes of outdoor lighting services Exhibit MC/DS-7 Page 2 of 4 Witness: Mark Cutshaw

COMPANY: FLORIDA PUBLIC UTILITIES Consolidated Electric Division DOCKET NO.: 140025-EI

Northwest Florida Present Rates - Outdoor Lighting Proposed Rates - Outdoor Lighting Est. Base Fuel Total Base Fuel Total Base Total Type of Monthly Facility Energy Maint. Monthly Facility Conserv. Monthly Energy Maint. Monthly Conserv. Monthly Percent Percent Facility KWH Charge Increase Increase 100w HPS Cobra Head-OL 41 \$6.10 \$1.58 \$0.96 \$8.64 \$3.12 \$11.76 \$6.34 \$1.83 \$1.88 \$10.05 \$3.12 \$13.17 16.3% 12.0% 175w MV Cobra Head -OL 72 \$1.44 \$2.72 \$0.52 \$4.68 \$5.48 \$10.16 \$1.19 \$3.15 \$1.04 \$5.38 \$5.48 \$10.86 15.0% 6.9% 400w MV Cobra Head-OL 154 \$4.39 \$5.82 \$0.89 \$11.10 \$11.72 \$22.82 \$1.31 \$6.74 \$1.12 \$9.17 \$11.72 \$20.89 -17.4% -8.5% 1000w HPS Flood -OL2 405 \$16.38 \$15.61 \$2.19 \$34.18 \$30.82 \$65.00 \$18.99 \$18.09 \$2.54 \$39.62 \$30.82 \$70.44 15.9% 8.4% 1000w MH Flood - OL2 405 \$15.20 \$15.61 \$2.03 \$32.84 \$30.82 \$63.66 \$17.51 \$18.09 \$2.48 \$38.08 \$30.82 \$68.90 16.0% 8.2% 1000w MH Vert Shoebox - OL2 405 \$21.31 \$15.61 \$2.69 \$39.61 \$30.82 \$70.43 \$24.70 \$18.09 \$3.12 \$45.91 \$30.82 \$76.73 15.9% 8.9% 100w HPS Amer Rev-OL2 41 \$8.10 \$1.58 \$1.15 \$10.83 \$3.12 \$13.95 \$8.23 \$1.83 \$2.78 \$12.84 \$3.12 \$15.96 18.6% 14.4% 100w HPS Cobra Head-OL2 41 \$6.10 \$1.58 \$0.96 \$8.64 \$3.12 \$11.76 \$6.34 \$1.83 \$1.88 \$10.05 \$3.12 \$13.17 16.3% 12.0% 100w HPS SP2 Spectra -OL2 41 \$18.18 \$1.58 \$3.16 \$22.92 \$3.12 \$26.04 \$21.07 \$1.83 \$3.66 \$26.56 \$3.12 \$29.68 15.9% 14.0% 100w MH SP2 Spectra -OL2 41 \$18.04 \$1.58 \$2.20 \$21.82 \$3.12 \$24.94 \$20.91 \$1.83 \$2.55 \$25.29 \$3.12 \$28.41 15.9% 13.9% 150w HPS Acorn-OL2 61 \$14.42 \$2.34 \$1.83 \$18.59 \$4.64 \$23.23 \$16.72 \$2.71 \$2.12 \$21.55 \$4.64 \$26.19 15.9% 12.7% 150w HPS ALN 440 -OL2 61 \$21.46 \$2.34 \$2.34 \$26.14 \$4.64 \$30.78 \$24.88 \$2.71 \$3.03 \$30.62 \$4.64 \$35.26 17.1% 14.6% 150w HPS Am Rev-OL2 61 \$8.31 \$2.34 \$1.14 \$11.79 \$4.64 \$16.43 \$7.70 \$2.71 \$3.79 \$14.20 \$4.64 \$18.84 20.4% 14.7% 175w MH ALN 440 -OL2 71 \$21.60 \$2.75 \$2.66 \$27.01 \$5.40 \$32.41 \$25.73 \$3.19 \$2.22 \$31.14 \$5.40 \$36.54 15.3% 12.7% 175w MH Shoebox -OL2 71 \$16.62 \$2.75 \$2.15 \$21.52 \$5.40 \$26.92 \$19.27 \$3.19 \$2.49 \$24.95 \$5.40 \$30.35 15.9% 12.7% 200w HPS Cobra Head -OL2 81 \$9.32 \$3.13 \$0.42 \$12.87 \$6.16 \$19.03 \$8.31 \$3.63 \$2.14 \$14.08 \$6.16 \$20.24 9.4% 6.4% 250w HPS Cobra Head -OL2 101 \$11.21 \$3.88 \$1.46 \$16.55 \$7.69 \$24.24 \$9.07 \$4.50 \$3.36 \$16.93 \$7.69 \$24.62 2.3% 1.6% 250w HPS Flood -OL2 101 \$8.49 \$1.34 \$3.88 \$13.71 \$7.69 \$21.40 \$9.98 \$4.50 \$2.05 \$16.53 \$7.69 \$24.22 20.6% 13.2% 250w MH Shoebox-OL2 101 \$17.69 \$3.88 \$2.40 \$23.97 \$7.69 \$31.66 \$20.51 \$4.50 \$2.78 \$27.79 \$7.69 \$35.48 15.9% 12.1% 400w HPS Cobra Head -OL2 162 \$8.43 \$6.26 \$1.34 \$16.03 \$12.33 \$28.36 \$9.21 \$7.26 \$2.35 \$18.82 \$12.33 \$31.15 17.4% 9.8% 400w HPS Flood - OL2 162 \$13.08 \$6.26 \$1.66 \$21.00 \$12.33 \$33.33 \$15.16 \$7.26 \$1.92 \$24.34 \$12.33 \$36.67 15.9% 10.0% 400w MH Flood OL2 162 \$8.81 \$6.26 \$1.39 \$16.46 \$12.33 \$28.79 \$10.29 \$7.26 \$1.88 \$19.43 \$12.33 \$31.76 18.0% 10.3% 10' Alum Deco Base-OL2 \$13.50 \$13.50 \$13.50 \$15.77 \$15.77 \$15.77 16.8% 16.8% 13' Decorative Concrete-OL2 \$10.36 \$10.36 \$10.36 \$12.01 \$12.01 \$12.01 15.9% 15.9% 18' Fiberglass Round-OL2 \$6.86 \$6.86 \$6.86 \$8.48 \$8.48 \$8.48 23.6% 23.6% 20' Decorative Concrete-OL2 \$11.75 \$11.75 \$11.75 \$13.59 \$13.59 \$13.59 15.7% 15.7% 30' Wood Pole Std-OL2 \$3.95 \$3.95 \$3.95 \$4.55 \$4.55 \$4.55 15.2% 15.2% 35' Concrete Square-OL2 \$11.45 \$11.45 \$11.45 \$13.44 \$13.44 \$13.44 17.4% 17.4% 40' Wood Pole Std - OL2 \$7.85 \$7.85 \$7.85 \$9.10 \$9.10 \$9.10 15.9% 15.9% 30' Wood pole \$3.53 \$3.53 \$3.53 \$4.09 \$4.09 \$4.09 15.9% 15.9%

Purchased Power Adjustment Conservation

\$0.07600 \$0.00010

COMPANY: FLORIDA PUBLIC UTILITIES Consolidated Electric Division DOCKET NO.: 140025-EI

Northeast Florida

Summary of all proposed changes in rates and rate classes, detailing current and proposed classes of street lighting services

Exhibit MC/DS-7 Page 3 of 4 Witness: Mark Cutshaw

		(<u>********</u>	Presen	t Rates - S	Street Ligh	ting		Proposed Rates - Street Lighting							
Type of Facility	Est. Monthly KWH	Facility Charge	Energy Charge	Maint. Charge	Base Monthly Charge	Fuel Conserv. Charge	Total Monthly Charge	Facility Charge	Energy Charge	Maint. Charge	Base Monthly Charge	Fuel Conserv. Charge	Total Monthly Charge	Base Percent Increase	Total Percent Increase
175w MV Cobra Head - SL1-2	72	\$0.67	\$2.71	\$1.23	\$8.64	\$3.76	\$8.37	\$1.19	\$3.15	\$1.04	\$10.05	\$3.76	\$9.14	16 3%	9.2%
400w MV Cobra Head - SL1-3	154	\$1.13	\$5.81	\$1.40	\$4.68	\$8.05	\$16.39	\$1.31	\$6.74	\$1.12	\$5.38	\$8.05	\$17.22	15.0%	5 1%
175w MV Cobra Head -SL2	72	\$0.67	\$2.71	\$1.23	\$11.10	\$3.76	\$8.37	\$1.19	\$3.15	\$1.04	\$9.17	\$3.76	\$9.14	-17 4%	9.2%
400w MV Cobra Head -SL2	154	\$1.13	\$5.81	\$1.40	\$34.18	\$8.05	\$16.39	\$1.31	\$6.74	\$1,12	\$39.62	\$8.05	\$17.22	15.9%	5 1%
1000w MH Flood -SL3	405	\$11.09	\$15.61	\$6.79	\$32.84	\$21.17	\$54.66	\$17.51	\$18.09	\$2.48	\$38.08	\$21.17	\$59.25	16.0%	8 4%
100w HPS Amer -SL3	41	\$5.99	\$1.58	\$3.80	\$39.61	\$2.14	\$13.51	\$8.23	\$1.83	\$2.78	\$45.91	\$2.14	\$14.98	15.0%	10.9%
100w HPS Cobra Head- SL3	41	\$4.37	\$1.58	\$2.78	\$10.83	\$2.14	\$10.87	\$6.34	\$1.83	\$1.88	\$12.84	\$2.14	\$12.10	19.6%	10.970
150w HPS Acorn -SL3	61	\$10.47	\$2.34	\$6.15	\$8.64	\$3,19	\$22.15	\$16.72	\$2 71	\$2.12	\$10.05	\$3.10	\$24.74	16.3%	14 70/
150w HPS Amer Rev -SL3	61	\$5.85	\$2.34	\$4.28	\$22.92	\$3.19	\$15.66	\$7.70	\$2.71	\$3.79	\$26.56	\$2.10	\$17.20	15.0%	11.77
175w MH ALN 440 -SL3	71	\$22.36	\$2.75	\$1.71	\$21.82	\$3.71	\$30.53	\$25.73	\$3.19	\$2.22	\$25.20	\$3.15	\$17.39	15.9%	11.0%
200w HPS Cobra Head -SL3	81	\$5.61	\$3.13	\$2.88	\$18.59	\$4.23	\$15.85	\$8.31	\$3.63	\$2.22	\$21.25	\$3.71	\$34.05	15.9%	14.2%
250w HPS Cobra Head -SL3	101	\$5.38	\$3.88	\$3.94	\$26.14	\$5.28	\$18.48	\$9.07	\$4.50	\$2.14	\$21.00	\$4.23 \$5.00	\$10.31	15.9%	15.5%
250w HPS Flood - SL3	101	\$9.22	\$3.88	\$5.38	\$11 79	\$5.28	\$23.76	\$0.02	\$4.50	\$3.30 \$2.05	\$30.02	\$5.26	\$22.21	17.1%	20.2%
400w HPS Cobra Head -SL3	162	\$6.28	\$6.26	\$4.41	\$27.01	\$8.47	\$25.10	\$9.90	\$4.50	\$2.05	\$14.20	\$5.28	\$21.81	20.4%	-8.2%
400w MH Flood -SL3	162	\$9.63	\$6.26	\$11.58	\$21.52	\$8.47	\$35.94	\$10.29	\$7.26	\$2.35 \$1.88	\$24.95	\$8.47 \$8.47	\$27.29 \$27.90	15.3% 15.9%	7.4%

10' Alum Deco Base-SL3	\$14.92	\$14.92	\$14 92	\$15 77	\$15 77	646 77	E 70/	F 70/
13' Deco Concrete - SL3	\$10.35	\$10.25	¢10.05	\$10.77	\$13.77	\$15.77	5.1%	5.7%
19' Eibergless Dound CLO	\$10.00	\$10.35	\$10.35	\$12.01	\$12.01	\$12.01	16.0%	16.0%
TO FIDEIGIASS ROUTIG-SLS	\$7.64	\$7.64	\$7.64	\$8.48	\$8.48	\$8 48	11 0%	11 0%
20' Decorative Concrete-SL3	\$11.45	\$11.45	\$11 45	\$13.59	\$12.50	642.50	40.70	11.0 %
30' Wood Pole Std - SL3	\$2.67	60.07	¢11.40	φ10.00	\$13.59	\$13.59	18.7%	18.7%
251 Concerto Courses OLO	\$5.07	\$3.67	\$3.67	\$4.55	\$4.55	\$4.55	24.0%	24.0%
35' Concrete Square-SL3	\$12.81	\$12.81	\$12.81	\$13.44	\$13.44	\$13.44	4.9%	4.9%

Purchased Power Adjustment	\$0.05218
Conservation	\$0.00010

COMPANY: FLORIDA PUBLIC UTILITIES Consolidated Electric Division DOCKET NO.: 140025-EI

Northwest Florida

Summary of all proposed changes in rates and rate classes, detailing current and proposed classes of street lighting services

Exhibit MC/DS-7 Page 4 of 4 Witness: Mark Cutshaw

		· · · · ·	Present	t Rates - S	Street Ligh	ting		Proposed Rates - Street Lighting							
Type of Facility	Est. Monthiy KWH	Facility Charge	Energy Charge	Maint. Charge	Base Monthly Charge	Fuel Conserv. Charge	Total Monthly Charge	Facility Charge	Energy Charge	Maint. Charge	Base Monthly Charge	Fuel Conserv. Charge	Total Monthly Charge	Base Percent Increase	Total Percent Increase
175w MV Cobra Head - SL1-2	72	\$0.67	\$2.71	\$1.23	\$8.64	\$3.76	\$8.37	\$1,19	\$3.15	\$1.04	\$10.05	\$3.76	\$0.14	16 3%	0.20
400w MV Cobra Head - SL1-3	154	\$1.13	\$5.81	\$1.40	\$4.68	\$8.05	\$16.39	\$1.31	\$6.74	\$1.12	\$5.38	\$8.05	\$17.22	15.0%	9.27
175w MV Cobra Head -SL2	72	\$0.67	\$2.71	\$1.23	\$11.10	\$3.76	\$8.37	\$1.19	\$3.15	\$1.04	\$9.17	\$3.76	\$0.14	17.0%	0.17
400w MV Cobra Head -SL2	154	\$1.13	\$5.81	\$1.40	\$34.18	\$8.05	\$16.39	\$1.31	\$6.74	\$1.12	\$39.62	\$8.05	\$17.22	15.0%	9.27
1000w MH Flood -SL3	405	\$11.09	\$15.61	\$6.79	\$32.84	\$21.17	\$54.66	\$17.51	\$18.09	\$2.48	\$38.08	\$21.17	\$50.25	15.9%	5.17
100w HPS Amer -SL3	41	\$5.99	\$1.58	\$3.80	\$39.61	\$2.14	\$13.51	\$8.23	\$1.83	\$2.78	\$45.01	\$2 1.17	\$14.09	15.0%	0.47
100w HPS Cobra Head- SL3	41	\$4.37	\$1.58	\$2.78	\$10.83	\$2.14	\$10.87	\$6.34	\$1.83	\$1.89	\$12.94	\$2.14	\$14.90	15.9%	10.9%
150w HPS Acorn -SL3	61	\$10.47	\$2.34	\$6.15	\$8.64	\$3 19	\$22.15	\$16.72	\$2.71	\$2.10	\$10.05	\$2.14	\$12.19	18.6%	12.19
150w HPS Amer Rev -SL3	61	\$5.85	\$2.34	\$4.28	\$22.92	\$3.19	\$15.66	\$7.70	\$2.71	\$2.12	\$10.05	\$3.19	\$24.74	16.3%	11.79
175w MH ALN 440 -SL3	71	\$22.36	\$2.75	\$1.71	\$21.82	\$3.71	\$30.53	\$25.73	\$3.10	\$2.73	\$20.00	\$3.19 \$2.74	\$17.39	15.9%	11.09
200w HPS Cobra Head -SL3	81	\$5.61	\$3.13	\$2.88	\$18.59	\$4 23	\$15.85	\$2 31	\$3.13	\$2.22	\$23.29	\$3.71	\$34.85	15.9%	14.29
250w HPS Cobra Head -SL3	101	\$5.38	\$3.88	\$3.94	\$26.14	\$5.28	\$18.48	\$0.07	\$3.03 \$4.60	\$2.14 \$2.26	\$21.00	\$4.23	\$18.31	15.9%	15.5%
250w HPS Flood - SL3	101	\$9.22	\$3.88	\$5.38	\$11 79	\$5.28	\$73.76	\$9.07	\$4.50	\$3.30	\$30.62	\$5.28	\$22.21	17.1%	20.2%
400w HPS Cobra Head -SL3	162	\$6.28	\$6.26	\$4.41	\$27.01	\$9.20	\$25.70	\$9.90	\$4.50	\$2.05	\$14.20	\$5.28	\$21.81	20.4%	-8.2%
400w MH Flood -SL3	162	\$9.63	\$6.26	\$11.58	\$21.52	\$8.47	\$35.94	\$9.21	\$7.26 \$7.26	\$2.35 \$1.88	\$31.14 \$24.95	\$8.47 \$8.47	\$27.29 \$27.90	15.3% 15.9%	7.4%

10' Alum Deco Base-SL3 13' Deco Concrete - SL3 18' Fiberglass Round-SL3 20' Decorative Concrete-SL3 30' Wood Pole Std - SL3	\$14.92 \$10.35 \$7.64 \$11.45 \$3.67	\$14.92 \$10.35 \$7.64 \$11.45 \$3.67	\$14.92 \$10.35 \$7.64 \$11.45 \$3.67	\$15.77 \$12.01 \$8.48 \$13.59 \$4.55	\$15.77 \$12.01 \$8.48 \$13.59 \$4.55	\$15.77 \$12.01 \$8.48 \$13.59	5.7% 16.0% 11.0% 18.7%	5.7% 16.0% 11.0% 18.7%
35' Concrete Square-SL3	\$3.67	\$3.67	\$3.67	\$4.55	\$4.55	\$4.55	24.0%	24.0%
	\$12.81	\$12.81	\$12.81	\$13.44	\$13.44	\$13.44	4.9%	4.9%

Purchased Power Adjustment	
Conservation	

\$0.05218 \$0.00010

FLORIDA PUBLIC UTILITIES COMPUTATION OF COMBINED LIGHT FUEL RATES 2014 PROJECTIONS

Exhibit MC/DS-8

Docket 140025-EI

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NORTHWEST FL	ORIDA DIVISION														
			JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER I	DECEMBER	
KWH			2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	TOTAL
Outdoor Lights	OL,OL-2		380,000	380,000	379,000	380,000	381,000	380,000	383,000	380,000	377,000	377 000	378 000	379 000	4 554 000
Street Lights	SL-1,SL-2,SL-3		95,000	96,000	95,000	96,000	95,000	95,000	95,000	95.000	95,000	94 000	96,000	95,000	1 142 000
			475,000	476,000	474,000	476,000	476,000	475,000	478,000	475,000	472,000	471,000	474,000	474,000	5,696,000
FUEL REVENUES	2														
Outside Lighting	OL,OL-2	0.07590	28,842	28,842	28,766	28,842	28,918	28 842	29 070	28 842	28 614	28 614	28 600	29 766	245 640
Street Lighting	SL-1,SL-2,SL-3	0.07611	7,230	7,307	7,230	7,307	7,230	7,230	7.230	7,230	7 230	7 154	7 307	20,700	345,648
			36,072	36,149	35,996	36,149	36,148	36,072	36,300	36,072	35,844	35,768	35,997	35,996	432,563
Combined Rate		3	0.07594	0.07594	0.07594	0.07594	0.07594	0.07594	0.07594	0.07594	0.07594	0.07594	0.07594	0.07504	0.07504
Including Tax Fa	ctor										0.01004	0.07034	0.07554	0.07594	0.07594

NORTHEAST FLO	ORIDA DIVISION														
KAN			JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER I	DECEMBER	
KVVH	1.22 2.8 A		2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	TOTAL
Outdoor Lights	OL,OL-2		102,000	102,000	102,000	102,000	100,000	103,000	104,000	103.000	99,000	97,000	102 000	106 000	1 222 000
Street Lights	SL-1,SL-2,SL-3		81,000	81,000	81,000	81,000	81,000	79,000	81,000	81,000	82,000	81,000	81,000	81 000	971.000
			183,000	183,000	183,000	183,000	181,000	182,000	185,000	184,000	181,000	178,000	183,000	187,000	2,193,000
FUEL REVENUES		0.05224	6 200	5 000		-2-2-2-3									
Charact Lighting		0.05224	5,328	5,328	5,328	5,328	5,224	5,381	5,433	5,381	5,172	5,067	5,328	5,537	63,835
Street Lighting	SL-1,SL-2,SL-3	0.05202	4,214	4,214	4,214	4,214	4,214	4,110	4,214	4,214	4,266	4,214	4,214	4,214	50,516
			9,542	9,542	9,542	9,542	9,438	9,491	9,647	9,595	9,438	9,281	9,542	9,751	114,351
Combined Rate	-	1	0.05214	0.05214	0.05214	0.05214	0.05214	0.05215	0.05215	0.05215	0.05214	0.05214	0.05214	0.05214	0.05214
Including Tax Fa	ctor														0.05218

REDACTED VERSION Exhibit MC/DS-9 Docket 140025-EI

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FLORIDA PUBLIC UTILITIES COMPANY

Docket No. 140025-EI

DIRECT TESTIMONY and EXHIBITS

OF

OF MATTHEW M. KIM

Direct Testimony and Exhibits of Matthew Kim

1

Q. Please state your name, occupation and business address.

A. My name is Matthew M. Kim. I serve as Vice President and Corporate Controller of
Chesapeake Utilities Corporation ("Chesapeake"), which is the parent company of
Florida Public Utilities Company ("FPU"). My business address is 909 Silver Lake
Boulevard, Dover, Delaware.

6

7 Q. Please describe your educational background and professional experience.

8 Α. I graduated with a Bachelor of Science degree in Business Administration with a major in Accounting from Georgetown University in Washington, DC in 1998. I am 9 a Certified Public Accountant, licensed in the District of Columbia. I have 16 years 10 of professional accounting experience. I joined Chesapeake in 2009 as Corporate 11 Controller and was appointed as Assistant Vice President and Vice President by 12 Chesapeake's Board of Directors in 2010 and 2012, respectively. Prior to joining 13 Chesapeake, I was Vice President and Assistant Controller at The Carlyle Group, a 14 global private equity firm, from 2005 to 2009. I also held various positions with 15 public accounting firms for over seven years, from Staff Auditor to Senior Manager. 16 Prior to leaving public accounting in 2005, I was a Senior Manager with 17 PricewaterhouseCoopers LLC. 18

19

20 Q. Please describe your current responsibilities.

A. As Vice President and Corporate Controller, I am responsible for accounting,
 financial reporting and tax compliance functions within Chesapeake and all of its
 subsidiaries. This includes daily oversight, management, compliance and policy. I

1	am a	also	involved	in	the	financial	planning	and	budgeting	functions	within
2	Ches	apeak	ke.								
3											

- 4 Q. Have you filed testimony before the Florida Public Service Commission in prior
 5 cases?
- A. Yes. In 2012, I provided testimony before the Florida Public Service Commission
 (the "Commission") in Docket Number 120311-GU, which was FPU's petition for
 approval of the acquisition adjustment for its Indiantown division. In 2010, I also
 provided testimony before the Commission in Docket Number 110133-GU, which
 was FPU's petition for approval of the acquisition adjustment related to
 Chesapeake's acquisition of FPU.
- 12

13 Q. Have you previously provided testimony before other regulatory bodies?

- 14 A. Yes, in 2010, I provided testimony before the Federal Energy Regulatory
 15 Commission ("FERC") in Docket Number RP11-1670.
- 16

17 Q. What is the purpose of your testimony?

A. I am supporting certain schedules of historical data and projected data represented in
the MFRs listed in my Exhibit MK-1. Specifically, I will address administrative and
general ("A&G") expenses and the allocation of corporate costs included in A&G
expenses, as well as some of the management, expense allocation, and accounting
changes that have been implemented since FPU was acquired by Chesapeake, along
with the benefits tied to those changes. I will also address income taxes, expenses

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Docket No. 140025-EI
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1		associated with pension and other postretirement benefit plans, as well as
2		Chesapeake's capital structure and financing plans as they relate to FPU.
3		
4	Q.	Do you have any exhibits to which you will refer in your testimony?
5	A.	Yes. Exhibit MK-1 was prepared under my supervision and direction.
6		
7	Q.	Are you sponsoring any MFRs in this case?
8	A.	I am supporting the MFRs listed in Exhibit MK-1. To the best of my knowledge,
9		these MFRs are true and correct.
10		
11	<u>A&G</u>	expenses
12	Q.	Please describe what is included in A&G expenses.
13	А.	A&G expenses include payroll, benefits, outside services and other related costs
14		associated with key administrative functions, including accounting and finance,
15		human resources, communications, information technology ("IT"), corporate
16		governance, and management functions. A&G expenses also include costs
17		associated with various administrative facilities, insurance and expenses associated
18		with FPU's pension and other postretirement benefit plans.
19		
20	Q.	Generally, please explain the accounting of A&G costs?
21	А.	The merger with Chesapeake in 2009 changed the way A&G expenses are recorded
22		for FPU, as well as the type of A&G costs being recorded by FPU. Prior to the
23		merger, all of the A&G expenses were incurred by FPU and allocated within

Direct Testimony and Exhibits of Matthew Kim

1 different businesses of FPU (mainly FPU's natural gas operation, FPU's electric 2 operation and FPU's unregulated subsidiary). Subsequent to the merger, certain 3 A&G functions remained in Florida and have continued to be performed by the management and employees dedicated to the Florida businesses, which include FPU 4 5 and other Florida businesses of Chesapeake (mainly the Florida division of 6 Chesapeake – d.b.a. Central Florida Gas). A&G expenses associated with the 7 functions performed by the Florida management and employees dedicated to serve 8 the Florida businesses are allocated among the Florida businesses only. Other A&G 9 functions have been combined with or transferred to Chesapeake's corporate office 10 for increased quality and efficiency. As a result, FPU is allocated a portion of A&G 11 expenses incurred by Chesapeake's corporate office. The calculation of allocations 12 to FPU is explained in greater detail below. However, generally, the accounting and finance, IT, human resources, corporate governance and certain management 13 14 functions are some of the examples of the A&G functions now being performed by 15 Chesapeake's corporate office in support of FPU's operations.

16

17

Q. What benefits are derived by FPU and its customers from Chesapeake's service 18 of these functions post-merger?

A. This is discussed in much greater detail below but generally speaking, since the 19 20 merger, FPU has benefited from certain functions and services provided by 21 Chesapeake's corporate office, which were not previously available to FPU on its 22 own. These new functions and services, which include communications, certain 23 business development and expanded management support functions, have increased

FPU's quality of service by enhancing customer engagement, obtaining more 1 accurate and relevant business and market information and providing reliable and 2 3 efficient service to its customers. These resources and capabilities also enabled FPU to address newly emerging, complex business issues, such as the franchise dispute in 4 Marianna and developing alternative electric fuel supply options. All of these 5 6 functions and capabilities have increased FPU's customer satisfaction. With the help of Chesapeake's corporate office, FPU has also been able to address expanded 7 business and compliance needs for IT infrastructure and security, accuracy in 8 9 accounting and financial data, adoption of new regulations by the federal and state governments, and employee training and retention. All of these efficiencies have 10 enabled FPU to continue its outstanding service to its customers and benefit from 11 increased access to capital to maintain and improve its electric system. 12

13

14 Q. How are A&G expenses allocated to FPU?

A&G expenses are recorded by FPU in one of the following ways: (a) direct 15 Α. 16 assignment of costs and (b) cost settlement designed to allocate the cost of shared 17 functions and services to business units receiving the benefit of such functions and 18 services. Whenever it is possible and practical, A&G expenses are directly assigned to the business unit incurring such cost. An example of direct assignment of A&G 19 20 costs is an external audit fee associated with auditing FPU electric operation's annual 21 report on FERC Form No. 1 filed with the Commission. This portion of the annual external audit fee is assigned and recorded directly to FPU. A&G expenses that 22 23 cannot be directly assigned are allocated among Chesapeake's business units that

1 receive a benefit from such functions and services. Chesapeake utilizes various 2 methodologies in allocation of costs, depending on the type of expense. These 3 methodologies are designed to reflect the relative size and benefit of each business unit receiving shared functions and services and may include direct payroll, 4 profitability, adjusted gross plant, investment and/or the specific level of effort or 5 focus, among others, in determining the allocation basis. Chesapeake utilizes a 6 consistent methodology among all of its business units in allocating the same type of 7 expense. Chesapeake reviews and updates the allocation basis at least annually at 8 the beginning of each fiscal year. A&G expenses incurred by the Florida 9 management and employees dedicated to serve the Florida businesses are allocated 10 among only the Florida businesses. A&G expenses incurred by Chesapeake's 11 corporate office are allocated among all of Chesapeake's businesses receiving 12 benefits from such services. 13

14

Q. Please explain further how A&G expenses incurred by Chesapeake's corporate office are allocated.

A. Each of Chesapeake's corporate department has its specific allocation method, which 17 is design to reflect the benefit of service provided by that department to all the 18 business units receiving such service. Generally, Chesapeake's corporate 19 departments use one of the following three allocation methods: task-based, Distrigas 20 formula and investment-based. The first method is the task-based allocation, which 21 identifies department's functions and assigns for each function the level of effort or 22 focus to each business unit receiving its service. Chesapeake utilizes the task-based 23

Direct Testimony and Exhibits of Matthew Kim

1 method to allocate the costs associated with the accounting and finance departments. 2 management and specific IT systems. Based on the specific nature of these services, 3 the task-based allocation method provides the most reasonable reflection of the benefit received by each business unit. The second method is the Distrigas formula, 4 5 which is a FERC-approved formula attempting to weight various aspects of each of 6 the business units to calculate the appropriate allocation. This formula incorporates 7 three equally-weighted factors: gross plant, net operating revenues (operating income before interest and income taxes) and labor cost. Costs related to IT network, data 8 9 and desktop maintenance and support, human resources and communications are allocated using the Distrigas formula. Due to the pervasive nature of these services, 10 the Distrigas formula provides the most appropriate basis to allocate these costs. The 11 third method is the investment-based allocation, which uses the level of 12 Chesapeake's investment in each business unit to allocate costs. Costs associated 13 14 with corporate governance, Chesapeake's Board of Directors and business 15 development, all of which are closely related to the level of investment, are allocated using the investment-based method. 16

17

Q. How does Chesapeake ensure a fair distribution of its corporate costs to all of its business units, including unregulated businesses?

A. Chesapeake reviews and updates the allocation basis at least annually or when a
 significant change occurs to Chesapeake's overall business or corporate functions.
 Every business unit benefiting from a particular department is allocated a portion of
 the cost associated with that department, using a consistent methodology.

Direct Testimony and Exhibits of Matthew Kim

1		Chesapeake also reviews the relative size of each business unit, measured by
2		investment, operating income, gross plant and payroll expenses, and compares it to
3		the overall corporate cost being allocated to that business unit to assess the
4		reasonableness of the allocation.
5		м. м
6	Q.	What is FPU's A&G expense budget for the 2015 test year?
7	А.	The projected A&G expense of FPU's electric operation in the 2015 test year is
8		\$5,563,777. Included in this projected A&G expense is \$3,061,986 of A&G expense
9		allocated from Chesapeake's corporate office.
10		
11	Q.	How does this amount compare with the A&G benchmark that the Florida
12		Commission has historically used?
13	A.	The test year benchmark for A&G expenses is \$4,223,626, which was calculated
14		based on the base year (2008) expenses of \$3,720,601 and the compound multiplier
15		of 1.1352. The projected A&G expenses in the 2015 test year are higher than the test
16		year benchmark by approximately \$1.3 million.
17		
18	Q.	Are these costs, including the costs allocated from corporate A&G, a legitimate
19		and necessary cost to FPU of providing service to its customers?
20	A.	Yes. A&G expenses for the 2015 test year include only the A&G costs that are
21		projected to be incurred in supporting FPU's electric operation. The overall A&G
21 22		projected to be incurred in supporting FPU's electric operation. The overall A&G costs in the 2015 test year are projected based on historic costs, recent trends and

Direct Testimony and Exhibits of Matthew Kim

continue providing outstanding service to FPU's customers. We monitor
 periodically FPU's A&G costs by comparing them on a per-customer-basis to other
 investor-owned electric utilities in Florida to ensure the level of A&G costs incurred
 and expected to be incurred is reasonable, compared to our peer utilities in Florida.

5

Q. Then, please explain the comparison of FPU's budgeted A&G expense to the historical benchmark.

There are four main factors contributing to the increase in A&G expense. First, there 8 Α. 9 are two notable reclassifications of costs between the historic benchmark and the 10 projected test year. In the projected 2015 test year, \$66,156 of common depreciation 11 expense was included in Account 921 in 2013. In the benchmark year, the common depreciation was charged to Account 403-Depreciation expense. In addition, in the 12 2015 projected year, rent expense of \$124,609, which was not included in the 13 14 benchmark year, was added. The inclusion of this rent expense is due to the sale of 15 the West Palm Beach administrative office and the rent expense allocated from corporate facilities. The increase in rent expense is offset by reductions to rate base, 16 17 depreciation expense, and taxes other than income that would have been included if the West Palm Beach corporate office was not sold. Second, in the 2015 projected 18 19 year, administrative and general expense was increased by \$120,000 to establish a 20 general liability reserve. This reserve is in lieu of purchased insurance and to reduce the volatility associated with periodic claims. Third, IT costs also increased by 21 approximately \$350,000 to address increased compliance, security, data and network 22 23 requirements, as well as to maintain enhanced system, website and software needs.

1 Finally, the remaining increase is due primarily to additional travel costs, higher 2 costs associated with maintaining administrative facilities as a result of improved 3 quality of those facilities, and expanded corporate functions and services not previously available to FPU. Travel costs have increased because of centralization 4 5 of the Florida staff, additional training available to employees and increased focus in 6 customer service and employee satisfaction, which require managers to travel to all 7 locations within Florida. The transfer of certain A&G functions to the corporate office in Delaware for increased quality and efficiency has also necessitated 8 9 additional travel. The increases in A&G expenses related to establishing a general 10 liability reserve, additional IT requirements and expanded corporate functions and 11 services, as well as their benefits to FPU and its customers, which are discussed in more detail below. These increases in A&G expenses provide FPU with the 12 appropriate level of administrative support necessary to manage its business and 13 14 provide the superior service to its customers. These increases are partially offset by 15 efficiency and effectiveness gained in other areas of the Company. For example, the 16 efficiency gained by combining the accounting and finance function with the 17 corporate office allowed FPU to comply with the Sarbanes-Oxley requirements without incurring any additional costs (FPU was required to comply with the 18 19 Sarbanes-Oxley requirements for the first time in 2009 and was expected to incur 20 significant costs on its own as a result). Strengthening management oversight and enhanced treasury/finance capability allowed FPU to make necessary improvements 21 22 in its electric system in the past several years to enhance reliability, which reduced 23 maintenance expenses in the projected test year. These are just a couple of examples

of how the expanded administrative functions and capabilities reflected in higher
 A&G expenses have helped FPU and its customers to benefit from lower costs or
 avoided costs in other areas.

- 4
- 5

Q. Please explain the general liability reserve.

6 A. With the help of an outside broker, Chesapeake assesses the Company's current 7 risks, insurance needs and costs in determining the appropriate level of insurance 8 coverage. The Audit Committee of Chesapeake's Board of Directors reviews 9 Chesapeake's insurance coverage, the current insurance environment and related 10 information to ensure it has the appropriate and necessary level of coverage. In the 11 past five years, FPU's electric operation had one large insurance claim, which was 12 settled for \$2.75 million. Chesapeake's general liability insurance policy, which also 13 covers FPU, had a maximum deductible of \$250,000 per each claim. Since 14 Chesapeake's general liability insurance policy covered this claim, FPU's financial 15 exposure was capped at \$250,000, which was the maximum deductible amount it had 16 to pay. FPU's electric rates currently in place did not include any cost associated 17 with general claims against the Company. As a result, the \$250,000 deductible paid 18 by FPU in this case has not been recovered. FPU is requesting recovery of \$250,000 19 paid to satisfy the deductible requirement under the insurance policy over a five-year 20 period. In addition, FPU is requesting an additional \$250,000 to be included in the 21 next five-year period to establish the general liability reserve sufficient to cover 22 another potential claim with the similar financial exposure that may arise during that

period, as well as \$20,000 per year to cover any other smaller general liability
 claims.

3

4

Q. Please describe in more detail the increased IT costs.

5 A. Since 2008, FPU has been facing the increased needs to maintain network security, 6 data integrity and system functionalities. A newly emerging threat of cyber attacks 7 and increased functionalities of the Company's website and key systems (accounting, billing, payroll, etc.) are just some examples of those needs that have necessitated 8 9 additional IT costs to expand network infrastructure and strengthen hardware and Chesapeake, like other businesses and utilities, has 10 software maintenance. 11 strengthened its IT software, hardware and network infrastructures to ensure the 12 additional functionalities and increased use of its key financial, billing and other systems can be maintained in a safe manner without interruption. IT has also 13 increased its staffing, as well as the expertise of its staff, to address this increased 14 risk and demand for service. FPU has benefited from Chesapeake's increased IT 15 infrastructure as it has enabled FPU to provide better customer service through 16 17 enhanced website, more secure customer billing and other information, accurate and 18 more timely financial information, and ability to engage customers and employees from remote locations. 19

- 20
- Q. Please provide specific examples on how the expanded corporate A&G
 functions provided by Chesapeake benefit FPU's customers?

Direct Testimony and Exhibits of Matthew Kim

A. Expanded corporate A&G functions have benefited FPU and its customers in many 1 different ways. Chesapeake's corporate communications team provides increased 2 awareness of the Chesapeake and FPU brand through emphasizing core values and 3 translating them into superior customer service. The communications team has 4 5 assisted FPU in its effort to redesign the Company's website to enhance its look, content and functionality to better and more easily engage customers, thereby 6 allowing customers to obtain accurate and more focused information through the 7 website. For example, FPU's customers can utilize the website to make billing 8 inquiries, request services, make payments and report power outages. They can also 9 get energy saving ideas and information on electric rebates and incentives currently 10 available. It has also assisted FPU with initiatives to increase its engagement with 11 customers and communities, as well as employee satisfaction and training. Another 12 corporate initiative benefitting FPU's customers is the Service Excellence initiative, 13 which emphasizes customer service, engagement and satisfaction. Chesapeake's 14 corporate office coordinates and provides necessary training to employees for the 15 Service Excellence initiative and develops specific plans to measure and improve 16 customer satisfaction. Business development is another example of the expanded 17 corporate A&G functions now available to FPU. Business development assists the 18 19 electric operations to assess alternative fuel supply options and provides market research data. It also coordinates the corporate-wide initiative to automate the 20 infrastructure mapping to increase efficiency and reliability of the Company's 21 22 system. Lastly, Chesapeake's management and Board of Directors also bring increased oversight of FPU's businesses and management. 23 For example,

Direct Testimony and Exhibits of Matthew Kim

Chesapeake's Board of Directors and senior management have seven people with 1 over fifteen years of energy and utility industry experience. One director in 2 particular has over 30 years of experience in the electric utility, generation and 3 marketing industry and brings in-depth knowledge of regulations and power 4 delivery. In addition to the industry knowledge, another director, for example, has 5 extensive knowledge of best practice in human capital and customer experience, 6 7 which helps FPU's effort in those areas. Four of Chesapeake's eleven independent 8 directors are based in Florida to provide valuable business, regulatory, financial and other insights unique to Florida. All these examples of the expanded corporate 9 functions and services have allowed FPU to continue its effort to enhance customer 10 11 experience, improve employee education, and develop strategies, all of which are for the direct benefit of our customers. 12

13

14 Q. How does Chesapeake review the level of compensation for its officers?

15 Α. Compensation of the named executive officers of Chesapeake, which include 16 Chesapeake's President and Chief Executive Officer, Senior Vice Presidents and the President of FPU, is reviewed by the Compensation Committee of Chesapeake's 17 Board of Directors. The Compensation Committee engages an outside consulting 18 firm to review executive compensation. In March 2013, the Compensation 19 20 Committee reviewed base salaries of the named executive officers based on a market analysis prepared by a third-party compensation consultant. Compensation of the 21 22 named executive officers and related information, including the review of the

Compensation Committee, are disclosed in Chesapeake's proxy, which was filed
 with the Securities and Exchange Commission.

3

4 Q. Why is it important that FPU be allowed to recover the costs associated with 5 corporate A&G through base rates?

6 Α. The corporate A&G functions are integral part of FPU's ability to support its operations, comply with legal, regulatory and other requirements, finance the 7 necessary capital required to maintain and grow its business, engage its customers to 8 9 provide superior customer service, address complex financial and business issues and provide appropriate management oversight. As it was previously mentioned in my 10 testimony, many of the A&G functions previously performed by FPU were 11 combined with or transferred to Chesapeake's corporate office since the merger in 12 2009 for increased quality and efficiency. The corporate A&G functions allow the 13 Florida electric operation to focus on its day-to-day business of serving its customers 14 15 without burdening itself with having to establish and maintain separate support functions. By receiving support from the corporate office, which has expanded 16 17 resources and capabilities, FPU benefits from superior quality of service, efficiency, more in-depth knowledge, higher level of professional service and increased ability 18 to handle more complex and challenging business and compliance issues. 19

- 20 Income Taxes
- 21 Q.

How was income tax expense determined?

A. Total income tax expense consists of income taxes currently payable and deferred
 income taxes. The currently payable income taxes for the projected test year were

calculated by simply multiplying the currently effective income tax rate by the
income that is currently taxable. Currently taxable income was calculated by
deducting from the projected test year net operating income before income taxes, the
interest expense inherent in the cost of capital and other permanent and temporary
timing differences.

- 6
- 7

Q. What is the effective income tax rate of FPU?

A. Since the merger with Chesapeake in 2009, FPU has been a member of a
consolidated federal tax return with Chesapeake and its other subsidiaries.
Chesapeake's federal statutory income tax rate is 35 percent, which is effectively the
federal statutory rate for FPU. FPU continues to file a separate state income tax
return in Florida. Florida's statutory income tax rate is 5.5 percent. After taking into
consideration the federal deduction of the state income taxes paid, the effective
income tax rate for FPU is 38.575 percent.

15

16

Q. Please explain how you derived the projected amount for deferred taxes.

A. Deferred income taxes represent the tax effect of temporary differences between the tax basis of an asset or liability and its reported amount in the financial statements that will result in taxable amounts or deductible amounts in future years when the reported amount of the asset is recovered or when the reported amount of liability is settled. The projected amount of deferred taxes were calculated by reviewing all existing timing differences and projecting the amount of timing differences that are expected to originate and reverse. The projected amounts of deferred taxes were

added to the deferred income tax balances at the end of the historic base year. For example, in projecting deferred taxes related to plant, we estimated the tax depreciation of existing and new plant assets in service during the projected period (originating) and the book depreciation of the same plant assets during the same period (reversing). The difference, which is the change in a timing difference, was multiplied by the effective income tax rate to estimate the change in deferred taxes in the projected period.

8

9 Q. Please explain the South Georgia adjustment for income tax step-up included in 10 this petition.

A. 11 Prior to the merger with Chesapeake, FPU was required to pay federal income taxes at a statutory rate of 34 percent. Since the merger, FPU's statutory rate increased to 12 35 percent. This increase in the federal statutory rate increased FPU's effective 13 14 income tax rate to 38.575 percent from 37.63 percent. The tax normalization rules 15 require that utilities maintain their deferred income taxes, in Account 282, at the 16 same income tax rate as the income tax rate used in calculating their income tax obligation to the IRS. This required FPU to adjust its deferred taxes to reflect the 17 increase in its effective income tax rate to 38.575 percent to comply with the 18 19 normalization rules at the time of the merger. Since FPU had a net deferred tax 20 liability associated with its plant assets at the time of the merger, this resulted in a deficiency in the deferred tax reserve. This deficiency represents the amount of 21 taxes associated with this timing difference, which FPU had previously been allowed 22 23 to recover under the previous, lower effective income tax rate, that will be paid in the

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1 future by FPU at the current, higher effective income tax rate. The South Georgia 2 method is one of the methods of the tax normalization accounting, which allows utilities to amortize the deficiency over the remaining lives of the property that gave 3 rise to the deficiency. The total deficiency, including the appropriate gross-up for 4 income taxes, is \$353,307. FPU is proposing this amount to be amortized over 26 5 years, which is the average remaining life of the plant assets for the electric 6 operation. The annual amortization is \$13,589, which is required to comply with the 7 8 tax normalization rules.

9

10 Pension and Postretirement Benefits

11 Q. Please explain how you derived the projected expense for pension and 12 postretirement benefits.

Α. The Company estimated the projected expense for pension and postretirement 13 benefits by averaging the expenses in the past years. Due to the significant volatility 14 in the discount rate assumptions in the past years, in which the discount rate 15 assumptions fluctuated as low as 3.75 percent and as high as 5.75 percent, it was 16 difficult to project the appropriate future discount rate assumption. In light of this 17 challenge, the Company decided to use the average of the past four years of its 18 19 pension expense (four years being the period since the merger with Chesapeake) to estimate the projected pension expense. For the postretirement medical plan, the 20 Company used the average of the past two years since the plan had a significant 21 22 amendment related to benefits, which was effective on January 1, 2012 (two years being the period since that amendment). 23

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- 2

3

Q. Please explain the amortization of pre-merger unrecognized cost included in the Company's projected expense for pension and postretirement benefits?

A. FPU has accounted for benefit plan costs using accrual accounting in accordance 4 with the Commission's practice, which is based on the accounting requirements 5 under the accounting principles generally accepted in the United States of America 6 7 (commonly referred to as US GAAP). The issuance of the Statement of Financial 8 Accounting Standard No. 158 ("FAS 158") in September 2006 modified US GAAP 9 for defined benefit employee benefit plans, such as FPU's pension and postretirement medical benefits. FAS 158 requires companies to record as an asset 10 or liability the difference between plan assets at fair value and obligation of the 11 12 defined benefit plans. In addition, FAS 158 requires companies to record, as a component of other comprehensive income (included in equity), the amount of the 13 14 net benefit asset or liability that had previously not been recognized in earnings. 15 Upon the issuance of FAS 158, FPU requested, and the Commission approved in Docket Number 080029-PU, the regulatory asset/liability treatment for the 16 unrecognized portion of the benefit asset or liability (in other words, the portion FAS 17 158 required to be included as a component of other comprehensive income). The 18 merger with Chesapeake in 2009 required a specific accounting treatment associated 19 with defined benefit plans. US GAAP requires the acquisition accounting to 20 21 recognize the full benefit obligations in excess of the plan asset value (similar to the net asset or liability required to be recorded under FAS 158) without recording the 22 unrecognized portion of the benefit (the portion included in equity, or in FPU's case, 23
Direct Testimony and Exhibits of Matthew Kim

1 regulatory asset). Essentially, US GAAP requires a one-time recognition of any 2 unrecognized benefit costs associated with defined benefit plans at the time of a 3 merger or acquisition. At the time of the merger with Chesapeake, FPU's electric operation had \$2,706,958 and \$31,450 of unrecognized benefit costs associated with 4 5 its pension and postretirement medical plans, respectively, which were deferred as 6 regulatory assets pursuant to the Commission's order in Docket Number 080029-PU. 7 The Commission previously allowed a deferral treatment of the accelerated benefit cost recognition pursuant to the acquisition accounting. In Docket Number 060657-8 9 GU, Florida City Gas ("FCG") was allowed to defer the amount associated with 10 accelerated pension cost recognition in its acquisition by AGL Resources Inc. and amortize it over the remaining service period of FCG employees expected to receive 11 benefits from the pension plan, which was the period approximating the normal 12 pension expense recognition without the acquisition. Consistent with this treatment 13 14 approved by the Commission, FPU continued to defer \$2,706,958 and \$31,450 in 15 unrecognized pension and postretirement medical benefit costs, respectively and amortize them over the remaining service period of FPU employees receiving 16 benefits from those plans (9.88 and 11.30 years, respectively). The resulting 17 18 amortization is \$276,767 per year.

19

20 Cost of Capital

- 21 Q. What is the Company's risk profile?
- A. Chesapeake's long-term debt carries the NAIC 1 rating from the National
 Association of Insurance Commissioners ("NAIC"). According to NAIC, NAIC 1 is

Direct Testimony and Exhibits of Matthew Kim

1		assigned to the highest quality obligations with the lowest credit risk. The NAIC 1		
2		rating is equivalent to an A-bond rating or above for Moody's and S&P ratings.		
3				
4	Q.	What is the capital structure of the Company?		
5	А.	The calculation of capital structure reflects investor sources of capital as follows:		
6		common equity of 58.21 percent, long-term debt (including the current maturity) of		
7		35.29 percent and short-term debt of 6.50 percent. Chesapeake targets an equity		
8		ratio to total capitalization of between 55 and 60 percents. These targets have been		
9		reviewed with Chesapeake's Board of Directors.		
10				
11	Q.	Why does the Company believe this structure is appropriate?		
12	А.	The capital structure is based on the historic capital structure as of September 30,		
13		2013, and is updated through the end of the projected test period based on our most		
14		recent projection of capital requirements. The projection incorporates long-term debt		
15		placements committed by Chesapeake in 2014 and anticipated in 2015, as well as		
16		anticipated equity issuances necessary to maintain the desired ratio of equity to total		
17		capitalization between 55 to 60 percents. Also, the common equity ratio of 58.21		
18		percent is consistent with the historic ratio in the past five years. The common		
19		equity ratio to the total capitalization as of December 31, 2013, 2012, 2011, 2010		
20		and 2009, excluding accumulated other comprehensive income, which is further		
21		discussed in the testimony of Mr. Moul, was 55 percent, 60 percent, 62 percent, 59		
22		percent and 56 percent, respectively. The simple five-year average for those five		
23		years was 58 percent.		

1

2 Q. What is FPU's role in the decision-making process regarding financing for 3 FPU?

A. Except for the remaining Secured First Mortgage Bond of \$8 million issued by FPU 4 prior to the merger, all of FPU's financing is provided by Chesapeake. FPU's 5 6 financing needs are considered, along with the needs of Chesapeake's other subsidiaries, in establishing Chesapeake's financing plan and executing the 7 associated financing strategy. Chesapeake has various budget, forecast and other 8 planning processes that allow each of its businesses, including FPU, to present its 9 capital requirements. Since Chesapeake finances with the consideration for the 10 financing needs of all of its subsidiaries, including FPU, FPU's financing decisions 11 are consistent with those of Chesapeake in terms of capital structure, terms and 12 conditions. Chesapeake has directly assigned the one remaining series of FPU's 13 Secured First Mortgage Bond to FPU as it was financed by FPU prior to the merger 14 15 with Chesapeake. The remainder of FPU's capitalization is represented by the relative proportions of Chesapeake's components of capitalization as Chesapeake 16 17 provides all of FPU's other financing needs.

18

Q. Has the merger with Chesapeake had an impact on FPU's overall cost of capital?

A. Yes, with Chesapeake's sound capital structure and superior ability to attract capital at reasonable cost, the merger has had a positive impact on FPU's overall cost of capital. Prior to the merger, FPU's credit rating (long-term debt rating of NAIC 2)

Direct Testimony and Exhibits of Matthew Kim

1 and inability to access capital market at attractive rates impaired its ability to obtain 2 the necessary capital to grow. By comparison, Chesapeake's long-term debt rating 3 was (at the time of the merger) and continues to be NAIC 1. At the time of the merger, FPU had only one committed line of credit for \$26 million. Chesapeake 4 5 currently has access to short-term debt facilities totaling \$165 million. In addition, 6 FPU had obtained only \$29 million of long-term debt financing over the 10-year 7 period immediately prior to the merger. By contrast, in less than five years since the 8 merger, Chesapeake has issued \$56 million in long-term unsecured debt with an 9 additional \$50 million committed to be issued in May 2014. The debt issuances have 10 been consummated at attractive interest rates ranging from 3.73 percent to 6.43 11 percent and on an unsecured basis with much less stringent covenants. Since the 12 merger, Chesapeake successfully refinanced all but one series of FPU's Secured First 13 Mortgage Bonds with Chesapeake unsecured senior notes and reduced the overall 14 cost of debt.

- 15
- 16 Q. Does this conclude your testimony?
- 17 A. Yes.

Exhibit No._ MK-1

MFR'S Sponsored by Matt Kim Page 1 of 1

MFR Number	Title	550	
B-22	Total Accumulated Deferred Income Taxes		F
B-23	Investment Tax Credits-Annual Analysis		Ľ
C-22	State and Federal Income Tax Calculations		
C-25	Deferred Tax Adjustment		
C-26	Income Tax Returns		ŀ
C-27	Consolidated Tax Information		1
C-28	Miscellaneous Tax Information		Ľ
D-1a	Cost of Capital-13 Month Average		Ľ
D-1b	Cost of Capital-Adjustments		ł
D-2	Cost of Capital-5 Year History		L
D-3	Short-Term Debt		
D-4a	Long-Term Debt Outstanding		D
D-4b	Reacquired Bonds		ł.
D-5	Preferred Stock Oustanding		
D-6	Customer Deposits		Ľ
D-7	Common Stock Data		l
D-8	Financial Plans-Stocks and Bond Issues		į.
D-9	Financial Indicators-Summary		Ľ
G-16	Interim Pension Cost		L
G-19a	Interim Cost of Capital-Year End		

FLORIDA PUBLIC UTILITIES COMPANY

Docket No. 140025-EI

DIRECT TESTIMONY and EXHIBITS OF OF ALEIDA SOCARRAS

1 Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

- 2
- A. My name is Aleida Socarras. I am Director of Marketing & Sales for Florida Public
 Utilities Company (the "Company" or "FPU"). My business address is 911 South 8th
 Street, Fernandina Beach, FL 32034.

6 Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND 7 PROFESSIONAL EXPERIENCE.

A. I joined Florida Public Utilities in March 2011. Prior to joining Florida Public Utilities
 Company, I was Senior Sales Manager of TECO Partners, a Florida sales and marketing
 company representing multiple energy related companies. Prior to that, I worked for
 TECO Peoples Gas in various management positions. I hold an M.S. degree in
 Organizational/Industrial Psychology from the University of Texas at El Paso.

13 Q. PLEASE DESCRIBE YOUR CURRENT RESPONSIBILITIES.

A. As Director of Marketing & Sales, I am responsible for the Company's marketing, sales
 and energy conservation departments, providing leadership for the Company's growth
 strategy and program and business development efforts.

17 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

18 A, My testimony addresses the critical role that FPU plays in promoting economic 19 development in areas we serve and the corresponding benefits to consumers. The 20 Company's Marketing & Sales team and the Company overall builds strong strategic 21 partnerships with FPU's business and industrial customers and advises on conservation 22 and energy efficiency measures. I explain the Company's approach to economic 23 development and our desire to be a leader in assisting the areas we serve advance their

Direct Testimony of Aleida Socarras

- economic development efforts. Finally, we propose in this rate case that the Commission
 approve our Economic Development Rider. I discuss the specifics of our request and
 explain how the rider will promote economic development.
- 4

Q. HAVE YOU FILED TESTIMONY BEFORE THE FLORIDA PUBLIC SERVICE

5

COMMISSION IN PRIOR CASES?

A. No. I do, however, regularly participate in the development of the Company's proposals
and programs addressed in the Commission's Natural Gas and Energy Conservation
Clauses.

9 Q. ARE YOU SPONSORING ANY EXHIBITS TO YOUR TESTIMONY?

A. Yes. I am sponsoring Exhibit AS-1, which is a description of our electric economic
 development program. I also sponsor Exhibit AS-2, which contains the proposed tariff
 sheets and service agreement for the economic development rider component of our
 economic development program.

14 Q. ARE YOU SPONSORING ANY MFRS IN THIS CASE?

15 A. No, I am not.

16 Q. PLEASE EXPLAIN THE ROLE THAT FPU HAS IN ECONOMIC 17 DEVELOPMENT.

As described in Rule 25-6.0426, Florida Administrative Code, economic development activities are those activities designed to improve the quality of life for all Floridians by building an economy characterized by higher personal income, better employment opportunities, and improved business access to domestic and international markets. To this end, the Company's Marketing & Sales team, and the Company overall, builds strong strategic partnerships with FPU's business and industrial customers and advises on

Direct Testimony of Aleida Socarras

conservation and energy efficiency measures. We work closely with regional economic
 development organizations, chambers of commerce, and trade associations to promote
 our service areas. We aggressively encourage new business growth and assist with
 retention and business expansions activities. By helping businesses reduce their energy
 costs and identifying and instituting energy efficiency measures, we help them become
 more competitive and prosper. This maintains and adds jobs to the local economy which
 in turn benefits the community and all rate payers.

8 Q. PLEASE EXPLAIN THE BENEFITS OF ECONOMIC DEVELOPMENT TO 9 FPU'S CUSTOMERS.

Economic development activities improve quality of life in the communities we serve by 10A. 11 creating jobs, expanding economic opportunities, and positively influencing demand for 12 energy consumption. At the same time, economic growth creates a greater pool of users 13 and additional wealth for communities to invest in energy efficiency measures. 14 Economic development efforts in our areas have resulted in economic development 15 organizations having a resource at their disposal to provide prospective businesses with 16 infrastructure assessment, technical information, rate comparisons, and assistance in site identification where infrastructure is already in place to help expedite site certification. 17 18 This assistance can help mitigate risk for prospective businesses and speed up the 19 process.

20 Our participation in community chambers of commerce, trade shows, and other economic 21 development activities strengthen the communities we serve. Our involvement not only 22 demonstrates support for the community, but provides education and leadership from 23 trained, knowledgeable professionals that can inform decisions made by community

leaders. FPU staff members assist in providing business recruitment leads, researching
 prospects and target markets, and in providing data gathering and analysis. These
 collaborations also provide opportunities to address and promote conservation efforts.

4 In addition, by hosting events and participating in community forums, we help share and 5 disseminate information which helps increase cooperation among stakeholders and 6 creates a positive image of the community. A unified community with a cohesive message helps to make the community more attractive to decision makers looking to the 7 8 community as a place where they want to live, thereby bringing new businesses and 9 people to our service area. Consequently, additional load added to our system enables us 10 to spread fixed costs over a larger customer base, furthering an efficient system and 11 keeping rates stable for all our customers.

12

13

Q. ARE THERE EXAMPLES OF FPU'S EXISTING ECONOMIC DEVELOPMENT INITIATIVES AND BENEFITS THERETO?

14 Yes. FPU has been actively involved with the Nassau County Business Development Α. 15 Board ("NCBDB") for many years through participation on the Board, as well as actively 16 participating in many committees and events. NCBDB relies on us for technical 17 assistance, industry knowledge, and man-hour resources to help them attract businesses 18 and promote the area overall. Also, we work with them to identify business ready sites 19 and provide projected rate analyses. Another example is our cooperation with the City of 20 Marianna in making improvements to the downtown area that is being revitalized. We 21 moved overhead lines near the courthouse, as well as around U.S. Highway 90, in order 22 to make the area more attractive and with the intent of driving visitors towards the

Direct Testimony of Aleida Socarras

downtown area. We also provide educational resources and help promote "Buy Local"
 campaigns.

3 Q. PLEASE DISCUSS THE STATE OF FLORIDA'S FOCUS ON ECONOMIC 4 DEVELOPMENT.

5 A. Governor Rick Scott and the Florida Legislature have strengthened the focus on 6 economic development efforts. Collectively, they encourage all Florida businesses to 7 place a priority on workforce development and job creation. As the Commission knows, 8 the Governor has outlined two major goals for Florida: job creation and decreasing 9 unemployment numbers. Correspondingly, the Commission has taken a leadership role 10 in supporting and facilitating economic development. The Commission has supported 11 efforts by other utilities to promote economic development by allowing recovery of 12 reasonable associate expenses pursuant to Section 288.035, Florida Statutes and Rule 25-13 6.0426, Florida Administrative Code.

14

15

Q.

IS FPU PROPOSING ANY NEW ECONOMIC DEVELOPMENT INITIATIVES AS PART OF THIS PROCEEDING?

16 Yes. FPU is seeking approval of our Economic Development Rider. We believe A. 17 the Rider will further our economic development efforts and result in greater customer 18 benefits in our service areas. When companies consider areas for relocation or 19 expansion, electric rates are often a major consideration. By providing a rate discount, we will be able to assist the state and specifically our service area in being more 20 21 competitive. Electric rate discounts are expected as part of the incentive packages 22 offered to prospective companies evaluating an area of relocation or expansion.

Direct Testimony of Aleida Socarras

1

Q. PLEASE DESCRIBE YOUR REQUEST.

As I have noted, for many years, FPU has been involved in economic development activities in the areas of the state in which we serve. In light of the current economic climate, FPU has concluded that we should further extend our efforts in economic development. To that end, we intend to implement a more robust, detailed and formalized Economic Development program to enhance even further our work to promote economic development. I have outlined below our Plan's components, the key to which is our Economic Development Rider Program.

9

Q. PLEASE BEGIN BY OUTLINING THE AVAILABILITY AND APPLICATION OF YOUR ECONOMIC DEVELOPMENT RIDER PROGRAM.

A. We intend to make the Economic Development Rider Program (the "Rider Program")
 available throughout the entire territory served by FPU. The Qualifying load and
 employment requirements under this Rider must be achieved at the same delivery point.
 Additional metering equipment may be required for service under this Rider. This
 Program would apply to new electric load associated with:

17

(1) Initial permanent service to new commercial and industrial establishments;

- 18 (2) Commercial or industrial space that has been vacant for more than six
 19 months prior to the application for service under the Rider Program; and
- 20
- (3) The expansion of existing establishments.

The purpose of this new Rider Program is to provide an attractive service discount offering for commercial ventures considering locating their business or new facilities in areas within FPU's service territory or considering expanding existing facilities in a

Direct Testimony of Aleida Socarras

1 manner that will create new job opportunities for communities we serve. Notably, the 2 jobs created by a new facility or facility expansion must be full-time positions that 3 continue to exist as long as the customer takes service under the Rider Program, which 4 can be up to five (5) years.

5

Q. HOW WILL YOU DETERMINE WHAT QUALIFIES AS NEW LOAD?

6 A. The new load applicable under this Rider Program for new and vacant establishments 7 must be a minimum of 200 kW at a single delivery point added after December 31, 2014. 8 In the case of the expansion of existing facilities, the added new load must be a minimum 9 of 100 kW; however in order to qualify, the total load after the addition of the new load 10 must be a minimum of 200 kW at a single delivery point. To qualify for service under 11 this Program, the Customer must employ an additional work force of at least 10 full-time 12 employees at the delivery point to which the load is added. Additionally, in order to take service under the Program, the Customer must provide sufficient evidence to FPU to 13 establish that the availability of the Program is a significant factor in the Customer's 14 location or expansion decision. 15

16 Q. WILL YOU MAKE THE RIDER PROGRAM AVAILABLE TO EXISTING 17 LOAD?

A. No. Initial application for this Rider Program is not available to existing load. However,
 if a change in ownership occurs after the Customer contracts for service under this
 Program, the successor Customer may be allowed to fulfill the balance of the contract
 under the Program and continue the schedule of credits outlined below. The Program is
 not available, however, for load shifted from one establishment or delivery point on the
 FPU system to another one on the FPU system.

Q. WHAT ARE THE TERMS AND CONDITIONS FOR RIDER PROGRAM PARTICIPATION?

3 A. The specific rates, term of service, and service agreement are included in Exhibit AS-1 attached to my testimony and are similar to programs approved by the Commission for 4 5 other electric utilities. To summarize the Rider Program, customers will be required to 6 sign a five (5) year contract, which will not be eligible for renewal. The customer will, for that period of time, continue to take service under the tariffed rates and charges for 7 8 their applicable rate class, but a percentage discount will be applied to the demand and 9 non-fuel charges. The discount applied will gradually be reduced each year of the 10 contract to zero in the final year. Throughout the contract period, the customer will still pay the applicable customer charge and any amounts associated with cost recovery 11 12 clauses.

Q. WHAT ARE THE COMPONENTS OF FPU'S OVERALL ECONOMIC DEVELOPMENT PROGRAM?

15 As indicated, the Rider Program is but one piece of our plan to enhance our economic A. development efforts. In addition to the Rider Program tariff included in my Exhibit AS-16 2,, FPU's Economic Development Program will memorialize and promote our 17 18 commitment to provide: 1) economic development assistance to the communities we serve; 2) recruitment resources for potential new businesses considering location options; 19 3) direct community involvement by FPU in key areas that attract new business; 4) 20 21 leadership, as appropriate, on community chambers and economic development boards; 5) active involvement in commercial retention and programs developed in cooperation 22 with local chambers of commerce; 6) programs, leadership and cooperation to encourage 23

innovation in community economic development programs; 7) resources to enhance k-12
 education, particularly in areas, such as STEM, that attract business; 8) resources and
 cooperation in community initiatives to promote sustainable practices; 9) active
 engagement on neighborhood revitalization programs; and 10) programs and information
 geared towards enhancing resiliency to disasters.

6 Specifically, FPU will provide assistance to local economic development organizations by providing information and resources, including timely responses to requests for 7 8 information regarding data and infrastructure assessments, communication and assistance 9 in the creation of a "business-ready" environment, as well as assistance in efforts to 10 certify "shovel ready" construction sites. The Company will also encourage and 11 participate in site visits, as well as recruitment and prospecting missions to showcase 12 communities in our service areas, and provide financial assistance, as necessary, to 13 support and strengthen these efforts.

FPU will also be engaged in offering assistance to businesses considering locating in our service areas. FPU will commit to providing prompt responses to new business inquiries regarding our service offerings, as well as information and technical guidance regarding the availability and requirements of gas and electric infrastructure for prospective new businesses. In addition, the Company will assist prospective business customers with projected rate analyses, review of reliability requirements, and back up powers supply, as needed.

FPU's broader community involvement will include active efforts to gain a greater understanding of the needs of the various communities we serve and work with communities and local governments in the development of community-specific economic

development plans. FPU will also be engaged on community economic development
 boards and local chambers of commerce, providing leadership and financial resources as
 needed. The Company will also provide outreach and seminars regarding Florida's
 energy market and correlating opportunities for businesses.

5 In addition to efforts targeted at attracting new businesses, the Company will also 6 undertake additional efforts to retain existing commercial enterprises, including 7 commercial energy conservation rebate programs and energy audits, as well as active 8 participation in retention and small business support programs promoted by local 9 governments and chambers. We will also participate in the development and 10 implementation of "Buy Local" campaigns, among other things.

Q. DOES YOUR ECONOMIC DEVELOPMENT PROGRAM INCLUDE ENGAGING SCHOOLS AND CHILDREN?

A. Yes. The Company's efforts will extend into the education arena through coordinated efforts to develop school programs that will build a stronger workforce in those areas most critical for attracting business opportunities. FPU will also engage direct with students through mentoring projects targeted at Science, Technology, Engineering, and Math ("STEM") programs and provide financial assistance as appropriate.

19 Q. ARE THERE ADDITIONAL EFFORTS NOT PREVIOUSLY 20 DISCUSSED?

A. Yes. FPU will also develop programs, as well as Company policies, designed to encourage technical innovation, particularly as it relates to the development of viable renewable and cogeneration projects and installation of electric recharging stations.

- FPU's program will also promote best practices for energy sustainability and include publications, seminars, and direct-mail marketing campaigns designed to encourage conservation, as well as economic growth.
- As another means of attracting businesses to our communities, FPU will coordinate with 4 5 communities engaged in neighborhood revitalization programs and assist by providing 6 assistance with neighborhood enhancements such as improved street lighting and tree 7 trimming. The Company will also provide communities with information and resources 8 to assist in the pursuit of state and federal incentives and grant funding for community 9 development projects. FPU will also actively engage in developing and implementing disaster resiliency initiatives, including locating back-up power supply and supporting 10 11 emergency response drills.
- All in all, each aspect of our overall Economic Development Plan is designed to assist communities that we serve in presenting the most compelling location package to businesses considering location options.
- Moreover, our Plan is consistent with the Commission's Rule 25-6.0426, F.A.C., in all respects. Consistent with that Rule, financial support provided by the Company will only be pursuant to a prior written agreement. Likewise, the Company will only seek recovery of economic development expenses that are consistent with the limitations set forth in paragraph (7) of the Rule.

20

21

Q. WHAT IS THE STANDARD BY WHICH THE COMMISSION CAN APPROVE YOUR REQUEST?

A. Section 288.035, Florida Statutes, allows the Commission to authorize utilities to recover
 reasonable economic development expenses.

Direct Testimony of Aleida Socarras

1 Q. CAN YOU DEFINE REASONABLE ECONOMIC DEVELOPMENT EXPENSES?

2 A. The Legislature has defined "reasonable economic development expenses" as: 1) 3 expenditures for operational assistance, including the participation in trade shows and prospecting missions with state and local entities; 2) expenditures for assisting the state 4 5 and local governments in the design of strategic plans for economic development 6 activities; and 3) expenditures for marketing and research services, including assisting local governments in marketing specific sites for business and industry development or 7 8 recruitment, and assisting local governments in responding to inquiries from business and 9 industry concerning the development of specific sites. FPU believes that the expenses 10 anticipated are fully consistent with this definition.

Q. WHAT IS THE EXPENSE AMOUNT INCLUDED IN THIS RATE CASE FOR ECONOMIC DEVELOPMENT?

The Company is seeking approval of \$50,000 annually, which will have a negligible 13 Α. 14 impact on rates to customers. Consistent with Rule 25-6.0426(4), F.A.C., we are asking that the Commission determine that this is a prudent level of economic development 15 expenses for FPU and that this amount may be reported by the Company as such for 16 17 purposes of its surveillance reports and earnings review calculations. Furthermore, FPU anticipates that some amount of the expenses incurred under this Program will be offset 18 by additional load, allowing the Company to spread its fixed costs across a larger 19 20 customer base.

Q. WITH REGARD TO THE RIDER PROGRAM, WILL THERE BE ANY LIMITATIONS ON THE NUMBER OF CUSTOMERS ABLE TO TAKE SERVICE UNDER THE TARIFF?

Direct Testimony of Aleida Socarras

1 A. Yes. The tariff will initially be open to all customers that meet the service requirements 2 in the tariff. However, in the event that the Company's economic development expenses 3 exceed, in total, the amount approved for the Company in accordance with Rule 25-4 6.0426(3), F.A.C., the Rider Program will be immediately closed to new applicants. 5 6 Q. DO YOU BELIEVE THE COMPANY'S REOUEST MEETS THE PARAMETERS 7 OUTLINED BY THE LEGISLATURE FOR APPROVAL OF ECONOMIC 8 **DEVELOPMENT INITIATIVES?** 9 Yes. Α. 10 11 Q. PLEASE SUMMARIZE YOUR TESTIMONY AND THE COMPANY'S 12 **REQUESTS IN THIS REGARD.** 13 FPU is seeking approval to recover \$50,000 annually in economic A. Certainly. 14 development-related expenses associated with a new economic development program 15 designed consistent with Commission Rule 25-6.0426, F.A.C. Our program is targeted at providing much needed economic development assistance to both our Northeast 16 17 (Fernandina Beach) and Northwest (Marianna) service areas. The amount requested will 18 have a minimal impact on customer rates, but the efforts undertaken through the program will be significant and beneficial. Moreover, we hope and expect that our efforts will 19 20 lead to additional growth, jobs, and ultimately, additional customers on our system, which should help to offset some additional expenses. As part of the new program, FPU 21 is also seeking approval of an Economic Development Rider tariff that will provide 22 discounts for new businesses that meet certain load requirements, which in turn will 23

provide an additional incentive for businesses to consider locating in our service areas. FPU's new Economic Development program and Rider Program tariff are consistent with the Commission's rules and similar to programs approved for other Florida investorowned electric utilities; therefore, we are asking that the Commission approve our proposal and allow the Company to move forward with our economic development efforts.

- 7 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 8 A. Yes.
- 9

Exhibit _____ AS-1 Page 1 of 2 Economic Development Plan



FPU'S ECONOMIC DEVELOPMENT PROGRAM

FPU's Economic Development Program is designed to promote economic growth in the communities we serve. For years, we have worked to build strong strategic partnerships with FPU's business and industrial customers and have worked with regional economic development organizations, chambers of commerce, and trade associations to promote our service areas and encourage growth. This program will guide our efforts to promote economic development. The program consists of the following components:

ECONOMIC DEVELOPMENT ASSISTANCE

*ssist local economic development organizations by providing information and resources. This includes:

- Timely responses to requests for information regarding data and infrastructure assessments;
- Communication and assistance in the creation of a "business-ready" environment; and
- Assistance in efforts to certify "shovel ready" construction sites.

RECRUITMENT ASSISTANCE

Encourage and participate in site visits and prospecting missions to showcase communities in our service areas and provide necessary financial assistance and resources to support and strengthen these efforts.

Offer assistance to businesses considering locating in our service areas.

Commit to providing prompt responses to new business inquiries regarding our service offerings, as well as information and technical guidance regarding the availability and requirements of gas and electric infrastructure for prospective new businesses.

Assist prospective businesses with projected rate analyses, review of reliability requirements, and backup power supply, as needed.

COMMUNITY INVOLVEMENT

Direct community involvement in key areas to attract new businesses, including efforts to gain a greater inderstanding of the needs of the various communities we serve.

Work with communities and local governments in the development of community-specific economic development plans.

Exhibit _____ AS-1 Page 2 of 2 Economic Development Plan

LEADERSHIP

Engage on community economic development boards and local chambers of commerce, providing leadership and financial resources as needed.

Sponsor conferences and seminars regarding Florida's energy market and correlating opportunities for businesses.

RETENTION

Participate in retention and small business support programs promoted by local governments and chambers.

Participate in the development and implementation of "Buy Local" campaigns and other activities to support existing businesses.

INNOVATION

Develop programs and company policies that encourage technical innovation, particularly in the development of viable renewable and cogeneration projects and the installation of electric recharging stations.

DUCATION

Coordinate efforts to develop school programs that will enhance the quality of the local curriculum to help build a stronger workforce and attract new businesses.

Participate in mentoring projects for Science, Technology, Engineering, and Math ("STEM") programs.

SUSTAINABLE PRACTICES

Promote best practices for energy sustainability by utilizing publications, seminars, and direct-mail marketing campaigns designed to encourage conservation, energy efficiency and economic growth.

NEIGHBORHOOD REVITALIZATION PROGRAMS

Support communities engaged in neighborhood revitalization programs and reach-out programs providing assistance with neighborhood enhancements, such as improved street lighting and tree trimming.

Provide communities with information and resources to assist in the pursuit of state and federal incentives and grant funding for community development projects.

RESILIENCY

Engage in developing and implementing disaster resiliency initiatives, including locating back-up power supply and supporting emergency response drills.

EXHIBIT NO.

(AS-2)

TO THE TESTIMONY OF ALEIDA M. SOCARRAS

ON BEHALF OF

FLORIDA PUBLIC UTILITIES COMPANY

ORIGINAL TARIFF SHEET NOS. 62, 63, AND 64 (ECONOMIC DEVELOPMENT RIDER PROGRAM)

Original Sheet No. 62

Exhibit AS-2

ECONOMIC DEVELOPMENT RIDER PROGRAM-EDRP

Availability:

This Economic Development Rate Program (the "Program") is available throughout the entire territory served by Florida Public Utilities Company. The Qualifying load and employment requirements under this Rider must be achieved at the same delivery point. Additional metering equipment may be required for service under this Rider.

Application:

This Program is applicable to new electric load associated with:

- (1) Initial permanent service to new commercial and industrial establishments.
- (2) Commercial or industrial space that has been vacant for more than six months prior to the application for service under the Program. Verification of vacancy will be established by evidence of no or minimal electric load during the time period in question.
- (3) The expansion of existing establishments. For existing establishments, new load is the net incremental load above that which existed prior to approval for service under this Program.

The new load applicable under this Program for new and vacant establishments must be a minimum of 200 kW at a single delivery point. In the case of the expansion of existing facilities, the added new load must be a minimum of 100 kW, however, in order to qualify, the total load after the addition of the new load must be a minimum of 200 kW at a single delivery point. To qualify for service under this Program, the Customer must employ an additional work force of at least 10 full-time employees at the delivery point to which the load is added.

In order to take service under the Program, the Customer must provide sufficient evidence to Florida Public Utilities Company to establish that the availability of the Program is a significant factor in the Customer's location or expansion decision.

Initial application for this Program is not available to existing load. However, if a change in ownership occurs after the Customer contracts for service under this Program, the successor Customer may be allowed to fulfill the balance of the contract under the Program and continue the schedule of credits outlined below.

This Program is not available for load shifted from one establishment or delivery point on the Florida Public Utilities system to another on the Florida Public Utilities system.

(Continued on Sheet No. 63)

Original Sheet No. 63

Exhibit AS-2

ECONOMIC DEVELOPMENT RIDER PROGRAM-EDRP (Continued)

Monthly Rate:

The rates and all other terms and conditions of the customer's otherwise applicable rate schedule shall be applicable under this Program. A credit based on the percentages below will be applied to the demand charges and non-fuel (base) energy charges of the Customer's otherwise applicable rate schedule associated with the Customer's new load:

Year 1 - 20% reduction Year 2 - 15% reduction Year 3 - 10% reduction Year 4 - 5% reduction Year 5 - 0% reduction

The above credit will be deducted from the monthly electric bill as computed in accordance with the provisions of the Monthly Rate section of the customer's applicable rate schedule before application of any discounts or adjustments. All other charges including the customer charge and energy conservation charge will be based on the Customer's otherwise applicable rate. The otherwise applicable rates may be any of the following: GSD, GSLD, or GSLD1.

Term of service:

The Customer agrees to a five-year contract term. Service under this Program will terminate at the end of the fifth year. Florida Public Utilities Company may terminate service under this Program at any time if the Customer fails to comply with the terms and conditions of this Program. Failure to: 1) maintain the level of employment specified in the Customer's Service Agreement and/or 2) purchase from Florida Public Utilities the amount of load specified in the Customer's Service Agreement will be considered grounds for termination.

If Florida Public Utilities Company terminates service under the Program for the Customer's failure to comply with its provisions, or if the Customer opts to terminate service under the Program, the Customer will be placed on their applicable rate schedule with no future discounts or rate reductions.

Service under this Rider is subject to the Rules and Regulations of the Company and the Florida Public Service Commission.

(Continued on Sheet No. 64)

Issued by: Jeffry M. Householder, President

Effective:

Original Sheet No. 64

Exhibit AS-2

ECONOMIC DEVELOPMENT RIDE PROGRAM-EDRP

ECONOMIC DEVELOPMENT RIDER PROGRAM- EDRP

Service Agreement

The customer is applying for service under the Economic Development Rate Program based upon new or expanded load as indicated below (Check one):

New Load associated with a new commercial or industrial establishment

New Load established in commercial or industrial space that has been vacant for more than six months

Expanded Load associated with an existing establishment

CUSTOMER NAME_____

SERVICE ADDRESS

TYPE OF BUSINESS_____

The Customer hereto agrees as follows:

- 1. For new and vacant establishments, a minimum of 200 kW of measured demand must be added at a single delivery point.
- For existing establishments that are expanding, a minimum of 100 kW of measured demand must be added at a single delivery point, and the total measured demand after the addition of the new load must be a minimum of 200 kW.
- In all cases, the customer must employ an additional work force of at least 10 full-time employees at the delivery point to which the load is added.
- 4. That the quantity of new or expanded load shall be 200KW of Demand.
- The nature of this new or expanded load is
- 6. That in the case of a new customer adding load to vacant facilities, the commercial/industrial space associated with the new load has been vacant for more than six months.
- 7. In case of early termination, the Customer shall repay Florida Public Utilities all of the credits provided under the Program to date.
- To initiate service under this Program on ______, and terminate service under this Program on ______, This shall constitute a period of five years.
- 9. To provide verification that the availability for this Program is a significant factor in the Customer's location/expansion decision.
- If a change in ownership occurs after the Customer contracts for service under this Program, the successor Customer may be allowed to fulfill the balance of the contract under the Program and continue the schedule of credits.
- 11. That in the case of new load established in a vacant facility to provide verification that there is no affiliation with any prior occupant.

Signed:	Accepted by: Florida Public Utilities Company
Title:	Title:
Date:	Date:

FLORIDA PUBLIC UTILITIES COMPANY Docket No. 140025-EI

DIRECT TESTIMONY and EXHIBITS OF

MARIANA PEREA

Direct Testimony of Mariana Perea

1 Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS 2 ADDRESS.

A. My name is Mariana Perea. I am the Director of Customer Care for Florida
 Public Utilities Company ("FPU"). My business address is 780 Amelia Island
 Parkway, Fernandina Beach, FL 32034.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND 7 PROFESSIONAL EXPERIENCE.

8 Α. I attended the University of Hawaii from 1976 to 1979 in the field of Travel 9 Industry Management. I continued my studies at the University of Phoenix 10 where I obtained my Bachelor of Science in Business Management and my 11 Masters of Business Administration in 2009. I spent the first twenty years of 12 my career employed by Mexicana International Airlines in a variety of 13 leadership roles concentrating on customer service and operations. I was 14 engaged by Quest Telecommunications for two years as a Resource 15 Allocation Manager. I moved on to American Express for seven years in the 16 area of Business and Consumer Travel Management. I have been employed with the Company in the capacity of Director of Customer Care for Florida. 17 18 Maryland, and Delaware since March 2011.

19 Q. PLEASE DESCRIBE YOUR CURRENT RESPONSIBILITIES.

A. As Director of Customer Care, I am responsible for establishing the strategy,
 goals, and objectives for our customer contact centers serving approximately
 126,000 customers.

23 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

1 Α. FPU has a great customer service record. We go through in-depth training to 2 ensure our representatives understand and deliver high levels of service. The 3 purpose of my testimony is to describe the improvements that the Company 4 has made to ensure consistency in customer service. I will describe the 5 strategic goals and objectives of the Company in this area, including the 6 initiatives that have been implemented in support of the strategy. Finally, I 7 will discuss the level of customer complaints to the Commission since the last 8 rate proceeding in 2008 for FPU Electric and the impact of recent reliability 9 improvements since the acquisition of FPU by Chesapeake Utilities 10 Corporation.

11

INCREASED QUALITY OF SERVICE

12 Q. PLEASE DESCRIBE THE COMPANY'S COMMITMENT TO CUSTOMER 13 SERVICE.

14 Α. We are fully committed to our customers and stand by our values. We aspire 15 to provide excellence in service and caring for the customer and to ensure 16 their experience with FPU is favorable; this is at the core of everything we do. 17 We strive to exceed customers' expectations. The Company's goal is to 18 establish a process to evaluate and implement changes that will result in an 19 even more positive experience for our customers. This experience is defined 20 as one which results in customers not just being satisfied customers; but 21 rather when customers become promoters of our Company. "Promoters" are 22 customers who refer potential customers to our Company, creating retention 23 and profitable growth. In order to achieve this positive customer experience,

1 the Company is committed to consistently exceeding our customers' needs 2 during critical touch points. These touch points include incoming phone calls, 3 walk-in contact, web site visits, billing, energy conservation program, sales & 4 marketing activities, meter turn-on's, leak investigations at the customer 5 premise and other opportunities to interact with customers. The Company 6 has identified, and is implementing, best practices throughout its operational 7 departments that are aligned with the goal of satisfying our customers to the 8 extent that they become promoters. One of the key components required to 9 achieve and maintain the goal of providing a positive customer experience is 10 the gathering of critical performance measurements. The Company has 11 identified many standard metrics that are critical to determining whether we 12 are moving in the direction of providing a positive customer experience. Based on these metrics (speed to answer, call handle time, net promoter 13 14 score encompassing the areas of field operations and customer contact, and 15 quality monitoring of calls), the Company is able to improve processes, 16 enhance employee training programs, and better focus collateral material 17 messaging that enables the Company to deliberately provide services that 18 meet and exceed customer expectations. This process encompasses all 19 aspects of the Company, from Customer Care to Sales & Marketing to 20 Operations and Engineering.

21 Q. PLEASE DESCRIBE THE PROCESS UNDERTAKEN BY THE COMPANY 22 TO IMPROVE THE SERVICE QUALITY TO CUSTOMERS.

1 Α. The Company has developed and implemented a Customer Care strategy 2 with a goal to be recognized as an industry leader in the execution of all 3 meter-to-cash activities, including Contact Center services, while ensuring all 4 processes are designed to deliver a positive customer experience. There are 5 four strategic objectives to the plan: 1) Customer Centric - excellent service to our customers is our number one priority; 2) Consistent Quality - we will 6 7 provide professional, courteous, timely, and accurate service to every 8 customer in a fair, consistent and accessible manner; 3) Efficient and 9 Effective - we will measure and improve work processes by implementing 10 innovative ideas, applying appropriate technology, and training staff to be 11 helpful and knowledgeable; and 4) Accountability - we will use feedback 12 from processes and customers to improve our performance.

13

Q. WHAT ARE THE SPECIFIC INITIATIVES THAT THE COMPANY IS

14 IMPLEMENTING IN SUPPORT OF THE CUSTOMER CARE STRATEGY?

- A. The Company has identified five (5) key initiatives that support the Customer
 Care strategy: 1) Consolidation; 2) Performance Management; 3)
 Development and Training; 4) Process Improvement; and 5) Implementation
 of Technology.
- 19

9 Q. CAN YOU PLEASE DESCRIBE EACH INITIATIVE?

A. Yes. After the acquisition we saw the need for structural change. First, the
 Company needed to consolidate its Customer Care activities organizationally.
 Prior to the acquisition of FPU, this function was performed at each physical
 location, under different managers who utilized different practices, resulting in

1 an inconsistent customer service experience. The Company has now 2 consolidated the Customer Care functions in one department, which meets 3 the first objective of having a singular focus on the delivery of meter-to-cash 4 activities efficiently in a manner that is easy for the customer and produces 5 high-quality service at a lower cost. Second, the Company has established 6 standards for each meter-to-cash discipline and the reporting requirements 7 necessary to provide valuable feedback to those employees performing the 8 By establishing these clear standards, the Company is able to activity. 9 measure and manage performance of its employees as we strive to deliver a 10 positive customer experience. Third, the Company has developed and 11 implemented a series of employee training modules, hired The Profitable 12 Group to perform training, which has provided employees with the skills and 13 knowledge necessary to efficiently and effectively perform their assigned 14 activities. In addition, the Company has contracted the Fred Pryor group for ongoing online training in a variety of areas. Fourth, many employees 15 16 throughout the Company have been involved in a review of existing 17 processes designed to improve the effectiveness and efficiency of the 18 activities that are performed. As we move forward, feedback from customers 19 and employees and the metrics results will be utilized in a continuous 20 improvement process to move us closer to the strategic objectives of the 21 Finally, the Company has made many Customer Care organization. 22 technology improvements that enhance our ability to provide efficient and 23 effective services to our customers.

1 Q. CAN YOU ELABORATE ON SOME OF THE TECHONOLOGY 2 IMPROVEMENTS?

A. The Company, since the acquisition by Chesapeake, has implemented the
 following two technology improvements which provide the foundation for our
 ability to provide world-class services to all of our customers, including the
 Electric customers:

7

8

Consolidation of Customer Information Systems (CIS); and

- Implementation of New Telephony Technology.
- 9

10 The Company is currently in the process of evaluating possible 11 implementation of kiosk-based service for 24/7 payment access in a variety of 12 locations across Chesapeake's Florida service platform with priority being 13 focused upon the Electric divisions. Additionally, the Company is reviewing 14 various Interactive Voice Recognition IVR systems for improved telephone 15 payment options and bill information as well as a mobile friendly website for 16 on the go payment processing and service requests.

17

Finally, the Company is upgrading its billing software to a new browser-based Customer Information System (CIS) version designed to increase the overall customer and user experience. Additional billing options will also be explored to enhance the customer service experience. The CIS utilizes streamlined guided processes that will create consistency in training and call handling. Additional safeguards have been built into the system to improve the

accuracy of customer records. Improved reporting capabilities will increase
 the Company's ability to analyze data, ensure consistency, and provide
 services that meet and exceed customer expectations. This billing system will
 be used Company-wide.

- 5
- 6

7

Q. CAN YOU DESCRIBE HOW THE CONSOLIDATION OF THE CUSTOMER INFORMATION SYSTEM BENEFITS ELECTRIC CUSTOMERS?

8 Α. In June 2010, the Company integrated the Customer Information Systems of 9 Chesapeake's Florida operations with FPU's system, thus providing a 10 consistent basis from which to operate. In November 2011, the Company completed the integration of all customers into the consolidated CIS system. 11 12 The current CIS platform allows for the combined company to seamlessly coordinate all Customer Care (customer call centers, billing and collections 13 14 and meter reading) and field services activities (turn-on's and off's, meter 15 changes, etc.) that impact customers. As such, customer inquiries can be 16 handled by virtually any customer representative. Previously, customers 17 were required to contact the local office for service during normal business 18 hours (8:30 am to 5:30 pm). Now, customers can contact the consolidated 19 call center from 7:00 am to 7:00 pm or the after-hours service during all non-20 business hours. The consolidation has also allowed the Company to 21 implement best practices, consistent training and, as described below, 22 capture valuable customer service metrics to evaluate our success in 23 providing the best possible customer experience.

Direct Testimony of Mariana Perea

1 Q. HAVE THE CUSTOMERS RECEIVED ANY OTHER BENEFITS FROM 2 THEIR INTEGRATION INTO THE CUSTOMER INFORMATION SYSTEM?

3 Α. Yes. Customers now receive a full page bill from the Company, which clearly 4 describes all components of the bill, compares current usage with previous 5 usage and provides other important information. Customers also receive a return envelope to facilitate payments made by check through the mail. 6 7 Previously, customers received their bill on a post card sized statement, 8 which contained the minimum required information, with no return envelope. 9 Customers now also have available multiple payment options, including credit 10 and debit cards, electronic funds transfer, payment by phone and, as more 11 fully described below, walk-in payments at a multitude of locations that are 12 available during and after normal business hours and on weekends.

Q. PLEASE DESCRIBE THE BENEFITS CUSTOMERS RECEIVE FROM IMPLEMENTING NEW TELEPHONY TECHNOLOGIES.

15 Α. The Company has finalized the installation of state-of-the-art telephone 16 systems that provide for seamless call center activities from agents located 17 throughout the state, as well as, for the first time, having the ability to collect a 18 wide variety of valuable customer call metrics. Information such as call 19 waiting times, call abandonments and recording of actual customer calls 20 provides us with the measurements needed to continuously improve our 21 ability to provide world class customer service. The ability to provide call 22 options via telephone prompts enables us to provide better specialized 23 service to customers. Customer service representatives are continuing to
Direct Testimony of Mariana Perea

1		receive intensive training that enhances their knowledge of all Company-
2		offered programs, such as Energy Conservation programs, and system-based
3		processes that allow for one-call resolution for most contacts.
4	Q.	CAN YOU IDENTIFY AND DESCRIBE OTHER SPECIFIC CUSTOMER
5		BENEFITS BEYOND THE TECHNOLOGY-BASED IMPROVEMENTS?
6	Α.	Yes. The Company has enhanced the customer experience through a variety
7		of initiatives designed to benefit customers through improved services. The
8		following specific improvements have been implemented:
9		 More thorough and more effective Employee Training;
10		 Implementation of Third Party Payment Centers;
11		 Online options for service, payments, and information; and
12		Utilization of Third Party Providers for Certain Functions.
13	Q.	CAN YOU DISCUSS THE EMPLOYEE TRAINING THAT HAS TAKEN
14		PLACE?
15	A.	Yes. As previously mentioned, the Company has engaged a firm out of
16		Tampa, Florida, The Profitable Group, to provide employee training
17		throughout the Company. Our employees are committed to serving our
18		customers in such a way that our customers become "promoters." With that
19		said, the employee training is specifically designed to enhance employee
20		understanding of the importance of providing quality service to our customers.
21	Q.	PLEASE DISCUSS WHAT THIRD-PARTY PAYMENT OPTIONS THE
22		COMPANY HAS IMPLEMENTED.

Direct Testimony of Mariana Perea

1 Α. Recently, the Company executed an agreement with Fiserv, Inc., a global 2 leader in information management and electronic commerce systems and 3 services, to accept utility payments at its network of locations, primarily at 4 over 300 Wal-Mart stores in the state. Additional payment locations are also 5 part of this service arrangement. This is a free service to our customers as 6 the Company pays for any transaction fees imposed by the contract. This 7 diverse and extensive access to payment locations is very convenient for 8 customers and provides all customers, including all Electric customers, 9 access to walk-in payment locations 24/7. This agreement with Fiserv, Inc. 10 provides for a significant enhancement for customers who desire to pay at a 11 walk-in facility.

12 Q. HOW HAS THE COMPANY UTILIZED THIRD PARTY PROVIDERS TO 13 ENHANCE SERVICE TO CUSTOMERS?

A. The Company has initiated a comprehensive Dealer Network program that actively recruits, trains and provides continuous support for third party providers, such as plumbing and HVAC companies. These providers are able to perform certain functions that have traditionally been provided by Company personnel, such as turn-key operations from service line installation through meter turn-on. This has resulted in more timely customer connections at a lower cost to the Company.

21 Q. HOW HAVE CUSTOMERS RESPONDED TO THESE SERVICE 22 IMPROVEMENTS?

Direct Testimony of Mariana Perea

1 Α. The primary tangible measurement of customer satisfaction is the number of 2 complaints filed with the Commission. Billing and service complaints were 3 minimal prior to the changes (5) and dropped 20% within 3 months of the new 4 implementations. In the last 7 months we have had no service complaints. 5 The Company believes that this is an important indicator that the customers 6 have embraced the changes from the deliberate implementation of the 7 Customer Care strategy, initiative implementations, employee training and 8 other customer service improvements made by the Company.

9 Q. PLEASE SUMMARIZE THE EFFORTS OF THE COMPANY TO IMPROVE 10 CUSTOMER SERVICE.

11 Α. The Company's Customer Care strategy, described above, is to provide a 12 positive customer experience on a consistent basis. As discussed, the 13 Company believes that it is not enough to have satisfied customers. Instead, 14 the Company believes that a key component of long-term success is to 15 develop the customer relationship to the point where the customer actively 16 promotes the Company to others. In order to achieve the strategy, the 17 Company has implemented several best practices designed to put the 18 Company on a continuous improvement path towards the perfect customer 19 experience. All of these activities are deliberately designed to identify how to 20 create promoters from our customers and to predict what will be required to 21 keep them as promoters in a rapidly changing environment. The Company 22 has implemented an extensive employee training program designed to 23 improve the knowledge and skill sets of employees that provide services to

Direct Testimony of Mariana Perea

customers. By implementing systems that capture customer information and
 feedback, the Company will be able to modify the employee training programs
 and work management processes and procedures that will result in exceeding
 the needs of our customers. The company has increased staffing levels and
 operating hours to 7AM-7PM M-F to support servicing capabilities for
 customers. All of these efforts by the Company have clearly resulted in an
 improved quality of customer service to the electric Company customers.

8 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

9 A. Yes.

FLORIDA PUBLIC UTILITIES COMPANY Docket No. 140025-EI

DIRECT TESTIMONY and EXHIBITS OF Robert J. Camfield

Direct Testimony of Robert J. Camfield

1 Q. Please state your name and business address.

A. My name is Robert J. Camfield, and my business address is 800 University
Bay Drive, Suite 400, Madison, Wisconsin 53705.

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

5 A. I hold the position of Vice President with Christensen Associates Energy
6 Consulting, LLC, located in Madison, Wisconsin.

7 Q. What is the purpose of your testimony?

8 Α. My testimony covers two major areas. In the first section of my testimony, I 9 present the recommended billing determinants of Florida Public Utilities Company 10 (FPUC, Company) for the test year, October 2014–September 2015. I then present the 11 Company's expected test-year revenues, which are based on the projections of test-12 year sales quantities. In the second section of my testimony, I address the expected 13 rate of cost inflation facing Florida Public Utilities Company during the 2014 and 14 2015 period, including the projected test year. This section of the testimony begins by 15 defining the notion of general inflation and discussing the macroeconomic forces that 16 drive cost and price inflation within regional and national economies. The testimony 17 briefly reviews methods for measuring expected inflation over the near-term future-18 methods which are applied within this immediate rate filing of Florida Public Utilities 19 Company. The testimony then turns to the empirical analysis, reviewing the study 20 results that are presented in an exhibit. The testimony concludes with a summary of 21 findings along with accompanying recommendations.

Direct Testimony of Robert J: Camfield

Q. Would you please provide a brief overview of your professional background?

3 Yes. My professional work is focused on the energy industry and includes A. 4 regulatory economics, cost of capital and valuation, cost analysis including cost 5 allocation, and analysis of energy demand and forecasting. For over thirty-five years, I 6 have been involved in numerous technical and policy issues facing the energy services 7 industry, including electric and gas utilities. Before regulatory authorities, I have made 8 appearances on behalf of consumer advocacy groups, transmission and distribution 9 companies, RTOs, integrated electric utilities, generation companies, regulatory 10 agencies, and utility associations. I have provided testimony on a variety of topics, 11 including power supply contracts, transmission congestion, cost allocation and 12 marginal costs, tariff design and rate phase-in plans, corporate performance and cost 13 benchmarking, and load and energy forecasts. My consulting assignments include 14 wholesale market restructuring, and the management of power procurement processes. 15 I have contributed materials to noted industry journals such as The Electricity Journal 16 and *IEEE Transactions on Power Systems*, and presented papers before the *Council on* 17 Large Electric Systems. I served as Program Director for the Edison Electric Institute's 18 Market Design and Transmission Pricing School, 1999-2008. I have held the positions of chief economist for a regulatory agency, and system economist for a large, 19 20 integrated electric service provider. I hold a master's degree in economics from 21 Western Michigan University, and I am a graduate of Interlochen Arts Academy.

Direct Testimony of Robert J. Camfield

Q. Have you previously testified before the Florida Public Service
 Commission?

A. Yes, I have represented Florida Public Utilities Company in fuel and non-fuel
related dockets of the Florida Public Service Commission (Florida PSC) in previous
years.

6 Q. Have you previously testified with respect to cost analysis and revenue7 requirements?

A. Yes, I have conducted and been involved in numerous public and private cost
studies and various analyses regarding electric, gas, and water utilities, and I have
testified with respect to various cost and revenue requirements issues, including sales
forecasts.

12 I. Billing Determinants and Test-Year Revenues

Q. Please identify how your testimony regarding test-year billing determinants and revenues is organized.

- 15 A. The first section of my testimony is organized as follows:
- History and Forecast of Billing Determinants, starting on page 6.
- <u>Approach to Load and Energy Forecasting</u>, starting on page 8.
- Preparation and Development of Data, starting on page 14.
- <u>Review of Forecast Models</u>, starting on page 24.
- Estimating Test-Year Billing Determinants, starting on page 26.

Direct Testimony of Robert J. Camfield

1	• Discussion of Key Issues, including Population, Personal Income, and End-
2	Use Technologies, starting on page 28.
3	• Presentation of Forecast Test-Year Revenues, starting on page 36.
4	Q. Are you sponsoring exhibits to accompany this section of your testimony?
5	A. Yes, I am sponsoring the following exhibits in this section:
6	RJC-1: Summary of Historical Energy Sales, Northeast and Northwest
7	Divisions
8	RJC-2: Summary Statistics of Estimated Forecast Equations, shown on
9	separate pages for the Northeast and Northwest Divisions (2 pages)
10	RJC-3: Predicted vs. Actuals, with Number of Customers and Use per
11	Customer shown separately for each of the four major rate classes (RS, GS, GSD,
12	GSLD) for the Northeast and Northwest Divisions (8 pages)
13	RJC-4: Changes in Population of Rural Counties, United States and the State
14	of Florida (2 pages)
15	RJC-5: Global Factors Affecting Residential Energy Use: Real Personal
16	Income, Electricity Prices, and the Stock of Energy-Using Technology (3 pages)
17	RJC-6: Projections of Test-Year Revenues, shown by customer class and
18	month. This exhibit shows the projected revenues for each of the two divisions as well
19	as for the Company's combined electric operations (3 pages).
20	Q. Please describe billing determinants and the role of billing determinants in
21	the Company's rate proceeding.

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Billing determinants refer to billing quantities, and include energy sales (kWh), 1 A. 2 number of customers served, billing demands (kW) for demand-metered customers, and reactive demand for a subset of demand-metered classes. Billing determinants are 3 specific to the Company's customer classes, which include Residential (RS), General 4 5 Service (GS), General Service Demand (GSD), General Service Large Demand (GSLD), and General Service Large Demand 1 (GSLD1), as well as Outdoor Lighting 6 (OL) and Street Lighting (STL). The Company's larger commercial classes, including 7 8 GSD, GSLD, and GSLD1, are demand-metered; kilovolt-amperes reactive (kVAR) 9 are recorded and used for billing purposes in the case of GSLD1. Test-year billing determinants are major elements of the Company's application for a 10 change in tariff prices. First, test-year billing determinants form the basis for 11

11 change in tariff prices. First, test-year binning determinants form the basis for 12 estimating test-year revenues. In addition, billing determinants serve as allocators 13 within the process of cost allocation, and the sales basis for the Company's proposed 14 retail tariffs. Also, billing determinants (number of customers, energy sales, and 15 billing demands) are used by the Company to develop cost projections through and 16 including the test-year period.

Q. Can you please review the Company's electricity sales experience overrecent years?

A. The Company's electricity sales have declined over recent years, which has
also been the experience of many utilities nationally. Moreover, some electric
companies have experienced declines in the number of customers served over recent

Direct Testimony of Robert J. Camfield

years. The Company's declining sales over recent years are attributable to a slowing
 growth—if not outright declines—in electricity usage on a per-customer basis.

3 The Company's sales experience reflects the combined impacts from declines in 4 household incomes during the deep recession of late 2007 through mid-2009, the 5 subsequent extended recovery from abnormally mild weather of selected years 6 including 2013, and the sharp rise in real electricity prices during the 2009–2010 7 timeframe. The increase in prices is a direct result of the Company's formerly highly 8 favorable power contracts evolving to new terms that reflect the contemporary market expectations of late 2005 through and including 2008. At that time, the demand for 9 10 electricity was advancing rapidly as a result of the U.S. economy operating somewhat 11 beyond sustainable full employment. These high demand conditions, coupled with 12 tight supply margins and disruptions in fuel transport, precipitated expectations of 13 comparatively high prices for generation services.

14 Exhibit RJC-1, Summary of Historical Energy Sales and Billing Determinants, 15 Northeast and Northwest Divisions, presents the Company's sales over the years 16 2008–2013, along with the projected sales in the test year, shown without weather 17 normalization of historical data. In the Northeast Division, residential sales are 18 expected to decline from 186 GWh during 2008 to 178 GWh during the 2014/2015 19 test year, seven years later. Similarly, sales for the GSD class also decline, by 1.3% 20 annually. Sales for the combined GS and GSLD classes rise modestly, by 1.1% 21 annually. For the Northeast Division as a whole, the net result-without accounting

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for the nearly fourfold decline in GSLD1 sales—amounts to a decline of about 0.5%
annually for the seven years shown, from 326.7 GWh in 2008 to 315.4 GWh in the
2014/2015 test year.

Similar historical experience is shown for the Northwest Division, where residential sales decline from 144 GWh during 2008 to an expected 127 GWh for the test year, a decline of 1.8% annually over these seven years. For the business classes within the Northwest Division, only GSLD sales are predicted to rise—by 0.3% annually over seven years. Taken as a whole, sales in the Northwest Division are expected to decline by 1.0% annually for the 2008 through 2014/2015 period.

10 Q. How can projections of test-year billing determinants be estimated?

11 A. Billing determinants (sales) can be estimated in several ways. First, sales 12 trends over historical years can be extrapolated over future years. Second, time series 13 methods, such as autoregressive moving averages (ARMA), are useful for determining 14 short-term forecasts—three to six months forward. Third, structural models, estimated 15 using conventional and well-founded statistical methods, constitute a proven and 16 often-applied approach. In selected cases, time series components can be integrated 17 within structural models.

Generally speaking, trend-based methods are appropriate when the data series (sales, number of customers, and demands) change over time in smooth and easily predictable patterns. Trend-based forecasts also provide a means to check and verify the forecast results obtained through other means.

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Q. For the immediate proceeding, how are the Company's test-year billing determinants estimated?

A. Billing determinants are estimated from structural models, using a statistical
methodology commonly referred to as regression analysis. Structural models are
particularly well suited to the task of estimating electricity demand.

Q. How are structural models applied? Please describe the framework used for determining billing determinants.

8 The methodology underlying the Company's forecast of test-year billing A. 9 determinants is referred to as a Use per Customer-Number of Customers (UPC) approach. This approach recognizes that the decisions and choices of economic agents 10 11 (households, private firms, and public institutions) driving electricity sales are twofold 12 and separable: first, the decisions on location and facility siting (e.g., new sub-13 divisions built to satisfy the demand for single-family dwellings); and second, the 14 decisions regarding the consumption of electricity, which are derivative to consumer 15 and business valuations of electricity-using technologies. These valuations are 16 essentially assessments of whether the net benefits are sufficient to warrant the 17 expenditure for the purchase and operation of residential appliances and business technologies. 18

19 The UPC approach can be applied with monthly frequency, thus allowing for 20 estimation over more contemporary timeframes. For purposes of analysis, the reliance 21 on recent experience (2004–2013), in isolation from the longer-term history, is

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1	important if the underlying relationships between energy consumption and causal
2	factors are evolving gradually over time. Additionally, the UPC approach with
3	monthly frequency captures the composition of regional electricity markets in more
4	depth. In so doing, the UPC approach allows for better diagnostics, thus facilitating an
5	improved understanding of the underlying relationships among sales, demands, and
6	explanatory factors.
7	For the purpose of developing the Company's load and energy forecast models,
8	specific features of a UPC approach include the following:
9	<u>Marginal real price of electricity</u> .
10	• <u>Weather factors</u> , constructed as the weighted combination of daily heating
11	degree days (HDDs) and cooling degree days (CDDs) over the 60 days of
12	current and previous months covered within billed energy for the current
13	month.
14	• Monthly identifier variables (binaries), covering eleven months.
15	• Real personal income and its components (population and per capita
16	income).
17	• Other factors correlated with electricity consumption. These factors may be
18	orthogonal within the data set, and thus prove to be statistically significant,
19	but may not be inherent causal drivers within the context of a regional
20	economy. Examples include various employment metrics and housing
21	starts for the relevant region.

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Q. Are there specific concerns and issues regarding the estimation of the Company's test-year billing determinants and revenues?

A. Yes, there are two overarching concerns. First, the estimation process should not reach back too far historically, if the underlying relationships among the variables in the data set are evolving gradually. Second, forecasts covering small regions are less able to account for the risk associated with random events within small, regional economies.

For sales forecasting, the appropriate starting point is an understanding of the 8 fundamental factors that determine electricity demand, and the particular 9 10 characteristics and features of the Company's markets. To the degree possible, the sales forecast should take account of the generic structural factors that drive 11 sales/billing determinants, including the underlying forces taking place within the 12 relevant regional economies as well as expected electricity prices and weather 13 conditions. A major factor within the residential class is the technological 14 advancement of electricity-using household products, inducing corresponding gains in 15 energy efficiency. Moreover, in the immediate case, the forecasting process must take 16 account of the directional change of the Company's energy sales-from rising to 17 declining sales-within the estimation period, 2004-2013. This sales trend appears to 18 be a combined result of a contraction in economic activity (the recession in Florida 19 and the Southeast U.S.) and rising electricity prices, as mentioned above. However, a 20 long-term secular trend of declining sales appears to be setting in within the 21

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1 Company's Northwest Division.

2 Q. Would you please describe the forecast process for estimating the
3 Company's test-year billing determinants and revenues?

4 A. Yes. The estimation of billing determinants and revenues involves a five-step
5 process.

6 Step 1: Identify the likely factors that determine electricity sales. As alluded to 7 above, the relevant factors for consideration include *demographic and related factors*, 8 such as population and civilian labor force participation; economic factors, such as the 9 income of households (often referred to as personal income) and total employment; 10 weather factors represented by CDDs and HDDs; marginal prices of electricity; and 11 the *timeframe*, including month specificity (monthly binary variables) and time trends. 12 Step 2: Gather and prepare data associated with the factors identified in Step 13 1. The identified factors can be referred to as energy sales drivers (drivers). For the 14 task at hand, the estimation of billing determinants for the test year, historical data that may serve as relevant sales drivers are gathered and organized into a billing 15

16 determinants data set.

17 Step 3: *Estimate forecast models*. The data set assembled in Step 2 serves as 18 the basis to estimate the Company's sales forecast models. The models are linear 19 equations developed to capture the underlying statistical relationships between billing 20 determinants (number of customers, use per customer, and billing demands) and the 21 identified explanatory factors.

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- Step 4: <u>Determine test-year sales</u>. Using the forecast models estimated in Step
 3, test-year billing determinants are projected based on the energy sales drivers, as
 forecasted for the test period (October 2014–September 2015).
- 4

Step 5: Incorporate appropriate adjustments and calculate test-year revenues.

5 Projections of sales for the test year are adjusted downward for 1) expected 6 conservation within the residential class; 2) the expected natural gas penetration within 7 the residential class served by the Northeast Division; and 3) the change in tariff 8 prices, as filed for, within the Company's petition for an increase in tariff rates.

9 Q. Does the process outlined above align with contemporary industry10 practices for sales forecasting?

11 A. Yes, the forecast process and general approach conform to current practices, 12 industry-wide. That is, linear and non-linear statistical methods are commonly used by 13 electric and gas service providers to develop near-term projections of billing 14 determinants, and also long-term sales forecasts used within resource planning 15 processes.

For the purposes here, the Company's projections of electricity billing determinants are estimated in monthly frequency over the 2004–2013 timeframe, and consist of number-of-customers and use-per-customer models for the four major rate classes (RS, GS, GSD, and GSLD). In addition, statistical models are also used to estimate billing demands for the GSD and GSLD classes. At a class and division level, the historical data for number of customers and use per customer are drawn from the

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Company's billing records. Forecast billing determinants for the GSLD1 and lighting
 classes (OL, STL) are determined by applying trend-based methods, where historical
 trends are used to project sales in the future. Historical data for GSLD1 and the
 lighting classes are also drawn from the Company's billing records.

5 Q. Please elaborate on Step 1, identifying the factors used to estimate the 6 statistical models, for forecasting the Company's test-year billing determinants.

7 A. As implied above, the demand for electricity within defined service territories 8 of utilities is driven by key explanatory factors, including the size of the underlying 9 regional economy, as reflected in well-known measures such as personal income and 10 regional gross product, and descriptive metrics such as population and civilian 11 employment, including private and public sector employment. Personal income covers 12 the income available to households in a region, and includes wages and salaries, 13 interest on savings and investment, and transfers including social security and 14 unemployment insurance payments. As mentioned, weather factors consist of CDDs 15 and HDDs but can also include other metrics such as the level of humidity and, in 16 some locales, wind velocity. Finally, the price of electricity measured in real terms is 17 found to be an important explanatory factor.

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1 Q. Please discuss the gathering and preparation of data under Step 2.

A. Once the factors have been identified, the forecast process involves the
collection, organization, and preparation of data, including key transformations. This
Step 2 work is discussed below for each of the several data types.

5 Regional Demographic and Macroeconomic Factors: The Company's number-of-6 customers and use-per-customer forecast models incorporate monthly estimates of the 7 population of the counties relevant to the Company's Northeast and Northwest electric 8 service territories. The Bureau of the Census estimates county population annually. 9 The Census Bureau's population estimates for the relevant counties provide the basis 10 for determining the monthly change in population over the course of the year.

11 For personal income, the forecast process draws upon two main sources of data: the 12 Bureau of Economic Analysis county-level personal income and its components; and 13 the Bureau of Labor Statistics quarterly estimates of average weekly wages and 14 salaries (earned income), and employment. The annual estimates of personal income at 15 the county level reach back several decades, although the immediate work utilizes the 16 more contemporary period, 2001 through 2012, and our preliminary estimates for 17 2013 are based on trend experience. As mentioned, the annual, county-level personal 18 income metrics are based on earned income and other elements, including transfers 19 and the interest on financial holdings (return to financial assets). For small areas such as rural counties, earned income, driven by both wages and employment, varies over 20 21 the course of the year as a result of seasonal and macroeconomic forces. As a

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consequence, the analysis varies the earned income component of personal income,
 observed annually, according to the monthly experience in wages and salary income,
 while holding the other components constant across all months. The net result is a
 proxy for monthly personal income.

5 Monthly estimates of county population are obtained by interpolating the annual 6 population estimates, as mentioned above. This approach implicitly assumes that the 7 underlying population evolves at a fairly steady and consistent rate of change over the 8 course of individual years.

9 The monthly proxy for personal income is divided by estimates of monthly population in order to obtain monthly per capita income, stated in nominal dollars. Finally, 10 monthly per capita income, which serves as a proxy for the true underlying level of 11 income available to individuals and households (which is unobserved within official 12 13 data) is converted to real terms using the Consumer Price Index for the U.S. economy. 14 In short, per capita income is a main macroeconomic driver within the use-percustomer equations, essentially accounting for leftward and rightward shifts over time 15 16 in the underlying demand for electricity. The historical experience within Duval County, not Nassau County, is used for model estimation for the Northeast Division. 17

Q. Is it possible that measures of macroeconomic activity, other than real per capita income at the local level, also explain variation in electricity demand?

A. Yes. The level of monthly employment and proxies for monthly gross product
may potentially be constructed and utilized for explaining electricity demand. Along

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1 this line of thought, the most relevant issue is one of discovery-finding 2 macroeconomic metrics that are conceptually appropriate and also "fit" in a 3 statistically significant way within the larger set of explanatory variables. Second, 4 even if alternative orthogonal data vectors (time series) are discovered, it is highly 5 likely that, in the context of macroeconomic data, new proxies as constructed, are 6 highly correlated with other macroeconomic time series. As an example, at the 7 national level, personal income and gross domestic product (GDP) move nearly in 8 lock step, demonstrating strikingly high correlation. In brief, it may be of little value to construct gross product metrics (e.g., measures of regional product) with monthly 9 10 frequency, either in lieu of or in addition to personal income.

11 Q. Please discuss the development of weather data.

A. Weather Factors, including CDDs and HDDs, are drawn from temperature data observed and collected by the National Weather Service (NWS). In the case of the Northeast Division, weather data are culled from the NWS data banks for the Jacksonville Naval Air Station and Fernandina Beach. In the case of the Northwest Division, weather data are drawn from NWS data for the Municipal Airport for the City of Marianna in Jackson County as well as for the City of Tallahassee.

18 The Company's forecast models utilize weather experience for the period 1999– 19 forward, observed daily. For the four weather stations (Jacksonville Naval Air Station, 20 Fernandina Beach, Municipal Airport for the City of Marianna, and the City of 21 Tallahassee), the historical record of the maximum and minimum temperatures (with

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daily frequency) includes missing data points, a typical occurrence. As a consequence, it is necessary to fill in the missing data with the weather data for the alternate locations for the Northeast and Northwest Divisions, respectively. The analysis includes an assessment of the correlation and level differences between the weather experiences for the main and alternate locations. The substitute data points, which essentially serve as weather proxies, are adjusted for level differences between the main and substitute locations; the differences are quite small.

8 The daily temperature data are then converted to CDDs and HDDs using the 9 commonly recognized weather benchmark: 65 degrees Fahrenheit. Alternative CDD 10 and HDD benchmarks have not yet been explored. However, my experience suggests 11 that, for plausible alternative temperature benchmarks, such as 60° F or 70° F, the 12 differences in the estimated effects of CDD and HDD weather metrics on use per 13 customer range from small to vanishingly small. Nonetheless, the possible use of 14 alternative temperature benchmarks is a topic for further exploration.

As with all variables utilized in Step 3, the model's weather metrics (CDDs and HDDs) are converted to monthly frequency. Monthly billed energy reflects energy consumption during the current and previous month. Due to the timing of bills, as determined by bill-cycle practices, a progressively larger share of billed energy for a current month is consumed during the latter days of the previous month, and the early days of the current month. Accordingly, for a current billing month, the daily CDDs and HDDs of the current and previous months (approximately 60 days total) are

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1 triangle-weighted, where the central point (greatest weight) is the last day of the previous month and first day of the current month. The monthly normal weather 2 3 CDDs and HDDs are equal to the average CDDs and HDDs for the respective month, 4 for the period 1999-forward. In the case of the Northeast Division-but less so for the 5 Northwest Division-the analysis has discovered a clear upward trend in 6 temperatures, for both winter and summer periods. This is not unusual; warming 7 trends in weather patterns can be observed in various areas of the North American 8 continent, notwithstanding recent El Nino and La Nina episodes. As a consequence, 9 the observed trends in weather for the Northeast and Northwest Divisions, though 10 small, are incorporated into the projections of normal CDDs and HDDs for the 11 individual months of 2014-2015, with increases in CDDs and decreases in HDDs. 12 Accordingly, the trends in weather are incorporated into the projected billing 13 determinants for the test year, October 2014–September 2015. It goes without saying, 14 the rising long-term trend in temperatures has slowed more recently, and may assume a fairly moderate pace following the rapid pace of rising temperatures over recent 15 16 decades.

17 Q: Would you please describe the role of electricity price factors?

18 A: *Electricity Price Factors* are developed from observed class billing records of 19 the Company's Northeast and Northwest Divisions. Like all normal goods, the 20 demand for electricity services is sensitive to the "own" price of electricity. For the 21 purpose of estimating use per customer, the most relevant—though not exclusive—

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1 price measure is the marginal usage price. Accordingly, estimates of the monthly 2 revenue attributable to customer charges are removed from total monthly revenue. 3 thus isolating revenue attributable to the consumption of electricity. Dividing this 4 volumetric revenue by energy usage obtains estimates for the marginal usage price 5 that, over the sample historical period (2004–2013), is then converted to real terms 6 using the Consumer Price Index for the U.S. economy. This monthly real electricity 7 price incorporates a finite lag process, where the weighting scheme assigns greater 8 weight to near-term months and reduced weight to later months (e.g., the eleventh 9 month) over a twelve-month period.

10 The procedure just discussed is followed for each customer class (RS, GS, GSD, and 11 GSLD) and both divisions. To summarize, use per customer is a function of the 12 weighted combination of electricity prices over the previous twelve months as well as 13 the several other factors discussed above.

Q. Is electricity demand sensitive to the prices of alternative, substitute forms of energy?

A. Yes, in the very long term, particularly with the rising availability of natural gas supply within areas where, over decades, gas was not previously accessible. It is common for long-run electricity demand studies using panel data to find that electricity demand is sensitive to natural gas prices; essentially, there is a "cross-price" effect. More generally, electricity demand is sensitive to substitute forms of energy in the very long run, under the condition of ready availability of the energy substitutes.

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However, energy consumers will take a "whole package view," thus internalizing any 1 2 incremental capital charges associated with the conversion to alternative energy sources. For example, industrial customers often adopt natural gas-fueled generating 3 4 technologies for the purpose of on-site power supply, which appears to be currently 5 taking place in Germany. Second, it is to be expected that, in the long term, many 6 residential and commercial customers will select natural gas for space conditioning 7 where natural gas is available. 8 The Company has recently introduced natural gas within the Northeast Division 9 service territory and, as a consequence, residential and commercial customers may

selectively utilize natural gas for space conditioning, prospectively. Also, within thenear term, natural gas may be used for power supply at the wholesale level.

At this point, we have not as yet explored the potential inclusion (through imputation) of the prices of alternative energy forms within the use-per-customer models. However, we have incorporated a trace amount of natural gas substitution over electricity within test-year residential sales of the Northeast Division.

16 Q. Would you please describe the role of other explanatory factors?

A. Other explanatory factors are selectively incorporated within the data set analysis, including monthly binary variables, a time trend, and shift factors (which are also represented by binary variables). Shift factors make allowances for abrupt and sometimes transitory changes in dependent variables that are not captured by other explanatory variables incorporated within the model.

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Q. Please discuss Forecast Model Estimation, Step 3 of the Billing Determinants process.

3 A. The forecast models are estimated using the data set developed in Step 2. As 4 implied above, the data consists of the "left-hand-side" (LHS) dependent variables. 5 including number of customers, use per customer, and non-coincident demands of the 6 GSD and GSLD classes; and the "right-hand-side" (RHS) explanatory variables 7 consisting of the macroeconomic metrics, weather factors (CDDs and HDDs), the 8 marginal price of electricity, monthly binaries, and other variables such as trend, 9 utilized selectively. The models are estimated in levels, although double-log estimation (for non-binary variables) was also briefly explored. 10

11 A levels approach is generally most appropriate-indeed, arguably necessary-when 12 weather factors are included in the RHS data set because electricity consumption is 13 generally linear with respect to weather data over *much of the relevant range* of the 14 variables. As alluded to above, the analysis is conducted with monthly frequency over 15 the years 2004 through 2013, and is based on well known, conventional econometric 16 practices (regression analysis) including appropriate test statistics. In general, the 17 period of estimation should be fairly contemporary but no shorter than ten years, 18 recognizing that relationships among the LHS and RHS variables may evolve 19 prospectively-outside the historical sample period used for estimation.

20 Q. What are the appropriate criteria for assessing model performance?

21 A. A primary performance measure is conceptual: forecast models should

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1 conform to a plausible explanation of the underlying behavior of electricity demand. 2 Second, the coefficients for the explanatory (RHS) variables should have appropriate 3 directional signs. Third, the magnitude of the coefficients should not stray far from the 4 plausible, as revealed by elasticity calculations. Fourth, overall predictive 5 performance, as technically revealed in the "root mean square error" statistic and 6 visually observed in predicted vs. actual graphs, should be acceptable for the purpose 7 at hand. Fifth, continuous RHS variables preferably should be statistically significant but they may remain within models even if they fail commonly recognized tests of 8 9 significance. Also, other statistical tests can be drawn into the assessments of models 10 but are not determining.

11 Q. Please describe key analysis issues and impacts on model performance.

12 A. The Step 3 analysis, in the form of time series regression models, consists of 13 twenty models. Summary statistics of the estimated equations for number of customers 14 and use per customer, covering the four main classes of the Company's two divisions, 15 are shown in Exhibit RJC-2, pages 1 and 2. Reported performance metrics for each of the estimated equations include Adjusted R^2 (the share of variation in the dependent 16 17 variable explained by the estimated equation, adjusted for degrees of freedom); RMSE 18 (root mean square error, a metric for the size of model error); F Statistic (a measure of goodness of fit); and # of Observations (number of data observations over which each 19 20 equation is estimated). Not reported are the four models for non-coincident demands 21 for the GSD and GSLD classes-two models for each of the Company's two

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electricity divisions. Not reported but calculated is the increasingly utilized *Akaike Information Criteria* (AIC).

The historical set of data used for model estimation is characterized by random 3 variation within selected data series, an inherent property of small-area forecasting-4 in this case, the Company's Northeast and Northwest Divisions. Specifically, the 5 Northeast Division serves Amelia Island situated in the northeast corner of Florida and 6 comprises a share of Nassau County. Similarly, the Northwest Division serves areas 7 within Calhoun, Liberty, and Jackson counties in north central Florida. Small area 8 9 forecasts confront two informational issues. First, observed data regarding historical experience is generally limited or of reduced frequency when compared to that which 10 is available for larger territories such as multiple, integrated county regions or large 11 metropolitan areas. Second, small area forecasting faces random variation, particularly 12 within the underlying number-of-customer and use-per-customer data, where the 13 14 variation is attributable to unobservable events and thus cannot be easily attributable, through analysis, to causal factors. 15

Q. Would you please briefly describe the realized performance of theCompany's forecast models?

A. Generally speaking, the Company's forecast models are conceptually
plausible, obtaining results which are uniformly consistent and reasonable. In the case
of the use-per-customer models for the residential class, the macroeconomic metric of
household incomes is negatively related to use per customer. This topic requires

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1 further explanation, which I will take up later on in this testimony.

The forecast equations in full detail are reported in Minimum Filing Requirement (MFR) Schedule F8 of the Company's filing. As shown, the continuous RHS variables along with the shift factors (captured by binary variables) have the correct signs and provide adequate levels of statistical significance.

6 Exhibit RJC-2 presents a summary of the performance statistics for the various forecast equations used to provide estimates for the two main dimensions of billing 7 determinants, number of customers and use per customer. The number-of-customers 8 equations for the Residential and General Service customer classes report Adjusted R² 9 results within the 0.90 to 0.95 range, and F Statistics with adequate levels of 10 significance. As expected, the performance metrics for the number-of-customers 11 forecast equations, for the larger business customers, GSD and GSLD, are lower, with 12 Adjusted R² results within the 0.62 to 0.70 range, and similarly lower values for the F 13 Statistics. The reduced performance, at least measured in terms of overall fit, is a 14 result of the small sample count for large customers (GSD and GSLD) within each of 15 the Company's two divisions. Note that, for the Northwest Division, the number of 16 customers for the GS and GSD classes is estimated together (GS plus GSLD), and 17 then "shared out" between these two rate classes over time via trend. 18

19 The use-per-customer equations for the Residential and General Service classes have 20 Adjusted R² values of 0.91 to 0.93, along with adequate F Statistics. For the reasons 21 mentioned above, the GSD and GSLD customer class equations have lower Adjusted

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R² values, ranging from 0.53 to 0.92, along with correspondingly lower F Statistics.
As shown, the use-per-customer models for GSLD in the two divisions have
considerable estimation error, a result of the small number of customers taking service
under the Company's GSLD tariff. Nonetheless, the forecast results reside well within
the realm of the plausible.

Forecast performance can also be gauged through a graphical comparison of the model-based predicted and actual values over the historical sample period, often referred to as *predicted vs. actuals*. These comparisons are presented in Exhibit RJC-3, pages 1–8 and ordered according to the Northeast Division (pages 1–4) and the Northwest Division (pages 5–8), with the number-of-customer and use-per-customer comparisons for each class shown on a single page. Several observations regarding the model performance for the two divisions are as follows:

- The use-per-customer models appear to capture well the month-by-month and
 long-term variation in electricity consumption.
- GSLD use per customer in the Northeast Division is unusually high during
 2005 and 2007, with the model-based predicted values for early 2005
 understating actual experience (page 4).
- 3) The number of customers served over the ten-year historical period has
 considerable random variation, which can be difficult to capture analytically, at
 least without resorting to extensive use of event variables (binaries).
- 4) Anomalous customer count experience in the GS and GSD classes of the

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1	Northwest Division is managed with event variables; the models appear to
2	perform well overall.

3 5) Similarly anomalous customer count experience appears in these two classes
4 (GS and GSD) within the Northeast Division.

6) The small number of customers for the GSLD class, in both the Northeast and
Northwest Divisions, inherently make for rather lumpy model performance
(pages 4 and 8). The number of GSLD customers, in both the Northeast and
Northwest Divisions, is held constant over the forecast test year.

9 Q. Please explain Step 4, Determine Test-Year Sales.

10 A. Test-year billing determinants (sales) are estimated by applying projections of 11 the forecast drivers within the RHS of the various forecast models. Projections of 12 drivers are, in the case of the binary variables, determined by definition (0, 1). The 13 weather variables, CDDs and HDDs, are based on normal weather and incorporate a 14 slight trend in recognition of steadily warming weather within recent historical years.

The real price of electricity is the variable price during each of the months of the final historical year (2013), adjusted downward over time according to the expected rate of inflation (2.20% for 2014 and 2.23% for 2015). (The purchased power price is expected to remain unchanged in real terms.) The test-year macroeconomic drivers including personal income and per capita income, both stated in real terms, reflect the expected near-term change in macroeconomic variables for the small county areas relevant to the Company's Northeast and Northwest Divisions. For the Northeast

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Division, projections for the rate of change in real per capita income for the U.S.
 economy are used as a proxy for Amelia Island (Fernandina Beach) and, when
 combined with the projected change in population for the area, provide the basis to
 construct the area proxy for real personal income.

5 Q. Please explain Step 5, Incorporate Appropriate Adjustments and Calculate 6 Test-Year Revenues.

A. As mentioned above, the test-year billing determinants (sales) estimated in
Step 4 are adjusted in three ways. First, the estimates of residential use per customer
are adjusted downward by 2% in order to capture the expected further declines in use
per customer beyond the test year. In view of the ongoing efficiency gains in
residential electricity-using technologies, these changes are not only expected but
virtually certain, thus constituting known and measurable changes.

13 Second, we incorporate a comparatively small effect in residential sales resulting from 14 the availability of natural gas for space conditioning and water heating. The working 15 assumption is that 20% of new residential customers in the Northeast Division will 16 select natural gas in lieu of electricity for cooking and water heating. In the case of electric space heating, the assumption is 10%. Using the forecasts of new customers 17 and the assumed shares selecting natural gas (20% for cooking and water heating, 10% 18 19 for space heating), the residential sales are adjusted according to the residential energy 20 attributable to these end-use applications.

21 The third adjustment accounts for the sales compression as a consequence to the

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1 Company's filed for change in electricity prices.

Q. You have indicated that further discussion is warranted on two issues: (1)
including changes in population trends, and (2) the impact of personal income on
electricity use within the residential class. Please elaborate.

5 As mentioned, the historical timeframe over which the forecast models have Α. 6 been estimated is somewhat difficult in view of mid-course changes in key 7 explanatory factors such as regional population. Regarding population, rural areas of the U.S. have been experiencing declines in population for some time, even as the 8 9 overall U.S. population has been growing and the national economy has been 10 advancing. This history reflects several factors, including, in particular, more robust 11 employment and income opportunities in urban areas for young adults. As shown on 12 Exhibit RJC-4, page 2, the number of U.S. rural counties experiencing declining population during the 2001–2008 period averaged 825, while the number of counties 13 experiencing positive population growth during the same timeframe averaged 779. 14 15 Florida was exceptional, insofar as typically only one of Florida's rural counties would have a decline in population in any single year during the 2001–2008 period. 16

By this metric—positive or negative growth in population—the outlook for rural counties has changed markedly for the worse more recently, 2009–2013. For the U.S., and for Florida in particular, a rising number of rural counties appear to be experiencing major, and in some cases chronic, decreases in population. For the U.S., the average number of counties with declining population has risen to 906—an

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1 increase of approximately 10% over the previous time period. In Florida, declining 2 population has set in for an average of nine of Florida's sixteen rural counties. While I 3 anticipate that few of Florida's rural counties will experience declining population 4 over the long term, decreasing population for several rural areas will likely continue 5 for a number of forward years. In brief, the abrupt break from rising to declining 6 population for the rural territory served by the Company's Northwest Division is not 7 altogether uncommon. And while the current trends in population may turn positive, it 8 is not likely to reassume the comparatively robust growth of the earlier era, the decade 9 prior to the deep recession of '07-'09.

10 Q. Please turn to the second issue, personal income and the efficiency of 11 electricity end uses in the residential sector.

12 A. Historically, increases in real personal income have translated into rising 13 electricity sales, though at a progressively slower rate of change. Evidence 14 demonstrates that the relationship between income and electricity consumption has 15 changed significantly, beginning in the 2006–2008 timeframe. Since that time, rising 16 incomes, overall and on a per capita basis, appear to be negatively related to electricity 17 sales. Exhibit RJC-5, page 1, graphically presents residential energy usage, on a 18 kWh/\$1,000 of personal income basis, for the U.S. as whole. Energy use per unit of 19 income rose rapidly through the late 1970s and has subsequently declined by 20 approximately 15%. Residential electricity usage increased, however, as real personal 21 income since the late 1970s increased by approximately 25%.

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1 An equally interesting story regarding the relationship between residential electricity usage and personal income is presented on page 2 of Exhibit RJC-5, subtitled 2 Residential Electricity Use and Income, stated on a Per Capital Basis. Here, indexes 3 4 of per capita electricity use (April and November) and real income are compared. For 5 the years 1990–2006, baseline electricity use on a per capita basis rose by 17% (1.171 for 2006), while real income per capita increased by 38% (1.383 for 2006). Since 6 2006, however, electricity use per capita has declined by 0.73% annually, while per 7 8 capita income has risen by 0.43% annually (with the marked slowdown in real income 9 resulting from the deep recession and slow recovery of '09-'12 and continuing). As 10 shown, this experience constitutes a sizable gap between the growth rates for 11 electricity consumption and income: 1.16% and 1.38% during the 2006-2012 and 2008–2012 time periods, respectively. While correlation may not necessarily imply 12 causality, this near-term historical review suggests that the negative relationship 13 between income and electricity usage on a per capita basis, captured in the residential 14 use-per-customer models, is plausible and certainly consistent with the larger 15 experience base of the U.S. overall. 16

Q. Can you explain how increases in real per capita and personal income translate into declining electricity use per customer within the residential sector?
A. Modern durable consumer goods are increasingly attractive in view of their modern and innovative design features. As discussed further below, rising incomes appear to be associated with a more rapid adoption of modern and much more efficient

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electricity-using durable goods, including major and minor appliances as well as
 lighting.

While not conclusive, this reasoning provides an explanation of the negative relationship between real incomes and residential electricity consumption. The end result, under rising incomes, is observable declines in electricity use, stated on both a per capita and a per customer basis.

Q. You have described the workings of rising incomes and declining
electricity consumption per capita. Clearly, the apparent advances in electricityusing technologies are central to this analysis. Please elaborate on the attractions
of modern end-use equipment within the residential sector and electricity
efficiency. If true, this trend could be a major structural factor driving electricity
sales.

Electricity-using household technologies are undergoing rapid changes, often 13 A. 14 including major product innovations regarding design, features and controls, and 15 technology. Referred to as durable goods, the most common household energyconsuming technologies include air conditioning, heating, lighting, cooking, water 16 17 heating, and major appliances, including televisions, washers, and dryers. These end-18 use technologies have experienced—and are continuing to experience—overall 19 product improvements and dramatic gains in energy efficiency. As mentioned above, 20 modern residential end-use technologies are in demand and have been adopted by 21 consumers fairly rapidly in recent years.
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The rate of adoption can be inferred from Indexes of Industrial Production for the 1 Appliance/Electrical Equipment Sectors, when compared to Occupied Housing over 2 3 recent years. Occupied Housing constitutes the "in-use" housing stock, and can serves 4 as an appropriate basis of comparison. Both sets of data series are presented on Exhibit 5 RJC-5, page 3. As shown, the average rate of production of electricity-using durable goods has declined modestly during the years of the housing slowdown, 2009-2013, 6 7 when compared to the 2002-2008 period, a time of rapid increases in the U.S. housing 8 stock. In comparison, the average gains in the Occupied Housing metric have slowed 9 by nearly 45% during the more current period (2009–2013), when compared to the 10 2002-2008 period.

Notwithstanding the effects of the increasing living space of residential dwellings, the net result of product advances within these consumer durable goods is declining individual household energy consumption, as earlier vintage technologies, which constitute the existing capital stock, are replaced with more contemporary units.

Q. Isn't it true that the stock of electricity-using devices is expanding? If true, does not the increased saturation of these devices imply that residential use per customer could rise, as the expanded use of these technologies offsets the reduced energy use for the more conventional applications of residential electricity services that you mention?

A. Without doubt, the smaller electricity-using household appliances/devicescause the electricity usage per residential customer to be higher than otherwise at the

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1 national level (and, as I expect, for virtually all regions), as there are only small 2 substitute effects from the major categories of residential electricity consumption. As 3 suggested, the range of electricity-powered devices includes an expanded array of 4 equipment over recent years. These new technologies include audio home 5 entertainment equipment, ceiling fans, desktop and laptop computers, computer 6 monitors, dehumidifiers, DVD players, external power chargers, modems and routers, 7 portable electric spas, pool and pool pumps, security systems, and set-top boxes. Also, 8 we should not forget the expanded array of electricity-using kitchen equipment.

9 Moreover, studies suggest that household saturation for these smaller-scale devices 10 will likely rise prospectively. And while the annual energy consumption of many of 11 these devices is comparatively small, when taken together the energy usage for this 12 miscellaneous category of energy-consuming technologies is sizable.

13 Survey-based assessments of the small electricity-using devices provide a more 14 complete view of the underlying markets for these devices and the likely impact on 15 residential electricity consumption. That is, because of the energy-efficiency gains, 16 when stated on a per-device basis, the net overall result is a decline in electricity use 17 per residential customer. Stated annually, the Energy Information Administration's 18 estimates of the changes in electricity use (kWh) between 2011 and 2015 are as 19 follows: for audio home entertainment equipment (from 88 kWh to 83 kWh), for 20 ceiling fans (from 77 to 71), for computers including desktops and laptops (from 280 21 to 215), for computer monitors (from 99 to 75), for dehumidifiers (from 710 to 620),

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for DVD players (from 27 to 23), for external power chargers (from 6.5 to 5.6), for
modems and routers (from 51 to 44), for portable electric spas (from 2,050 to 2,040),
for pool and pool pumps (from 2,460 to 2,060), for security systems (from 45 to 44),
and for set-top boxes (from 127 to 107).

5 To summarize, overall energy consumption for miscellaneous technologies is expected 6 to decline much like the experience for the major residential end-use technologies, 7 despite steady increases in saturation. Indeed, the energy consumption for these 8 smaller electricity-using devices is expected to decline by over 2.5% annually for 2011 9 through 2015. In brief, the smaller devices as a whole are contributing to the decline in 10 residential use-per-customer electricity demand, despite rising saturation.

Q. Is the rate of adoption of new household technologies related to household
income? Also, how does income, through the impact on adoption of
contemporary technology, affect energy use per customer? Please discuss.

A. The rate of adoption of new energy-using technologies is positively related to,
and driven by, the incomes available to households. While income can be measured in
several ways, increases in personal income will give rise to an increase in the rate of
adoption of new technologies within the residential sector.

Q. What are the implications for energy use per customer, within the
residential class, as a result of long-run increases in household income over time?
A. At least over near-term forward years, rising household incomes, stated in real
terms, will likely cause declines in energy use per customer within the residential

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class. The exception is larger homes; if the average size of homes were to again
 assume a clear upward trend, it is possible that progressively larger space, stated on a
 per capita basis, may more than offset the efficiency gains obtained through the
 adoption of more contemporary-vintage end-use technologies within the residential
 class.

6 As alluded to above, residential durable goods, in the form of electricity-using 7 technologies, are undergoing major design improvements, including innovations and 8 expanded features covering a number of dimensions. These improvements make 9 contemporary electricity-using durable goods increasingly attractive. As a 10 consequence, rising household incomes will precipitate increased demand for these 11 good, which will be manifested in a faster rate of obsolescence, as new products are 12 brought into the capital stock of equipment more quickly. Because of the large gains in 13 energy efficiency associated with these modern residential electricity-using 14 technologies, the faster rate of adoption of new products translates into outright reductions in energy use. In brief, electricity use per customer is negatively associated 15 16 with increasing household income, thus explaining the negative sign on the RHS 17 income variable within the use-per-customer equations for the residential class.

I should also mention that the declining use per customer within the residential class is not unique to FPUC. As presented earlier in my discussion of Exhibit RJC-5, pages land 2, the contemporary experience reveals continued declines in residential electricity consumption per unit of personal income. So, even with rising real personal

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income, stated on a per capita basis, electricity usage per customer will likely continue
 to decline within near-term years.

- 3 Q. Do you anticipate that the negative relationship between residential use
- 4 per customer and household income will be stationary over an extended future?

5 A. No. We can expect that, over the long term, the relationship may reverse as 6 energy efficiency gains are exhausted. Second, electric vehicles and robotics will 7 likely assume an increasingly prominent share of use per customer within the 8 residential class. Nonetheless, we can anticipate that the apparent negative relationship 9 may hold over the next few years, though a follow-up review involving the combined 10 experience of several utilities may also be appropriate.

11 Q. Projected test-year billing determinants translate into revenues for the test

12 year, calculated at current tariff prices. Please discuss.

A. Exhibit RJC-6 presents the Company's test-year revenues, shown monthly by
class. Test-year revenues are shown on page 1 for the Northeast Division, and on page
2 for the Northwest Division. Additionally, test-year revenues are shown for the
Company's combined electric operations on page 3. The test-year revenues are
calculated monthly, obtained by multiplying the billing determinants—number of
customers, monthly energy sales, non-coincident demands (GSD, GSLD, and
GLSD1), and kVAR (GSLD1)—by the Company's applicable tariff prices.

20 II. Expected Rate of Inflation

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Q. Please provide a summary of your testimony with regard to the expected rate of inflation.

A. With few exceptions, ongoing price inflation has been a feature of contemporary business conditions and over the long term. As a consequence, inflation expectations factor into the decisions of buyers and sellers within markets. It is thus necessary to account for the impact of broadly defined inflation expectations within the costs incurred by Florida Public Utilities Company to provide retail electricity services.

9 My assessment of inflation expectations covers the years 2014 and 2015, and is based 10 on the combined results of four measures of inflation expectations. These measures 11 include observed *Interest Rate Differentials*, which reveal expectations held by 12 investors, and three surveys, including the *Livingston Survey* of business economists, 13 the University of Michigan/Thompson Reuters *Survey of Consumers*, and the *Survey* 14 of *Professional Forecasters* conducted by the Philadelphia Federal Reserve Bank.

The assessment leads me to conclude that broad-based inflation expectations held during 2013, for the years 2014 and 2015, were 2.20% and 2.23%, respectively. I recommend that the Florida Public Service Commission adopt these estimates of expected inflation (2.20%, 2.23%) for test-year cost escalation factors in the Company's immediate rate case filing, covering the October 2014–September 2015 test period.

21 Q. Let's begin by focusing on general inflation. Please describe the notion of

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1 price inflation and the reasons for it.

A. Price inflation (inflation) refers to the change over time in the prices of goods
and services. Inflation is expressed in growth rates over time, usually as annual rates
of change.

5 As with virtually all economies, the U.S. macroeconomy continues to experience 6 ongoing price inflation. Broadly defined, price inflation is a common feature of all 7 regions, and permeates all sectors of the U.S. economy over the long term, including 8 electricity services. As alluded to above, expectations of future inflation have become 9 implicitly embedded in the actions of private companies, households, and public 10 institutions.

11 The causes of price inflation are several. First, both expected and unanticipated 12 increases in the demand for (or decreases in supply of) goods and services across 13 macroeconomies (e.g., that of the U.S. or other sovereign regions) imply upward 14 pressures on prices. Second, changes in the exchange value of sovereign currencies on 15 international currency markets can cause domestic prices to rise or decline.

16 Third, and importantly, changes in the monetary policy of central banks can often 17 impact price levels across the macroeconomy. This is because the key function of fiat 18 money is the accommodation and facilitation of economic transactions, the 19 purchase/sale of goods and services. Holding other factors constant—in particular, the 20 velocity of money supply and its equivalents, and the demand for asset liquidity—an 21 unanticipated expansion in money supply can cause a corresponding rise in prices, or

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1 for prices to rise more rapidly (i.e., for inflation to accelerate). Similarly, a slower rate 2 of change in money supply or the monetary base will correspondingly cause prices to 3 rise more slowly (i.e., a decline in the rate of price inflation). Monetary policy can be 4 implemented by central banks in several ways, including changes in the reserve 5 requirements of commercial banks, changes in the interest rates paid on commercial 6 bank reserves held by central banks, and the purchase and sale of widely held debt 7 securities such as Treasury bonds or other broadly held debt securities (e.g., mortgage-8 backed securitized debt and commercial paper within wholesale capital markets).

9 Of the various monetary policy options listed above, the third approach (purchase and 10 sale of debt securities) has been applied extensively by the U.S. Federal Reserve 11 Board in the most recent years. That is, liquidity, in the form of large increases in the 12 monetary base, has been expanded greatly beginning in September 2008, and then 13 extended during early 2011 and 2013. While the expanded monetary base has not 14 precipitated substantial increases in the general price level-because the Federal 15 Reserve pays interest on the accounts held by banks with the Federal Reserve-such 16 policy has caused expected inflation to rise selectively during recent months.

17

Q. How is inflation measured historically?

A. Inflation is measured as the rate of price change per unit of time. Inflation
metrics (indexes of inflation) are based on in-depth monthly and quarterly surveys of
prices, and are generally stated as annual rates of change. Inflation indexes, including
the consumer price index (CPI) and the producer price index (PPI), are calculated and

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1	released monthly by the Bureau of Labor Statistics. The published inflation indexes
2	include price changes for individual wholesale commodities, narrowly defined retail
3	goods or services, and broadly defined sector composites. The CPI metric of inflation
4	is available for both urban consumers and urban wage earners, and for core
5	components. The CPI is also measured for several large, metropolitan areas, including
6	Miami.
7	The PPI is computed for numerous economic sectors and production stages
8	(commodity, intermediate, and final demand for specific sectors), and for specific
9	commodities, product lines, and services. The PPI includes some 10,000 price series.
10	In addition, price indexes are also estimated by the Bureau of Economic Analysis for
11	the main components of U.S. national income (Gross Domestic Product or GDP),
12	including Personal Consumption Expenditure (PCE) deflators.

Q. Is historical inflation, captured by various price indexes, the same as inflation expectations?

A. By definition, historical inflation refers to observed changes in the various metrics of inflation, such as the indexes described above. In contrast, inflation expectations refer to the estimates of inflation prospectively—the expectations harbored by economic agents (households, business firms, and government entities) regarding the change, or trend, in prices over future periods. Expectations of future inflation are rationally driven by expected levels of demand and supply within specific sectors of the broad macroeconomy, expected money supply, and expected interest

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1 rates to the degree that interest rates affect currency exchange rates. Importantly, 2 inflation expectations are influenced by observed historical inflation, and the prices 3 and price changes that parties to transactions actually experience. Price experience 4 covers the gamut of transactions, including, in the case of households, changes in the 5 prices of groceries and apartment rents; in the case of business entities, changes in the 6 invoice prices for rail transport services and components of labor contracts; or in the 7 case of public authorities such as a municipal services department, changes in the 8 prices paid for repair services to reactivate a large water pump used for water supply.

9 Q. Please describe the methods that you use and recommend for measuring 10 inflation expectations.

A. The task at hand is to estimate expectations of inflation over the near-term
future, including the test period, October 2014–September 2015. As mentioned above,
the issue of expected inflation is approached by applying two methods: 1) observed
interest rate differentials within capital markets, and 2) surveys of expected inflation.
These methods are defined as follows:

Interest Rate Differentials: Interest rate/yield differentials between two types
 of Treasury securities: Nominal and Treasury Inflation-Protected Securities
 (TIPS). The Interest Rate Differentials approach provides estimates of the
 inflation expectations of investors.

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- 1 <u>Survey Methods</u>:
- *Projected Rates of Inflation:* The consensus view of professional forecasters,
 as reported in the Philadelphia Federal Reserve Bank's *Survey of Professional Forecasters* (SPF).
- Survey of Households: Expectations of future inflation as reported by sampled
 households included in the Survey of Consumers conducted monthly by the
 Survey Research Center, University of Michigan/Thomson Reuters.
- 8 *Expectations of Inflation by Economists:* Inflation expectations held by 9 academic and business economists, as reported in the *Livingston Survey*, as 10 conducted by the Philadelphia Federal Reserve Bank.
- In brief, the approach underlying my assessment of expected inflation draws upon observed market yields on securities of equivalent risks, as well as three surveys. Such an approach is sufficiently broad, capturing the expectations of investors, forecasters, consumers, and business and academic economists.

Q. Would you please elaborate on the *Interest Rate Differentials-* and *Survey-*based methods for measuring inflation expectations?

A. Yes. The *Interest Rate Differentials* method focuses on the inflation
expectations of investors, where the term "investors" is interpreted broadly to mean
any party that holds, and thus purchases and sells, financial assets, including equities
and debt obligations. Transacting parties can thus include individual households,
retirement funds, or investment banks trading on behalf of their own accounts.

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The market value of financial assets can rise or fall with respect to changes in 1 2 expected inflation. Some types of assets, such as equities, are less sensitive to 3 expected inflation than others. In the case of debt securities, yield to maturity refers to 4 the expected rate of return on the outstanding principle (the securities themselves). Precisely because the face yields on debt securities such as corporate or Treasury 5 6 bonds are generally held constant at the time of origination, the market value, and thus 7 the net yield, on outstanding debt obligations either decline as expected inflation 8 increases or rise as expected inflation decreases. Changes in market yield account for 9 changes in expected inflation for the investment community as a whole. As a 10 consequence, the expected real return on outstanding debt-realized net return after 11 accounting for expected inflation-at a point in time is predominantly, though not 12 exclusively, a function of perceived risks.

This is a natural result of efficient capital market processes, where expected inflation is capitalized within market yields. Debt securities with equivalent risks and terms can be expected to trade at nearly equivalent yields, given expected inflation. This result also means that, for debt obligations of common risk attributes, obligations that fully compensate for (i.e., *are protected from*) inflation should trade at market yields below the yields for obligations with nominal yields, where the difference is approximately equal to expected inflation.

20 This is the case for selected bond issues of the U.S. Treasury. The U.S. Treasury 21 issues both debt securities with nominal yields, and other bonds that include

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provisions for inflation compensation. As mentioned, this latter type of Treasury
 bonds, *Treasury Inflation-Protected Securities*, referred to as TIPS, insulates investors
 from inflation risk.

Accordingly, this metric for expected inflation, the *Interest Rate Differentials* method,
reveals investor expectations by examining the yield differences between nominal and
TIPS obligations. For these analyses, nominal and TIPS yield differentials for 5-year
U.S. Treasury obligations are calculated monthly for each month of 2013, and then
averaged.

9 Q: Would you please describe the three surveys of inflation expectations 10 listed above?

A. As mentioned, we draw upon the results of three surveys of inflation
expectations. Each is described below.

13 Projections of Inflation are predominantly model-based forecasts of inflation, as 14 reported in the Survey of Professional Forecasters (SPF) and organized by the 15 Philadelphia Federal Reserve Bank. This survey dates to 1968 and is carried out 16 quarterly. This survey's results present the consensus view of forecasters, covering the 17 usual macroeconomic metrics of interest but with considerable density-a selection of 18 thirty-two variables altogether. Of particular technical interest is that, for selected 19 variables, SPF reports the dispersion and range of expectations of survey respondents. 20 Consumer Expectations of Inflation are captured by the Survey of Consumers, 21 conducted by the Survey Research Center at the University of Michigan in

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collaboration with the Thomson Reuters News Service. This survey consists of
 approximately 500 telephone interviews with randomly selected households, where
 the question categories include personal finances, business conditions, and purchasing
 plans. The *Survey of Consumers* was initiated during the late 1940s.

5 Expectations of Inflation of Economists are based on the survey results gathered and reported semi-annually by the Livingston Survey, as mentioned above. This third 6 7 survey is compiled from the results provided by some fifty respondents, and covers 8 eighteen survey items, such as economic output (real and nominal GDP, corporate 9 profits, business fixed investment, industrial production, retail sales, and auto sales), price inflation (CPI and the PPI), labor markets (unemployment rate, average earnings 10 of wage earners), and capital markets (prime interest rate, 10-year U.S. Treasury bond 11 12 rate, and the S&P 500 Index).

Q. Please summarize the methods for determining the inflation factor which vou describe above.

A. The basis for the inflation factors, for determining cost escalation for the Company's test year, is the annual rates of expected inflation over the period. The overall measure of expected inflation is derived from four estimates involving two methods as I have discussed. The four estimates are expectational in nature: estimates of the expected rate of inflation harbored by four categories of economic actors, including investors, professional forecasters, consumers, and economists.

21 As discussed above, the first of the two methods, Interest Rate Differentials, is the

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1 observed interest rate gap between nominal and TIPS yields for U.S. Treasury 2 securities. The second method draws on the expressed views of the identified 3 constituent groups, as gathered through the three formal surveys (Survey of 4 Professional Forecasters, Survey of Consumers (University of Michigan/Thomson 5 Reuters), and the Livingston Survey). The results of these four measures of expected 6 inflation form the basis for the Company's proposed inflation factor, for cost 7 escalation. For this reason, for the purpose of determining future cost escalation, I 8 recommend that the Florida PSC utilize measures for *expectations of inflation* rather 9 than metrics of observed historical inflation.

10 Q. What are the overall results for the four selected metrics of inflation

expectations? 11

12

Α. Based on the above analyses, I project overall inflation of 2.20% and 2.23% 13 per year for 2014 and 2015, respectively. These results are summarized in the column entitled Summary Results in Exhibit RJC-7. This exhibit shows estimates of inflation 14 15 expectations for each of the four methods: Nominal-TIPS Yield Differentials (1), 16 Survey of Professional Forecasters (2), Survey of Consumers (U of M/Thompson

17 Reuters) (3), and the Livingston Survey (4).

18 Exhibit RJC-7 presents 2013 inflation expectations for 2014 and 2015. Shown from

- 19 left to right, Exhibit RJC-7 defines the Forward Year, details the timeframe for the
- Samples of Inflation Expectations (1st half, 2nd half, or December of 2013), and 20
- 21 provides the results for each of methods 1 through 4. The results are summarized for

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each year in the far right column: expected rates of inflation (during 2013) for 2014
and 2015 are equal to 2.20% and 2.23%, respectively. The average accounts for the
four methods. The sample frequency of methods 1 and 3 is higher than for methods 2
and 4.

5 Q. In your view, is it useful to consider observed historical inflation in order 6 to develop projections of inflation for the near term future?

A. Yes, a useful perspective can be obtained from a review of historical inflation
measures, in order to benchmark and assess the reasonableness of projections of
inflation. Certainly, historical experience tailors and, to a substantial degree, also
drives the expectations of inflation harbored by private companies, households, and
other economic actors. In other words, historical inflation experience is implicitly
accounted for in expectations of inflation for forward periods.

13 However, presuming that future price inflation essentially replicates that of historical timeframes, however defined, will likely result in inflation projections that do not 14 15 align with the expectations held by the economy as a whole. As an example, 16 expectations of inflation measured by interest rate differentials rose by 40 basis points 17 between mid-2012 and March-April 2013, largely as a consequence of changes in the 18 expected impact of the Federal Reserve's monetary policy (i.e., a slowing rate of purchase of financial assets). The expectation of considerably higher inflation, as held 19 by investors, subsequently eased and has remained largely unchanged since early 20 21 2013.

Direct Testimony of Robert J. Camfield

1 Q. Can you please provide examples of expectations of inflation, estimated

2 historically?

3 A. Historical expectations of inflation refer to expectations held at various 4 timeframes historically. Interest rate differentials between nominal and TIPS yields for 5 the 2003-2013 timeframe have averaged 1.95% and 2.19% for Treasury securities with 6 5- and 10-year terms, respectively. Similarly, the University of Michigan/Thomson 7 Reuters monthly Survey of Consumers reveals inflation expectations of 3.10% and 8 3.07% for the same timeframes, 2003-2013 and 2009-2013, respectively. It is 9 important to distinguish between historical samples of expected inflation and actual 10 inflation, measured using various price indexes over historical periods.

11 Q. Does the rate of inflation within regions of the U.S., such as the Florida

12 Peninsula, vary from the rate of inflation across the U.S?

A. Yes. First of all, it is essential to distinguish between price level and price
inflation. Measured in terms of levels, prices across regions can vary greatly.
Measured in terms of rates of changes through time, prices across regions appear to
evolve in remarkably similar patterns over the long term.

Nonetheless, inflation for specific regions may deviate from the rate of inflation for the U.S. as a whole, over selected timeframes. Regional differences in price inflation are largely attributable to differences in growth in aggregate economic demand for goods and services. A contemporary example is the economic expansion within North Dakota's western region, a result of the vast and sudden expansion of oil and gas

Direct Testimony of Robert J. Camfield

1 production within the Bakken formation. Prices, including labor costs, have risen fast 2 within western North Dakota. Similarly, prices in southeastern Florida, including the 3 Miami Metropolitan Statistical Area (MSA), have outpaced general price inflation for 4 the U.S. during the 2000-2013 period, particularly during 2000-2007. Over recent 5 years, however, it appears that price inflation in this large Florida region has slowed 6 and, prospectively, is likely to closely approximate that of the U.S. In view of the 7 comparative rise in economic activity in South Florida recently, I anticipate that, 8 prospectively, price inflation in South Florida and the U.S. will maintain a similar 9 path. In summary, with few exceptions, projections of inflation expectations for the 10 U.S. as a whole provide an appropriate basis for inflation within various regions of the 11 U.S., including Florida.

Q. Can you please provide a brief summary of the findings of your study of inflation expectations and your recommended inflation factors for cost escalation?

A. Yes. I have conducted an assessment of expected rates of inflation as the basis for estimating the inflation factors, for determining the escalation in costs incurred by Florida Public Utilities Company in providing electricity services during 2014 and 2015. My assessment utilizes the four methods described above. My findings indicate that the appropriate inflation factors for 2014 and 2015 are 2.20% and 2.23%, respectively.

21 Q. Does this conclude your testimony?

Direct Testimony of Robert J. Camfield

1 A. It does.

SUMMARY OF HISTORICAL ENERGY SALES, NORTHEAST AND NORTHWEST DIVISIONS

NORTHEAST DIVISION: Class Energy Consumption (MWh)

Class	2008	2009	2010	2011	2012	2013	Test Year
RS	185,850	182,712	201,641	185,895	172,984	171,751	177,658
GS	28,857	27,754	29,507	28,325	28,533	29,292	30,417
GSD	83,844	84,574	86,621	83,877	78,221	75,623	76,462
GSLD	25,665	24,536	26,120	25,109	25,312	27,489	28,617
GSLD1	84,300	64,950	66,580	52,440	58,640	31,440	23,740
OL	1,396	1,392	1,377	1,397	1,378	1,353	1,353
STL	1,127	1,133	1,134	1,031	864	879	851
Total	411,039	387,050	412,980	378,072	365,932	337,827	339,098

NORTHWEST DIVISION: Class Energy Consumption (MWh)

Class	2008	2009	2010	2011	2012	2013	Test Year
RS	143,796	133,594	145,399	132,170	119,996	119,344	126,536
GS	29,298	27,120	28,662	29,238	28,327	27,412	28,989
GSD	89,919	87,224	92,821	85,312	83,243	83,305	83,577
GSLD	57,582	56,901	60,314	62,622	63,279	59,338	58,645
OL	4,181	4,028	3,922	3,894	3,895	4,066	4,074
STL	1,133	1,137	1,147	1,136	1,242	1,253	1,211
Total	325,909	310,004	332,265	314,372	299,983	294,717	303,031

SUMMARY STATISTICS OF ESTIMATED FORECAST EQUATIONS

NORTHEAST DIVISION

Residential Class

RS #

# of Customers		Use per Customer		
Performance Measure	Value	Performance Measure	Value	
Adjusted R ²	0.94	Adjusted R ²	0.93	
Standard Error	56.02	RMSE	71.56	
F	398.16	F	97.85	
# Obs	108	# Obs	108	

Business Classes

# of Customers		Use per Customer		
Performance Measure Value		Performance Measure	Value	
Adjusted R ²	0.95 14.52	Adjusted R ²	0.91	
RMSE		RMSE	84.64	
F	1079.33	F	80.19	
# Obs	120	# Obs	108	
	# of Customers Performance Measure Adjusted R ² RMSE F # Obs	# of CustomersPerformance MeasureValueAdjusted R20.95RMSE14.52F1079.33# Obs120	# of CustomersUse per CustomerPerformance MeasureValuePerformance MeasureAdjusted R20.95Adjusted R2RMSE14.52RMSEF1079.33F# Obs120# Obs	

GSD	# of Customers		Use per Customer		
	Performance Measure Value		Performance Measure	Value	
	Adjusted R ²	0.70 6.55	Adjusted R ²	0.92	
	RMSE		RMSE	1049.90	
	F	21.02	F	68.87	
	# Obs	120	# Obs	96	

GSLD	# of Customers		Use per Customer		
	Performance Measure	Value	Performance Measure	Value	
	Adjusted R ²	0.62 0.50	Adjusted R ²	0.53	
	RMSE		RMSE	28143.00	
	F	15.37	F	8.79	
	# Obs	117	# Obs	105	

SUMMARY STATISTICS OF ESTIMATED FORECAST EQUATIONS

NORTHWEST DIVISION

Residential Class

RS	# of Customers		Use per Customer		
	Performance Measure	Value	Performance Measure	Value	
	Adjusted R ²	0.90	Adjusted R ²	0.92	
	RMSE	34.42	RMSE	64.65	
	F	313.79	F	86.29	
	# Obs	72	# Obs	108	

Business Classes

GS	# of Customers		Use per Customer	
	Performance Measure	Value	Performance Measure	Value
	Adjusted R ²	0.95	Adjusted R ²	0.91
	RMSE	12.77	RMSE	58.73
	F	455.21	F	71.76
	# Obs	120	# Obs	108
	Combined regression	with GSD		

GSD	# of Customers		Use per Customer		
	Performance Measure Value		Performance Measure	Value	
	Combined regression	with GS	Adjusted R ²	0.84	
			RMSE	1118.90	
			F	37.57	
			# Obs	108	

GSLD	# of Customers		Use per Customer		
	Performance Measure	Value	Performance Measure	Value	
	Adjusted R ²	0.70	Adjusted R ²	0.79	
	RMSE	0.67	RMSE	23353.00	
	F	126.83	F	25.25	
	# Obs	108	# Obs	96	

PREDICTED VS. ACTUALS RESIDENTIAL CLASS, NORTHEAST DIVISION





PREDICTED VS. ACTUALS GENERAL SERVICE CLASS, NORTHEAST DIVISION



Exhibit RJC-3 Page 3 of 8

PREDICTED VS. ACTUALS GENERAL SERVICE DEMAND CLASS, NORTHEAST DIVISION







Exhibit RJC-3 Page 5 of 8

PREDICTED VS. ACTUALS RESIDENTIAL CLASS, NORTHWEST DIVISION





Exhibit RJC-3 Page 6 of 8

PREDICTED VS. ACTUALS GENERAL SERVICE CLASS, NORTHWEST DIVISION





PREDICTED VS. ACTUALS GENERAL SERVICE DEMAND CLASS, NORTHWEST DIVISION



Exhibit RJC-3 Page 8 of 8



Exhibit RJC-4 Page 1 of 2

CHANGES IN POPULATION OF RURAL COUNTIES, UNITED STATES AND THE STATE OF FLORIDA



% Annual Population Change, Rural Counties

CHANGES IN POPULATION OF RURAL COUNTIES, UNITED STATES AND THE STATE OF FLORIDA

Number of Rura	I Counties with	Positive a	nd Negative	Population	Growth
Nulliber of Kula	i counties with	rusitive a	inu wegative	Fopulation	Glowin

UNITED STATES	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Positive Growth	619	726	780	807	794	861	844	804	774	884	633	550	648
Negative Growth	985	878	824	797	810	743	760	800	830	720	971	1054	956
STATE OF FLORIDA	_												
Positive Growth	14	13	16	16	14	16	16	15	11	8	5	7	5
Negative Growth	2	3	0	0	2	0	0	1	5	8	11	9	11

Exhibit RJC-5 Page 1 of 3

GLOBAL FACTORS AFFECTING RESIDENTIAL ENERGY USE: REAL PERSONAL INCOME, ELECTRICITY PRICES, AND THE STOCK OF ENERGY-USING TECHNOLOGY

ENERGY USE PER \$K OF PERSONAL INCOME

REAL ELECTRICITY PRICES OF RESIDENTIAL ENERGY



Exhibit RJC-5 Page 2 of 3

GLOBAL FACTORS AFFECTING RESIDENTIAL ENERGY USE: REAL PERSONAL INCOME, ELECTRICITY PRICES, AND THE STOCK OF ENERGY-USING TECHNOLOGY

RESIDENTIAL ELECTRICITY USE AND INCOME, STATED ON A PER CAPITA BASIS

	Index: Apr	Index of	
	and Nov	Per	
	Electric Use	Capita	
	Per Capita	Income	
1990	1.000	1.000	
1991	1.026	0.988	
1992	1.025	1.013	
1993	1.040	1.018	
1994	1.014	1.036	
1995	1.037	1.061	
1996	1.077	1.090	
1997	1.064	1.124	
1998	1.040	1.182	
1999	1.058	1.212	
2000	1.081	1.265	
2001	1.087	1.279	
2002	1.149	1.272	
2003	1.112	1.281	
2004	1.133	1.313	
2005	1.145	1.335	
2006	1.171	1.383	
2007	1.172	1.407	
2008	1.170	1.402	
2009	1.138	1,351	
2010	1.111	1.358	
2011	1.138	1.397	
2012	1.120	1.419	
			Differential Trend: EL Use
% Growth,			and Income Per Capita
2006-2012	-0.73%	0.43%	1.16%
% Growth,			
2008-2012	-1.08%	0.31%	1.38%

Exhibit RJC-5 Page 3 of 3

GLOBAL FACTORS AFFECTING RESIDENTIAL ENERGY USE: REAL PERSONAL INCOME, ELECTRICITY PRICES, AND THE STOCK OF ENERGY-USING TECHNOLOGY

CHANGING RATES OF ADOPTION OF MODERN ELECTRICITY END-USE TECHNOLOGIES IN THE RESIDENTIAL SECTOR AS IMPLIED BY INDEXES OF INDUSTRIAL PRODUCTION AND OCCUPIED HOUSING

	Changes in							
	Electrical Eq,					Occupied Housing		
Year	Appliances	Lighting	Appliances	S. Appliance	L. Appliance	Additions	% Chg	
2002	94.24	97.16	96.34	113.98	91.99	1,479	1.43%	
2003	90.40	91.38	100.44	107.94	98.66	595	0.57%	
2004	91.39	95.20	105.20	106.54	104.89	1,028	0.97%	
2005	93.62	96.05	103.85	90.50	106.91	1,643	1.54%	
2006	94.90	96.54	101.37	91.42	103.66	1,344	1.24%	
2007	100.00	100.00	100.00	100.00	100.00	731	0.67%	
2008	97.58	95.90	89.24	94.55	87.97	1,103	1.00%	
2009	76.24	75.26	72.40	85.36	69.33	-65	-0.06%	
2010	79.93	75.04	71.89	77.37	70.56	516	0.46%	
2011	85.92	79.67	70.13	69.70	70.18	1,674	1.50%	
2012	89.14	80.25	69.55	70.70	69.25	979	0.86%	
2013	91.03	84.45	74.84	72.22	75.35	160	0.14%	
Average,								
2002-2008	94.59	96.03	99.49	100.70	99.15	1,132		
Average,								
2009-2013	84.45	78.93	71.76	75.07	70.93	653		

Exhibit RJC-6 Page 1 of 3

PROJECTIONS OF TEST-YEAR REVENUES

NORTHEAST DIVISION

(shown in current dollars)

	RS	GS	GSD	GSLD	GSLD1	OL	STL	Total
Oct-14	2,081,096	369,892	748,881	250,632	235,899	42,202	19,928	3,748,530
Nov-14	1,529,561	302,273	647,481	231,473	298,808	41,884	19,997	3,071,479
Dec-14	1,753,161	296,478	612,204	230,840	214,660	42,647	19,878	3,169,868
Jan-15	2,218,966	324,246	633,671	243,022	262,582	41,346	21,288	3,745,120
Feb-15	2,031,539	301,748	577,963	230,631	292,271	41,100	20,992	3,496,246
Mar-15	1,795,554	298,621	603,435	229,264	280,153	41,500	21,279	3,269,808
Apr-15	1,565,473	290,582	613,851	234,746	451,505	41,545	21,074	3,218,776
May-15	1,664,248	309,673	661,706	253,219	312,660	41,512	20,468	3,263,485
Jun-15	2,223,789	365,232	752,918	279,307	341,194	41,649	20,656	4,024,745
Jul-15	2,795,480	421,863	851,066	273,158	303,454	42,688	21,225	4,709,935
Aug-15	2,734,251	428,206	838,144	283,883	272,808	42,105	22,404	4,621,801
Sep-15	2,648,193	418,626	837,661	270,187	437,608	42,451	22,937	4,677,662
Test Year	25,042,312	4,127,438	8,378,984	3,010,362	3,703,602	502,629	252,127	45,017,453
PROJECTIONS OF TEST-YEAR REVENUES

NORTHWEST DIVISION

(shown in current dollars)

	RS	GS	GSD	GSLD	GSLD1	OL	STL	Total
0d-14	1,411,862	404,076	865,972	553,283		84,292	22,558	3,342,043
Nov-14	1,152,467	326,249	710,764	510,423		84,524	22,709	2,807,136
Dec-14	1,511,887	337,808	699,544	504,321		84,547	22,806	3,160,913
Jan-15	1,896,830	381,170	757,610	482,151		84,320	23,055	3,625,136
Feb-15	1,597,254	345,279	705,961	431,685		84,151	22,629	3,187,959
Mar-15	1,382,514	332,843	698,320	442,975		84,174	22,873	2,963,699
Apr-15	1,148,061	314,581	691,313	457,912		84,543	23,876	2,720,285
May-15	1,198,753	336,654	750,234	492,143		84,326	23,568	2,885,678
Jun-15	1,541,230	399,455	832,938	545,572		84,472	23,319	3,426,986
Jul-15	1,855,846	456,887	932,220	614,109		85,023	23,207	3,967,291
Aug-15	1,830,574	451,763	925,890	584,179		84,297	23,227	3,899,930
Sep-15	1,800,125	451,429	953,880	585,143		84,532	23,309	3,898,417
Test Year	18,327,403	4,539,194	9,524,645	6,203,896	_	1,013,200	277,135	39,885,473

PROJECTIONS OF TEST-YEAR REVENUES

FLORIDA PUBLIC UTILITIES COMPANY, COMBINED ELECTRIC OPERATIONS

(shown in current dollars)

	RS	GS	GSD	GSLD	GSLD1	OL	STL	Total
Oct-14	3,492,959	773,968	1,614,853	803,915	235,899	126,494	42,486	7,090,573
Nov-14	2,682,028	628,522	1,358,245	741,896	298,808	126,408	42,706	5,878,614
Dec-14	3,265,048	634,286	1,311,748	735,161	214,660	127,194	42,684	6,330,781
Jan-15	4,115,796	705,416	1,391,281	725,172	262,582	125,666	44,344	7,370,256
Feb-15	3,628,793	648,028	1,283,924	662,317	292,271	125,251	43,621	6,684,205
Mar-15	3,178,069	631,465	1,301,755	672,239	280,153	125,674	44,152	6,233,506
Apr-15	2,713,534	605,162	1,305,165	692,658	451,505	126,088	44,949	5,939,061
May-15	2,863,000	646,327	1,411,940	745,362	312,660	125,837	44,037	6,149,164
Jun-15	3,765,020	764,687	1,585,855	824,879	341,194	126,121	43,975	7,451,731
Jul-15	4,652,326	878,750	1,783,287	887,266	303,454	127,711	44,432	8,677,226
Aug-15	4,564,825	879,968	1,764,034	868,062	272,808	126,401	45,632	8,521,731
Sep-15	4,448,319	870,054	1,791,540	855,330	437,608	126,983	46,245	8,576,079
Test Year	43,369,715	8,666,632	17,903,629	9,214,257	3,703,602	1,515,829	529,262	84,902,926

Exhibit RJC-7 Page 1 of 1

INFLATION EXPECTATIONS

drawn from

OBSERVED INTEREST RATE DIFFERENTIALS

and

SURVEYS OF PROFESSIONAL FORECASTERS, CONSUMERS, AND ECONOMISTS

		METHODS									
				SURVEYS							
			(1)		(2)		(3)	(4)			
	Approximate Time for Sample of	Nominal - TIPS Yield Differential (%) (shown by term)		Survey of Professional Forecasters		U of M/Thomson					
Forward	Inflation Expectations					Reuters Survey of	Livingston	SUMMARY			
Period		5-year	10-year	20-year	CPI (%)	PCE (%)	Consumers (%) Survey	Survey (%)	RESULTS (%)	_	
	1st Half, 2013	2.09			2.20	2.00	3.17	2.00			
	2nd Half, 2013	1.78			2.00	1.85	3.06				
	Dec, 2013	1.67			2.00	1.90	2.90	1.80			
2014	Across 2013	Across 2013	1.94			2.10	1.93	3.12	1.90	2.20%	(for 2014)
	1st Half, 2013	2.09			2.30	2.00	3.06	N/A			
	2nd Half, 2013	1.78			2.20	1.95	2.74				
	Dec, 2013	1.67			2.20	1.90	2.64	2.10			
2015	Across 2013	1.94			2.25	1.98	2.90	2.10	2.23%	(for 2015)	
Long-Term	1st Half, 2013		2.40	2.54	2.25	2.00		2.50			
	2nd Half, 2013		2.16	2.37	2.10	1.90		2.40			
	Dec, 2013		2.16	2.36	2.10	1.80					
	Across 2013		2.28	2.46	2.18	1.95		2.45	2.24		

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA PUBLIC UTILITIES COMPANY

Docket No. 140025-EI

Direct Testimony and Exhibits

Of

Paul R. Moul

Florida Public Utilities Company Direct Testimony of Paul R. Moul

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Appendix A - Educational Background, Business Experience and Qualifications

GLOSSARY OF ACRONYMS AND DEFINED TERMS				
ACRONYM	DEFINED TERM			
AFUDC	Allowance for Funds Used During Construction			
β	Beta			
b	Represents the retention rate that consists of the fraction of earnings that are not paid out as dividends			
b x r	Represents internal growth			
CAPM	Capital Asset Pricing Model			
CCR	Corporate Credit Rating			
CE	Comparable Earnings			
CUC	Chesapeake Utilities Corporation			
CWIP	Construction Work in Progress			
DCF	Discounted Cash Flow			
EPACT	National Energy Policy Act			
FERC	Federal Energy Regulatory Commission			
FOMC	Federal Open Market Committee			
FPU	Florida Public Utilities Company			
IGF	Internally Generated Funds			
LT	Long Term			
M&M	Modigliani & Miller			
MPL	Minimum pension liability			
NAIC	National Association of Insurance Commissioners			
OCI	Other Comprehensive Income			
r	Represents the expected rate of return on common equity			
Rf	Risk-free rate of return			
Rm	Return on the market			
RP	Risk Premium			
S	Represents the new common shares expected to be issued by a firm			
s x v	Represents external growth			
S&P	Standard & Poor's			
v	Represents the value that accrues to existing shareholders from selling stock at a price different from book value			

INTRODUCTION AND SUMMARY OF RECOMMENDATION

1	Q.	Please state your name, occupation and business address.
2	A.	My name is Paul Ronald Moul. My business address is 251 Hopkins Road,
3		Haddonfield, New Jersey 08033-3062. I am Managing Consultant at the firm P.
4		Moul & Associates, an independent financial and regulatory consulting firm.
5	Q.	Please describe your educational background and prior experience.
6	А.	I have a Bachelor of Science in Business Administration from Drexel University. I
7		have a long history of experience in this subject area with years of study and
8		testimony before state commissions around the country. My educational
9		background, business experience, and qualifications are provided in Appendix A,
10		which follows my direct testimony.
11	Q.	What is the purpose of your testimony?
12	А.	My testimony presents evidence, analysis, and a recommendation concerning the
13		appropriate rate of return that the Florida Public Service Commission (the
14		"Commission") should recognize in the determination of the revenues that Florida
15		Public Utilities Company ("FPU" or the "Company") should realize as a result of
16		this proceeding. My analysis and recommendation are supported by the detailed
17		financial data contained in Exhibit PRM-1, which is a multi-page document divided
18		into thirteen (13) schedules.
19	Q.	Was this exhibit prepared by you or under your direction or supervision?
20	Α.	Yes, it was.
21	Q.	Are you responsible for any of the Company's Minimum Filing Requirements

- 1 (MFRs)?
- 2 A. Yes. I am sponsoring MFR Number D-1a.
- Q. Based upon your analysis, what is your conclusion concerning the appropriate
 cost of common equity and rate of return for the Company?
- My conclusion is that the Commission should find that the Company's rate of return 5 Α. on common equity is 11.25%. With this return, I have presented on page 1 of 6 Schedule 1 the weighted average cost of capital of 8.60% that is based on investor-7 provided capital. In addition, cost of capital components for customer deposits and 8 deferred income taxes also play a role in the rate of return that is applicable to the 9 rate base. The resulting overall cost of capital that will be used to establish rates, 10 which is the product of weighting the individual capital costs by the proportion of 11 each respective type of capital, should, if adopted by the Commission, establish a 12 compensatory level of return for the use of capital and provide the Company with 13 the ability to attract capital on reasonable terms. 14
- Q. What background information have you considered in reaching a conclusion
 concerning the Company's cost of capital?
- A. FPU is a combination electric and natural gas distribution utility. The Company is a
 wholly-owned subsidiary of Chesapeake Utilities Corporation ("Chesapeake" or
- 19 "CUC"), which is a diversified energy company that has regulated gas distribution
- 20 operations in Florida, Delaware, and Maryland, as well as interstate transmission of
- 21 natural gas on the Delmarva Peninsula and non-regulated propane delivery
- 22 operations. CUC also has other non-regulated businesses. FPU is a very small

DIRECT TESTIMONY OF PAUL R. MOUL

1		electric delivery utility that provides service to approximately 31,066 customers, in
2		two divisions, i.e., Marianna and Fernandina Beach. The Company obtains all of
3		the energy needs for its customers from purchases from JEA, Gulf Power Company,
4		and other marketers. The Company's sales are primarily made to residential and
5		commercial customers, although there are two major industrial customers engaged
6		in the manufacturing of paper that represents approximately 9% of kWh sales.
7	Q.	How have you determined the cost of common equity in this case?
8	A.	The cost of common equity is established using capital market and financial data
9		relied upon by investors to assess the relative risk, and hence the cost of equity, for
10		an electric utility, such as FPU. In this regard, I relied on four well-recognized
11		measures of the cost of equity: The Discounted Cash Flow ("DCF") model, the
12		Risk Premium ("RP") analysis, the Capital Asset Pricing Model ("CAPM"), and the
13		Comparable Earnings ("CE") approach. The results of a variety of approaches
14		indicate that the Commission should find that the Company's rate of return on
15		common equity is 11.25%.
16	Q.	In your opinion, what factors should the Commission consider when
17		determining the Company's cost of capital in this proceeding?
18	А.	The Commission's rate of return allowance must be set to cover the Company's
19		interest and dividend payments, provide a reasonable level of earnings retention,
20		produce an adequate level of internally generated funds to meet capital
21		requirements, be commensurate with the risk to which the Company's capital is
22		exposed, assure confidence in the financial integrity of the Company, support

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1		reasonable credit quality, and allow the Company to raise capital on reasonable
2		terms. The return that I propose fulfills these established standards of a fair rate of
3		return set forth by the landmark <u>Bluefield</u> and <u>Hope</u> cases. ¹ That is to say, my
4		proposed rate of return is commensurate with returns available on investments
5		having corresponding risks.
6	Q.	What factors have you considered in measuring the cost of equity in this case?
7	А.	The models that I used to measure the cost of common equity for the Company
8		were applied with market and financial data developed from my proxy group of
9		eleven (11) electric companies. The criteria that I used to assemble the proxy group
10		will be described later in my testimony. The companies in the electric proxy group
11		are identified on page 2 of Schedule 3. I will refer to these companies as the
12		"Electric Group" throughout my testimony.
13	Q.	How have you performed your cost of equity analysis with the market data for
14		the Electric Group?
15	А.	I have applied the market-based models (i.e., DCF, RP, and CAPM) for estimating
16		the cost of equity using the average data for the Electric Group. By employing
17		group average data, rather than individual Company's analysis, I have helped to
18		minimize the effect of extraneous influences on the market data for an individual
19		company.
20	Q.	Please summarize your cost of equity analysis.
21	А.	My cost of equity determination was derived from the results of the

¹<u>Bluefield Water Works & Improvement Co. v. P.S.C. of West Virginia</u>, 262 U.S. 679 (1923) and <u>F.P.C. v. Hope Natural Gas Co.</u>, 320 U.S. 591 (1944).

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1	methods/models identified above, and is revealed on page 2 of Schedule 1. In
2	general, the use of more than one method provides a superior foundation to arrive at
3	the cost of equity. At any point in time, reliance on a single method can provide an
4	incomplete measure of the cost of equity. The specific application of these
5	methods/models will be described later in my testimony. The following table, taken
6	from the model results presented on page 2 of Schedule 1, provides a summary of
7	the indicated costs of equity using each of these approaches and recognizing
8	flotation costs. ²

DCF	9.59%
RP	12.19%
САРМ	10.84%
Comparable Earnings	13.30%
Average	11.48%
Median	11.52%
Mid-point	11.45%

9	From all measures of the cost of equity, I recommend that the Company's rate of
10	return on common equity be set at 11.25%. The result of the Risk Premium and
11	Comparable Earnings methods indicate that my recommended equity return of
12	11.25% is conservative. Even the average, median and midpoint of my analyses
13	suggest my recommendation is conservative. To accommodate the Commission's

²Flotation costs are defined as the out-of-pocket costs associated with the issuance of common stock. Those costs typically consist of the underwriters' discount and company issuance expenses.

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1		preference for a range of the cost of equity, I propose a range of 10.25% to 12.25%,
2		which includes the one percentage point band on each side of the midpoint often
3		employed by the Commission. I also believe my recommended cost of equity is
4		appropriate in this case because it makes no provision for the prospect that the rate
5		of return may not be achieved due to unforeseen events that could occur during the
6		rate effective period.
7		ELECTRIC UTILITY RISK FACTORS
8	Q.	Please identify some of the risk factors that impact the electric utility industry
9		today.
10	А.	Today, electric utilities face meaningful changes in the fundamentals that affect
11		their operations, but cost of service pricing continues to dominate much of their
12		business profile. On the national level, the passage of the National Energy Policy
13		Act ("EPACT") and the issuance of FERC Order Nos. 888 and 889 and Order No.
14		2000 initiated sweeping changes that fundamentally altered the structure of the
15		electric utility business.
16	Q.	Will you please elaborate on the risk factors that affect electric utilities today?
17	А.	Yes. Aside from the obligation to serve and the responsibility to maintain
18		reliability, electric utilities are faced with risks associated with demand uncertainty,
19		investment cost uncertainty, and regulatory uncertainty. In addition, the risk of
20		distributed generation will continue to be a concern, and could have an increasing
21		influence on the business of electric delivery utilities. With technological advances
22		in micro-turbines, potential commercialization of fuel cells, development of wind

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1		and solar power, and the creation of micro-grids, utilities face the potential for
2		bypass and the resulting declines in transmission and distribution revenues. At the
3		same time, an electric utility retains the obligation to provide reliable delivery
4		service. Utilities must make new investment to provide continuity of quality
5		service, keep rates reasonable, while promoting conservation.
6		Moreover, regulatory risks include the overall framework of ratesetting,
7		cost allocation, and rate design issues, and the level of return that will be allowed.
8		With increased emphasis on market-determined prices, a new dimension exists in
9		the electric utility business. A pricing structure restricted by regulation or politics
10		diminishes management's ability to adjust its business strategy quickly to changing
11		market conditions to respond to broadening competition.
12	Q.	Are there specific risk issues facing the Company?
12 13	Q. A.	Are there specific risk issues facing the Company? Yes. Energy deliveries to one commercial and two industrial customers, which
12 13 14	Q. A.	Are there specific risk issues facing the Company? Yes. Energy deliveries to one commercial and two industrial customers, which represent approximately 42,064,300 of kWh sales, are usually thought to be of
12 13 14 15	Q. A.	Are there specific risk issues facing the Company? Yes. Energy deliveries to one commercial and two industrial customers, which represent approximately 42,064,300 of kWh sales, are usually thought to be of higher risk than to residential customers. Success in this segment of the Company's
12 13 14 15 16	Q. A.	Are there specific risk issues facing the Company? Yes. Energy deliveries to one commercial and two industrial customers, which represent approximately 42,064,300 of kWh sales, are usually thought to be of higher risk than to residential customers. Success in this segment of the Company's market is subject to the business cycle and pressures from self-generation.
12 13 14 15 16 17	Q. A.	Are there specific risk issues facing the Company? Yes. Energy deliveries to one commercial and two industrial customers, which represent approximately 42,064,300 of kWh sales, are usually thought to be of higher risk than to residential customers. Success in this segment of the Company's market is subject to the business cycle and pressures from self-generation. Moreover, external factors also can influence deliveries to these customers, which
12 13 14 15 16 17 18	Q. A.	Are there specific risk issues facing the Company? Yes. Energy deliveries to one commercial and two industrial customers, which represent approximately 42,064,300 of kWh sales, are usually thought to be of higher risk than to residential customers. Success in this segment of the Company's market is subject to the business cycle and pressures from self-generation. Moreover, external factors also can influence deliveries to these customers, which face competitive pressure on their own operations from other facilities outside the
12 13 14 15 16 17 18 19	Q. A.	Are there specific risk issues facing the Company? Yes. Energy deliveries to one commercial and two industrial customers, which represent approximately 42,064,300 of kWh sales, are usually thought to be of higher risk than to residential customers. Success in this segment of the Company's market is subject to the business cycle and pressures from self-generation. Moreover, external factors also can influence deliveries to these customers, which face competitive pressure on their own operations from other facilities outside the utility's service territory.
12 13 14 15 16 17 18 19 20	Q. A. Q.	Are there specific risk issues facing the Company? Yes. Energy deliveries to one commercial and two industrial customers, which represent approximately 42,064,300 of kWh sales, are usually thought to be of higher risk than to residential customers. Success in this segment of the Company's market is subject to the business cycle and pressures from self-generation. Moreover, external factors also can influence deliveries to these customers, which face competitive pressure on their own operations from other facilities outside the utility's service territory. Please indicate how the Company's risk profile is affected by its construction
12 13 14 15 16 17 18 19 20 21	Q. A. Q.	Are there specific risk issues facing the Company? Yes. Energy deliveries to one commercial and two industrial customers, which represent approximately 42,064,300 of kWh sales, are usually thought to be of higher risk than to residential customers. Success in this segment of the Company's market is subject to the business cycle and pressures from self-generation. Moreover, external factors also can influence deliveries to these customers, which face competitive pressure on their own operations from other facilities outside the utility's service territory. Please indicate how the Company's risk profile is affected by its construction program.

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1		and upgrade existing facilities in its service territory and to meet growth. Over the
2		next five years (i.e., 2014 through 2018), the Company's total capital expenditures
3		are expected to be approximately \$32.6 million, as described in the testimony of
4		Company witness Mark Cutshaw. These expenditures will represent approximately
5		52% (\$32.6 million ÷ \$63.0 million) of the net utility plant at December 31, 2013.
6		A fair rate of return for the Company represents a key to a financial profile
7		that will provide the Company with the ability to raise the capital, in all market
8		conditions to meet its needs, and to satisfy investor requirements at reasonable cost.
9		In the situation where significant additional capital is required, as shown by the
10		construction expenditures indicated above, the regulatory process must establish a
11		return on equity that provides a reasonable opportunity for the Company to actually
12		achieve its cost of capital. This is especially important for FPU due to its small
13		size.
14		FUNDAMENTAL RISK ANALYSIS
15	Q.	Is it necessary to conduct a fundamental risk analysis to provide a framework
16		for a determination of a utility's cost of equity?
17	А.	Yes. It is necessary to establish a company's relative risk position within its
18		industry through a fundamental analysis of various quantitative and qualitative
19		factors that bear upon investors' assessment of overall risk. The qualitative factors
20		that bear upon the Company's risk have already been discussed. The quantitative
21		risk analysis follows. The items that influence investors' evaluation of risk and
22		their required returns were described above. For this purpose, I compared FPU to

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1		the S&P Public Utilities, an industry-wide proxy consisting of various regulated
2		businesses, and to the Electric Group.
3	Q.	What are the components of the S&P Public Utilities?
4	А.	The S&P Public Utilities is a widely recognized index that is comprised of electric
5		power and natural gas companies. These companies are identified on page 3 of
6		Schedule 4.
7	Q.	What criteria did you employ to assemble the Electric Group?
8	А.	The Electric Group companies have the following common characteristics: they are
9		engaged in similar business lines, have publicly-traded common stock, are reported
10		in The Value Line Investment Survey, operate within the southeastern and south
11		central regions of the U.S., and are not currently the target of a merger or
12		acquisition. It would be inappropriate to include a company that is a target of a
13		takeover in a proxy group because the stock price of that company reflects the
14		acquisition price of the target company. The Electric Group includes American
15		Electric Power Company, CenterPoint Energy, Inc., Cleco Corporation, Dominion
16		Resources, Inc., Duke Energy Corp., Entergy Corp., NextEra Energy, Inc., OGE
17		Energy Corp., SCANA Corp., Southern Company, and TECO Energy. The Electric
18		Group members are identified on page 2 of Schedule 3.
19	Q.	Is knowledge of a utility's bond rating an important factor in assessing its risk
20		and cost of capital?
21	А.	Yes. Knowledge of a company's credit quality rating is important because the cost
22		of each type of capital is directly related to the associated risk of the firm. So while

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1		a company's credit quality risk is shown directly by the rating and yield on its
2		bonds, these relative risk assessments also bear upon the cost of equity. This is
3		because a firm's cost of equity is represented by its borrowing cost plus
4		compensation to recognize the higher risk of an equity investment compared to
5		debt.
6	Q.	Does FPU have a bond rating from the major credit rating agencies?
7	A.	No. There is no public rating on the debt of FPU. Rather, I have reviewed the
8		credit quality rating of CUC, which provides the basis for the debt component of
9		FPU's rate of return. The CUC's long-term debt carries a designation of "1" from
10		the National Association of Insurance Commissioners ("NAIC"). The NAIC is a
11		non-profit organization that is comprised of the chief insurance regulators of the
12		fifty states, the District of Columbia, and four U.S. territories. Essentially, it is a
13		trade association of insurance regulators much like the National Association of
14		Regulatory Utility Commissioners ("NARUC") is for state economic regulators.
15		NAIC conducts analysis that aids the state regulators in performing their oversight
16		of the insurance companies. As the NAIC has stated:
17 18 19 20 21 22		The quality of the assets of an insurance company has long been a key concern to state insurance regulators. As the chief public officials charged with the responsibility for monitoring the financial condition of insurers, state regulators must keep a close watch on both the credit quality and the value of those assets.
23 24		As noted, the valuation of the assets of insurance companies has been a
25		matter of concern to the NAIC for a very long period of time. The NAIC
26		recognized the need for the standardization of securities valuation across the U.S.

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1		and published its first volume of <i>Valuation of Securities</i> in 1908. Later, in 1949,
2		the NAIC set up the Securities Valuation Office ("SVO") to perform analytical
3		valuations of the growing number of securities owned by insurance companies that
4		were acquired through private placement. Privately placed securities owned by
5		insurance companies typically do not have credit quality ratings from Moody's and
6		S&P. The mission of the SVO is to provide state insurance regulators and
7		insurance companies with a uniform source of prices and quality ratings for
8		securities holdings in the portfolios of insurance companies. These prices and
9		quality ratings form what are known as "Association Values" that are used by
10		insurance companies in their Annual Statements filed with state insurance
11		regulators. For many years, the SVO used four bond rating categories: "Yes"
12		(investment grade), "No*" (average quality), "No**" (below average quality), and
13		"No" (in or near default). In September 1986, NAIC Valuation of Securities Task
14		Force began to consider revising its bond rating system that had been used
15		previously to provide a more discriminating set of bond categories. After 2-1/2
16		years of study, the NAIC established a six-category system that is in use today.
17	Q.	Are NAIC designations comparable to S&P and Moody's?
18	A.	Yes. The NAIC designations provide credit quality ratings for privately placed debt

20 alignment between the different ratings by S&P, Moody's and NAIC:

11

securities that are not rated by Moody's and S&P. The chart below summarizes the

<u>S&P</u>	Moody's	NAIC	
AAA	Aaa	1	
AA+	Aa1	1	
AA	Aa2	1	
AA-	Aa3	1	
A+	A1	1	Investment
А	A2	1	Grade
A-	A3	1	
BBB+	Baa1	2	
BBB	Baa2	2	\uparrow
BBB-	Baa3	2	
BB+	Ba1	3	I.
BB	Ba2	3	$ $ \vee
BB-	Ba3	3	
B+	B1	4	Non-
В	B2	4	Investment
В-	B3	4	Grade
CCC	Caa	5	
CC	Ca	5	
С	C	5	
D	D	6	

Q. How do the ratings compare for CUC, the Electric Group, and the S&P Public Utilities?

A. Due to the size of the debt issued by CUC, private placement is the most cost
effective way of issuing debt. As noted above, CUC has an NAIC designation of 1,
which is equivalent to an A-bond rating and above. For the Electric Group, the
average LT issuer rating is Baa1 from Moody's Investors Service ("Moody's") and
the average CCR is BBB+ from Standard & Poor's Corporation ("S&P"). The LT
issuer rating by Moody's and the CCR designation by S&P focuses upon the credit
quality of the issuer of the debt, rather than upon the debt obligation itself. Many of

1		the financial indicators that I will subsequently discuss are considered during the
2		rating process.
3	Q.	How do the financial data compare for FPU, the Electric Group, and the S&P
4		Public Utilities?
5	А.	The broad categories of financial data that I will discuss are shown on Schedules 2,
6		3, and 4. The data cover the five-year period 2008-2012. The analysis covering the
7		years 2011 and 2012 for FPU relate to its electric operations exclusively. The
8		amounts that I used were taken from the Company's FERC Form No. 1 and are not
9		prepared in a rate case format. That is to say, all of the Company's capitalization is
10		represented by proprietary capital for the purpose of the FERC Form No. 1
11		presentation. Prior years, i.e., 2008, 2009 and 2010, cover both the Company's
12		electric and natural gas distribution operations. The important categories of relative
13		risk may be summarized as follows:
14		Size. In terms of capitalization, FPU is very much smaller than the average
15		size of the Electric Group and the S&P Public Utilities. All other things being
16		equal, a smaller company is riskier than a larger company because a specific
17		numerical change in revenue and expense has a proportionately greater impact on a
18		small firm. As I will demonstrate later, the size of a firm can impact its cost of
19		equity. This is the case for FPU.
20		Market Ratios. Market-based financial ratios provide a partial indication of
21		the investor-required cost of equity. If all other factors are equal, investors will
22		require a higher rate of return on equity for companies that exhibit greater risk, in

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1	order to compensate for that risk. That is to say, a firm that investors perceive to
2	have higher risks will experience a lower price per share in relation to expected
3	earnings. For example, two otherwise similarly situated firms each reporting \$1.00
4	in earnings per share would have different market prices at varying levels of risk
5	(i.e., the firm with a higher level of risk will have a lower share value, while the
6	firm with a lower risk profile will have a higher share value).
7	There are no market ratios available for FPU because the Company's stock
8	is not traded. The five-year average price-earnings multiple for the Electric Group
9	was somewhat below that of the S&P Public Utilities. The five-year average
10	dividend yield was the same for the Electric Group and the S&P Public Utilities.
11	The average market-to-book ratio for the Electric Group was fairly similar to the
12	S&P Public Utilities.
13	Common Equity Ratio. The level of financial risk is measured by the
14	proportion of long-term debt and other senior capital that is contained in a
15	company's capitalization. Financial risk is also analyzed by comparing common
16	equity ratios (the complement of the ratio of debt and other senior capital). That is
17	to say, a firm with a high common equity ratio has lower financial risk, while a firm
18	with a low common equity ratio has higher financial risk. The five-year average
19	common equity ratios, based on permanent capital, were 43.0% for the Electric
20	Group and 45.0% for the S&P Public Utilities. The capital structure for the FPU
21	Electric Division is not meaningful because the CUC capital structure is used for
22	rate of return purposes for FPU.

1	Return on Book Equity. Greater variability (i.e., uncertainty) of a firm's
2	earned returns signifies relatively greater levels of risk, as shown by the coefficient
3	of variation (standard deviation \div mean) of the rate of return on book common
4	equity. The higher the coefficients of variation, the greater degree of variability.
5	For the five-year period, the coefficients of variation were 0.873 (5.5% \div 6.3%) for
6	FPU, 0.132 (1.6% \div 12.1%) for the Electric Group, and 0.104 (1.1% \div 10.6%) for
7	the S&P Public Utilities. The earnings variability was much higher for FPU than
8	the Electric Group and the S&P Public Utilities, indicating that the Company has
9	higher risk. Moreover, the Company's generally poor historical earnings
10	performance only adds to its risk.
11	Operating Ratios. I have also compared operating ratios (the percentage of
12	revenues consumed by operating expense, depreciation and taxes other than income
13	taxes). ⁴ The complement of the operating ratio is the operating margin which
14	provides a measure of profitability. The higher the operating ratio, the lower the
15	operating margin. The five-year average operating ratios were 94.6% for FPU,
16	80.9% for the Electric Group, and 82.3% for the S&P Public Utilities. These
17	comparisons show significantly higher operating risk for FPU as compared to the
18	Electric Group and the S&P Public Utilities. FPU's higher operating ratio can be
19	traced to the significant role that purchased power has on its operations. With a
20	majority of its energy requirements provided by other utilities, the Company must
21	rely upon JEA and Gulf Power Company to provide the majority of the energy

⁴The complement of the operating ratio is the operating margin which provides a measure of profitability. The higher the operating ratio, the lower the operating margin.

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1	needs for its customers. In the hierarchy of claims on the Company's revenues,
2	JEA and Gulf Power Company (i.e., the wholesalers) obtain recovery of their fixed
3	costs prior to the realization of a return for FPU (i.e., the retailer).
4	Coverage. The level of fixed charge coverage (i.e., the multiple by which
5	available earnings cover fixed charges, such as interest expense) provides an
6	indication of the earnings protection for creditors. Higher levels of coverage, and
7	hence earnings protection for fixed charges, are usually associated with superior
8	grades of creditworthiness. The five-year average interest coverage (excluding
9	Allowance for Funds Used During Construction ("AFUDC")) was 2.95 times for
10	FPU, 3.23 times for the Electric Group, and 3.12 times for the S&P Public Utilities.
11	The lower interest coverage for FPU can be traced to its lower earnings rate on its
12	common equity. The Company's lower interest coverage adds to its risk.
13	Quality of Earnings. Measures of earnings quality usually are revealed by
14	the percentage of AFUDC related to income available for common equity, the
15	effective income tax rate, and other cost deferrals. These measures of earnings
16	quality usually influence a firm's internally generated funds because poor quality of
17	earnings would not generate high levels of cash flow. Quality of earnings has not
18	been a significant concern for FPU, the Electric Group, and the S&P Public
19	Utilities.
20	Internally Generated Funds. Internally generated funds ("IGF") provide an
21	important source of new investment capital for a utility and represent a key measure
22	of credit strength. Historically, the five-year average percentage of IGF to capital

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1		expenditures was 126.5% for FPU, 82.3% for the Electric Group, and 91.1% for the
2		S&P Public Utilities. The higher IGF percentage indicates a lower risk factor for
3		FPU.
4		Betas. The financial data that I have been discussing relate primarily to
5		company-specific risks. Market risk for firms with publicly-traded stock is
6		measured by beta coefficients. Beta coefficients attempt to identify systematic risk,
7		i.e., the risk associated with changes in the overall market for common equities.
8		Value Line publishes such a statistical measure of a stock's relative historical
9		volatility to the rest of the market. As computed by Value Line, the beta coefficient
10		is derived from a regression analysis of the relationship between weekly percentage
11		changes in the price of a stock and weekly percentage changes in the NYSE Index
12		over a period of five years. The betas are adjusted for their long-term tendency to
13		converge toward 1.00. A common stock that has a beta less than 1.0 is considered
14		to have less systematic risk than the market as a whole and would be expected to
15		rise and fall more slowly than the rest of the market. A stock with a beta above 1.0
16		would have more systematic risk. A comparison of market risk is shown by the
17		Value Line beta of .73 as the average for the Electric Group (see page 2 of Schedule
18		3), and .75 as the average for the S&P Public Utilities (see page 3 of Schedule 4).
19	Q.	Please summarize your risk evaluation of the Company and the Electric
20		Group.
21	А.	FPU is much smaller than the average size of the Electric Group and its earnings are
22		much more variable. The Company also has a high operating ratio. These factors

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1		indicate that the Company has a higher risk profile. The Company's relatively high
2		IGF percentage is an offsetting risk factor. Since several of these risk factors
3		balance out, the cost of equity derived from the Electric Group provides a
4		reasonable basis for measuring the Company's cost of equity.
5		CAPITAL STRUCTURE RATIOS
6	Q.	Please explain the selection of capital structure ratios for FPU.
7	A.	CUC provides all the permanent capital, both debt and equity, for FPU. There is
8		some legacy debt that remains outstanding that was issued prior to FPU's
9		acquisition by CUC. This debt remains outstanding because it is not callable
10		without a make-whole provision to the lender. The Company has determined that it
11		is uneconomic to redeem this debt and make the call premium payment. For this
12		case, CUC's capital structure ratios have been employed for rate of return purposes
13		after assigning the legacy debt directly to FPU. Details of the Company's proposed
14		capital structure are provided in the D-Schedules and are summarized on my
15		Schedule 1.
16	Q.	Why is it appropriate to assign the legacy debt to the Company's weighted
17		average cost of capital with the remainder represented by the Parent Company
18		capitalization?
19	А.	As noted above, there is one series of long-term debt that remains outstanding,
20		which was issued prior to the acquisition of FPU by CUC. When rates were set for
21		the Company prior to the acquisition, this issue of debt was part of the capital
22		structure of FPU for rate of return purposes. As this one issue remains outstanding,

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1		it should be included in the Company's capital structure, which is consistent with
2		previous rate cases. The direct assignment of this debt to FPU will avoid having
3		customer rates in other jurisdictions carry the cost of this debt (i.e., Delaware,
4		Maryland, and FERC jurisdictional customers do not benefit from this debt). That
5		is to say, FPU customers have benefited from the assets constructed with the legacy
6		debt, and should continue to carry the cost associated with it. As to the remainder
7		of the Company's capital structure, it should be represented by the relative
8		proportions of the CUC capitalization. This procedure is appropriate because CUC
9		refinanced the other debt previously issued by FPU prior to the acquisition, and
10		CUC will provide all of the new capital needs of FPU on a going forward basis.
11	Q.	Please explain the justification for removing the accumulated Other
12		Comprehensive Income ("OCI") from the capital structure ratios proposed for
12 13		Comprehensive Income ("OCI") from the capital structure ratios proposed for this case.
12 13 14	А.	Comprehensive Income ("OCI") from the capital structure ratios proposed for this case. The accumulated OCI must be eliminated from the capital structure for ratesetting
12 13 14 15	А.	Comprehensive Income ("OCI") from the capital structure ratios proposed for this case. The accumulated OCI must be eliminated from the capital structure for ratesetting purposes. OCI arises from a variety of sources, including: minimum pension
12 13 14 15 16	А.	Comprehensive Income ("OCI") from the capital structure ratios proposed for this case. The accumulated OCI must be eliminated from the capital structure for ratesetting purposes. OCI arises from a variety of sources, including: minimum pension liability ("MPL"), foreign currency hedges, unrealized gains and losses on
12 13 14 15 16 17	А.	Comprehensive Income ("OCI") from the capital structure ratios proposed for this case. The accumulated OCI must be eliminated from the capital structure for ratesetting purposes. OCI arises from a variety of sources, including: minimum pension liability ("MPL"), foreign currency hedges, unrealized gains and losses on securities available for sale, interest rate swaps, and other cash flow hedges. The
12 13 14 15 16 17	А.	Comprehensive Income ("OCI") from the capital structure ratios proposed for this case. The accumulated OCI must be eliminated from the capital structure for ratesetting purposes. OCI arises from a variety of sources, including: minimum pension liability ("MPL"), foreign currency hedges, unrealized gains and losses on securities available for sale, interest rate swaps, and other cash flow hedges. The accumulated OCI has its roots in the MPL. None of the accounting entries that
12 13 14 15 16 17 18 19	А.	Comprehensive Income ("OCI") from the capital structure ratios proposed for this case. The accumulated OCI must be eliminated from the capital structure for ratesetting purposes. OCI arises from a variety of sources, including: minimum pension liability ("MPL"), foreign currency hedges, unrealized gains and losses on securities available for sale, interest rate swaps, and other cash flow hedges. The accumulated OCI has its roots in the MPL. None of the accounting entries that affect accumulated OCI have anything to do with financing the rate base (i.e., they
12 13 14 15 16 17 18 19 20	А.	Comprehensive Income ("OCI") from the capital structure ratios proposed for this case. The accumulated OCI must be eliminated from the capital structure for ratesetting purposes. OCI arises from a variety of sources, including: minimum pension liability ("MPL"), foreign currency hedges, unrealized gains and losses on securities available for sale, interest rate swaps, and other cash flow hedges. The accumulated OCI has its roots in the MPL. None of the accounting entries that affect accumulated OCI have anything to do with financing the rate base (i.e., they do not generate or consume any cash). A MPL entry must be recorded on the
12 13 14 15 16 17 18 19 20 21	А.	Comprehensive Income ("OCI") from the capital structure ratios proposed for this case. The accumulated OCI must be eliminated from the capital structure for ratesetting purposes. OCI arises from a variety of sources, including: minimum pension liability ("MPL"), foreign currency hedges, unrealized gains and losses on securities available for sale, interest rate swaps, and other cash flow hedges. The accumulated OCI has its roots in the MPL. None of the accounting entries that affect accumulated OCI have anything to do with financing the rate base (i.e., they do not generate or consume any cash). A MPL entry must be recorded on the balance sheet when the present value of the pension benefit earned by employees

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1		in stock market values and a decline in interest rates, which reduces the value of the
2		trust fund assets and increases the present value calculation of the pension benefit
3		obligation. SFAS 87 requires that the MPL be recognized as a pension expense
4		over future periods, as long as the MPL continues to exist. When stock market
5		improves and when interest rates rise from recent low levels, the MPL will reverse
6		and not impact future pension expense. Hence, the accumulated OCI must be
7		excluded from the common equity.
8	Q.	As shown on Schedule D-1a, the capital structure ratios that the Company
9		proposes for the projected test year 2015 include 41.79% combined legacy
10		debt, long-term debt and short-term debt, and 58.21% common equity based
11		on investor provided capital. Are these ratios reasonable for the Company?
12	А.	Yes. These ratios conform with the Company's capital structure objectives stated
13		on Schedule D-8. Further justification for these ratios rests with the market
14		capitalization capital structure ratios for the Electric Group shown on Schedule 8.
15		Since we are using market-based models (i.e., DCF, RP and CAPM) with data
16		obtained from the Electric Group, then the capital structure ratios derived from the
17		market capitalization of the Electric Group is relevant for comparative purposes.
18		There, the average common equity ratio for the Electric Group is 57.58% based on
19		the market capitalization, which is close to the 58.21% common equity ratio
20		proposed by the Company for ratesetting purposes. Moreover, the Company's
21		common equity ratio is clearly within the range of common equity ratios for the
22		Electric Group based on their market capitalization. Further, the small size of

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1		FPU/CUC requires more conservative financial policies as compared to the Electric
2		Group. The capital structure proposed by the Company will allow it to invest in
3		order to grow its business and take advantage of other opportunities.
4		COST OF SENIOR CAPITAL
5	Q.	Please explain the cost of debt for FPU.
6	А.	Consistent with the capital structure ratios for the Company, the embedded cost
7		rates of FPU's legacy debt and the cost of CUC's debt must be employed. The
8		determination of the cost of debt is essentially an arithmetic exercise and is
9		provided in the D-Schedules.
10	Q.	The Company has forecast new issues of long-term debt for CUC in September
11		2014 and in 2015. Are the rates of interest on the new long-term debt
12		financings that the Company has forecast reasonable?
13	А.	Yes. For the September 2014 new issue by CUC, the Company has forecast a rate
14		of 4.50%. For the 2015 issue, the Company has forecast a rate of 5.00%. The
15		Company is proposing a fifteen year term for its proposed new issues of long-term
16		debt. These rates are reasonable based upon the forecast contained in the Blue Chip
17		Financial Forecasts, which I will describe below. According to Blue Chip, the
18		consensus yield on thirty-year Treasury bonds is forecast to be 4.1% for the third
19		quarter of 2014 (see page 2 of Schedule 12). Adding to that yield the interest rate
20		spread of 1.00% related to A-rated public utility bonds that I will describe below,
21		the <u>Blue Chip</u> derived yield would be 5.1% (i.e., $4.1\% + 1.0\% = 5.1\%$). This shows
22		that the Company's forecast of 4.5% is reasonable and recognizes that the term for

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X

1		its issue (i.e., 15 years) is shorter than a 30-year issue. Likewise for the 2015 issue,
2		the Blue Chip issue dated December 1, 2013 provides the long-range forecasts of
3		interest rates, which reveals 4.3% yield for 30-year Treasury bonds. Here, the Blue
4		<u>Chip</u> derived yield for A-rated public utility bonds would be $5.3\% (4.3\% + 1.0\% =$
5		5.3%). Again, the Company's forecast is reasonable in light of its shorter 15-year
6		maturity.
7	Q.	Are the projections of future interest rates regarding short-term debt that the
7 8	Q.	Are the projections of future interest rates regarding short-term debt that the Company has proposed in this case reasonable?
7 8 9	Q. A.	Are the projections of future interest rates regarding short-term debt that the Company has proposed in this case reasonable? Yes. The Company has reflected the general trend toward higher interest rates as
7 8 9 10	Q. A.	Are the projections of future interest rates regarding short-term debt that the Company has proposed in this case reasonable? Yes. The Company has reflected the general trend toward higher interest rates as part of its forecasts in this case. According to the <u>Blue Chip</u> issue that forecasts
7 8 9 10 11	Q. A.	Are the projections of future interest rates regarding short-term debt that the Company has proposed in this case reasonable? Yes. The Company has reflected the general trend toward higher interest rates as part of its forecasts in this case. According to the <u>Blue Chip</u> issue that forecasts long-range interest rates, the LIBOR rate that forms the basis for CUC's short-term
7 8 9 10 11 12	Q. A.	Are the projections of future interest rates regarding short-term debt that the Company has proposed in this case reasonable? Yes. The Company has reflected the general trend toward higher interest rates as part of its forecasts in this case. According to the <u>Blue Chip</u> issue that forecasts long-range interest rates, the LIBOR rate that forms the basis for CUC's short-term borrowings are shown below:

Year	LIBOR
2015	0.90%
2016	2.20%
2017	3.30%
2018	4.00%
Average	2.60%

13	The Company has proposed the use of a four-year average for its short-term
14	borrowings. Therefore, the forecast interest rate for short-term debt would be 3.7%
15	(2.6% + 1.1%), which reflects the 1.10% margin that the Company is required to
16	pay under its short-term credit facility that exceeds LIBOR.

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1		COST OF EQUITY – GENERAL APPROACH
2	Q.	Please describe the process you employed to determine the cost of equity for
3		FPU.
4	А.	Although my fundamental financial analysis provides the required framework to
5		establish the risk relationships among FPU, the Electric Group, and the S&P Public
6		Utilities, the cost of equity must be measured by standard financial models that I
7		identified above. Differences in risk traits, such as size, business diversification,
8		geographical diversity, regulatory policy, financial leverage, and bond ratings must
9		be considered when analyzing the cost of equity.
10		It is also important to reiterate that no one method or model of the cost of
11		equity can be applied in an isolated manner. Rather, informed judgment must be
12		used to take into consideration the relative risk traits of the firm. It is for this
13		reason that I have used more than one method to measure FPU's cost of equity. As
14		I describe below, each of the methods used to measure the cost of equity contains
15		certain incomplete and/or overly restrictive assumptions and constraints that are not
16		optimal. Therefore, I favor considering the results from a variety of methods. In
17		this regard, I applied each of the methods with data taken from the Electric Group
18		to arrive at a cost of equity of 11.25%.
19		DISCOUNTED CASH FLOW ANALYSIS
20	Q.	Please describe your use of the Discounted Cash Flow approach to determine
21		the cost of equity.
22	A.	The DCF model seeks to explain the value of an asset as the present value of future

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1		expected cash flows discounted at the appropriate risk-adjusted rate of return. In its
2		simplest form, the DCF return on common stock consists of a current cash
3		(dividend) yield and future price appreciation (growth) of the investment. The
4		dividend discount equation is the familiar DCF valuation model and assumes future
5		dividends are systematically related to one another by a constant growth rate. The
6		DCF formula is derived from the standard valuation model: $P = D/(k-g)$, where $P =$
7		price, $D = dividend$, $k = the cost of equity$, and $g = growth in cash flows$. By
8		rearranging the terms, we obtain the familiar DCF equation: $k=D/P + g$. All of the
9		terms in the DCF equation represent investors' assessment of expected future cash
10		flows that they will receive in relation to the value that they set for a share of stock
11		(P). The DCF equation is sometimes referred to as the "Gordon" model. My DCF
12		results are provided on page 2 of Schedule 1 for the Electric Group. The DCF
13		return is 9.59%.
14		Among other limitations of the model, there is a certain element of
15		circularity in the DCF method when applied in rate cases. This is because
16		investors' expectations for the future depend upon regulatory decisions. In turn,
17		when regulators depend upon the DCF model to set the cost of equity, they rely
18		upon investor expectations that include an assessment of how regulators will decide
19		rate cases. Due to this circularity, the DCF model may not fully reflect the true risk
20		of a utility.
21	Q.	Please explain the dividend yield component of a DCF analysis.

22 A. The DCF methodology requires the use of an expected dividend yield to establish

the investor-required cost of equity. The monthly dividend yields for the twelve months ended December 2013, are shown on Schedule 5 and capture an adjustment to the month-end prices to reflect the buildup of the dividend in the price that has occurred since the last ex-dividend date (i.e., the date by which a shareholder must own the shares to be entitled to the dividend payment – usually about two to three weeks prior to the actual payment).

For the twelve months ended December 2013, the average dividend yield 7 was 4.01% for the Electric Group based upon a calculation using annualized 8 dividend payments and adjusted month-end stock prices. The dividend yields for 9 the more recent six- and three-month periods were 4.04% and 4.03%, respectively. 10 I have used, for the purpose of the DCF model, the six-month average dividend 11 yield of 4.04% for the Electric Group. The use of this dividend yield will reflect 12 current capital costs, while avoiding spot yields. For the purpose of a DCF 13 calculation, the average dividend yield must be adjusted to reflect the prospective 14 nature of the dividend payments, i.e., the higher expected dividends for the future. 15 Recall that the DCF is an expectational model that must reflect investor anticipated 16 cash flows for the Electric Group. I have adjusted the six-month average dividend 17 yield in three different, but generally accepted, manners and used the average of the 18 three adjusted values as calculated in the lower panel of data presented on Schedule 19 5. This adjustment adds eleven basis points to the six-month average historical 20 yield, thus producing, the 4.15% adjusted dividend yield for the Electric Group. 21

22

Q. Please explain the underlying factors that influence investor's growth

1 expectations.

21

As noted previously, investors are interested principally in the future growth of their 2 Α. investment (i.e., the price per share of the stock). Future earnings per share growth 3 represent the DCF model's primary focus because under the constant price-earnings 4 multiple assumption of the model, the price per share of stock will grow at the same 5 rate as earnings per share. In conducting a growth rate analysis, a wide variety of 6 variables can be considered when reaching a consensus of prospective growth, 7 including: earnings, dividends, book value, and cash flows stated on a per share 8 9 basis. Historical values for these variables can be considered, as well as analysts' forecasts that are widely available to investors. A fundamental growth rate analysis 10 is sometimes represented by the internal growth ("b x r"), where "r" represents the 11 12 expected rate of return on common equity and "b" is the retention rate that consists of the fraction of earnings that are not paid out as dividends. To be complete, the 13 internal growth rate should be modified to account for sales of new common stock. 14 This is called external growth ("s x v"), where "s" represents the new common 15 shares expected to be issued by a firm and "v" represents the value that accrues to 16 existing shareholders from selling stock at a price different from book value. 17 Fundamental growth, which combines internal and external growth, provides an 18 explanation of the factors that cause book value per share to grow over time. 19 Growth also can be expressed in multiple stages. This expression of growth 20

22 high profit margins, and abnormally high growth in earnings per share. Thereafter,

26

consists of an initial "growth" stage where a firm enjoys rapidly expanding markets,

a firm enters a "transition" stage where fewer technological advances and increased 1 product saturation begin to reduce the growth rate and profit margins come under 2 pressure. During the "transition" phase, investment opportunities begin to mature, 3 capital requirements decline, and a firm begins to pay out a larger percentage of 4 earnings to shareholders. Finally, the mature or "steady-state" stage is reached 5 when a firm's earnings growth, payout ratio, and return on equity stabilizes at levels 6 where they remain for the life of a firm. The three stages of growth assume a step-7 down of high initial growth to lower sustainable growth. Even if these three stages 8 of growth can be envisioned for a firm, the third "steady-state" growth stage, which 9 is assumed to remain fixed in perpetuity, represents an unrealistic expectation 10 because the three stages of growth can be repeated. That is to say, the stages can be 11 repeated where growth for a firm ramps-up and ramps-down in cycles over time. 12 What investor-expected growth rate is appropriate in a DCF calculation? 13 Q. Investors consider both company-specific variables and overall market sentiment 14 Α. (i.e., level of inflation rates, interest rates, economic conditions, etc.) when 15 balancing their capital gains expectations with their dividend yield requirements. I 16 follow an approach that is not rigidly formatted because investors are not influenced 17 by a single set of company-specific variables weighted in a formulaic manner. In 18 my opinion, all relevant growth rate indicators using a variety of techniques must be 19 evaluated when formulating a judgment of investor-expected growth. 20 What data for the proxy group have you considered in your growth rate 21 0. 22 analysis?

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1	А.	I have considered the growth in the financial variables shown on Schedules 6 and 7.
2		The historical growth rates were taken from the Value Line publication that
3		provides this data. As shown on Schedule 6, the historical growth of earnings per
4		share was in the range of 3.60% to 5.23% for the Electric Group.
5		Schedule 7 provides projected earnings per share growth rates taken from
6		analysts' forecasts compiled by IBES/First Call, Zacks, Morningstar, SNL, and
7		Value Line. IBES/First Call, Zacks, Morningstar, and SNL represent reliable
8		authorities of projected growth upon which investors rely. The IBES/First Call,
9		Zacks, and SNL growth rates are consensus forecasts taken from a survey of
10		analysts that make projections of growth for these companies. The IBES/First Call,
11		Zacks, Morningstar, and SNL estimates are obtained from the Internet and are
12		widely available to investors. First Call probably is quoted most frequently in the
13		financial press when reporting on earnings forecasts. The Value Line forecasts also
14		are widely available to investors and can be obtained by subscription or free-of-
15		charge at most public and collegiate libraries. The IBES/First Call, Zacks,
16		Morningstar, and SNL forecasts are limited to earnings per share growth, while
17		Value Line makes projections of other financial variables. The Value Line
18		forecasts of dividends per share, book value per share, and cash flow per share have
19		also been included on Schedule 7 for the Electric Group.
20	Q.	What specific evidence have you considered in the DCF growth analysis?
21	А.	As to the five-year forecast growth rates, Schedule 7 indicates that the projected
22		earnings per share growth rates for the Electric Group are 4.99% by IBES/First

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1		Call, 5.27% by Zacks, 5.68% by Morningstar, 5.13% by SNL, and 4.70% by Value
2		Line. The Value Line projections indicate that earnings per share for the Electric
3		Group will grow prospectively at a more rapid rate (i.e., 4.70%) than the dividends
4		per share (i.e., 4.64%), which translates into a declining dividend payout ratio for
5		the future. As noted earlier, with the constant price-earnings multiple assumption
6		of the DCF model, growth for these companies will occur at the higher earnings per
7		share growth rate, thus producing the capital gains yield expected by investors.
8	Q.	What conclusion have you drawn from these data regarding the applicable
9		growth rate to be used in the DCF model?
10	А.	A variety of factors should be examined to reach a conclusion on the DCF growth
11		rate. However, certain growth rate variables should be emphasized when reaching a
12		conclusion on an appropriate growth rate.
13		First, historical and projected earnings per share, dividends per share, book
14		value per share, cash flow per share, and retention growth represent indicators that
15		could be used to provide an assessment of investor growth expectations for a firm.
16		However, although history cannot be ignored, it cannot receive primary emphasis.
17		This is because an analyst, when developing a forecast of future earnings growth,
18		would first apprise himself/herself of the historical performance of a company.
19		Hence, there is no need to count historical growth rates separately, because
20		historical performance already is reflected in analysts' forecasts.
21		Second, from the various alternative measures of growth identified above,
22		earnings per share should receive greatest emphasis. Earnings per share growth are

1	the primary determinant of investors' expectations regarding their total returns in
2	the stock market. This is because the capital gains yield (i.e., price appreciation)
3	will track earnings growth with a constant price earnings multiple (a key
4	assumption of the DCF model). Moreover, earnings per share (derived from net
5	income) are the source of dividend payments and are the primary driver of retention
6	growth and its surrogate, i.e., book value per share growth. As such, under these
7	circumstances, greater emphasis must be placed upon projected earnings per share
8	growth. In this regard, it is worthwhile to note that Professor Myron Gordon, the
9	foremost proponent of the DCF model in rate cases, concluded that the best
10	measure of growth in the DCF model is a forecast of earnings per share growth. ⁵
11	Hence, to follow Professor Gordon's findings, projections of earnings per share
12	growth, such as those published by IBES/First Call, Zacks, Morningstar, and Value
13	Line, represent a reasonable assessment of investor expectations.
14	The forecasts of earnings per share growth, as shown on Schedule 7, provide
15	a range of average growth rates of 4.70% to 5.68%. Although the DCF growth
16	rates cannot be established solely with a mathematical formulation, it is my opinion
17	that an investor-expected growth rate of 5.25% is within the array of earnings per
18	share growth rates shown by the analysts' forecasts. The stellar performance of the
19	stock market in 2013 points to an improving economy, as it is one of the leading

⁵<u>Gordon, Gordon & Gould, "Choice Among Methods of Estimating Share Yield," The Journal of</u> Portfolio Management (Spring 1989).
1		economic indicators compiled by The Conference Board. ⁶ In fact, the Leading
2		Economic Index, whose financial components include the stock market, has
3		increased for five consecutive months through November 2013. Moreover, "the
4		strengths among the leading indicators have become more widespread." according
5		to The Conference Board. This improving economic growth argues for a higher
6		DCF growth rate in the future.
7	Q.	Are the dividend yield and growth components of the DCF adequate to explain
8		the rate of return on common equity when it is used in the calculation of the
9		weighted average cost of capital?
10	А.	Only if the capital structure ratios are measured with the market value of debt and
11		equity. In the case of the Electric Group, those average capital structure ratios are
12		42.16% long-term debt, 0.26% preferred stock, and 57.58% common equity, as
13		shown on Schedule 8. These capital structure ratios are quite close to the ratios that
14		the Company proposes in this case.
15	Q.	How have you measured the flotation cost allowance as part of the DCF
16		return?
17	А.	The flotation cost adjustment adds 0.19% (9.59% - 9.40%) to the rate of return on
18		common equity for the Electric Group as shown by the calculations provided on
19		page 2 of Schedule 1. In my opinion, this adjustment is reasonable and supported
20		by the analysis of natural gas utility stock issue shown on Schedule 9. On that

⁶The Conference Board U.S. Business Cycle Indicators -The Conference Board Leading Economic Index (LEI) for the U.S. and Related Composite Economic Indexes for November 2013 [Press Release].Retrieved from <u>http://www.conference-board.org/data/bci.cfm</u> dated December 19, 2013.

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1		schedule, I show that the average underwriters' discount and commission and
2		company issuance expenses are 3.3% for the twenty-six issues of common stock
3		shown there for the Electric Group. Since I apply the flotation cost to the entire
4		DCF result, I have utilized a flotation cost adjustment factor of 1.02 on page 2 of
5		Schedule 1.
6		RISK PREMIUM ANALYSIS
7	Q.	Please describe your use of the Risk Premium approach to determine the cost
8		of equity.
9	А.	With the Risk Premium approach, the cost of equity capital is determined by
10		corporate bond yields plus a premium to account for the fact that common equity is
11		exposed to greater investment risk than debt capital. The result of my Risk
12		Premium study is shown on page 2 of Schedule 1. That result is 12.19% including
13		the adjustment for flotation costs. As with other models used to determine the cost
14		of equity, the Risk Premium approach has its limitations, including potential
15		imprecision in the assessment of the future cost of corporate debt and the
16		measurement of the risk-adjusted common equity premium.
17	Q.	What long-term public utility debt cost rate did you use in your Risk Premium
18		analysis?
19	A.	In my opinion, a 5.50% yield represents a reasonable estimate of the prospective
20		yield on long-term A-rated public utility bonds.
21	Q.	What forecasts of interest rates have you considered in your analysis?
22	А.	I have determined the prospective yield on A-rated public utility debt by using the

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Blue Chip Financial Forecasts ("Blue Chip") along with the spread in the yields that 1 I describe below. The Blue Chip is a reliable authority and contains consensus 2 forecasts of a variety of interest rates compiled from a panel of banking, brokerage, 3 and investment advisory services. In early 1999, Blue Chip stopped publishing 4 forecasts of yields on A-rated public utility bonds because the Federal Reserve 5 deleted these yields from its Statistical Release H.15. To independently project a 6 forecast of the yields on A-rated public utility bonds, I have combined the forecast 7 yields on long-term Treasury bonds published on January 1, 2014, and a yield 8 9 spread of 1.00%, derived from historical data. 10 Q. What historical data have you analyzed? A. I have analyzed the historical yields on the Moody's index of long-term public 11

utility debt as shown on page 1 of Schedule 10. For the twelve months ended 12 December 2013, the average monthly yield on Moody's index of A-rated public 13 utility bonds was 4.48%. For the six and three-month periods ended December 14 2013, the yields were 4.75% and 4.76%, respectively. During the twelve-months 15 ended December 2013, the range of the yields on A-rated public utility bonds was 16 4.00% to 4.81%. Page 2 of Schedule 10 shows the long-run spread in yields 17 between A-rated public utility bonds and long-term Treasury bonds. As shown on 18 page 3 of Schedule 10, the yields on A-rated public utility bonds have exceeded 19 those on 30-year Treasury bonds by 1.03% on a twelve-month average basis, 0.99% 20 on a six-month average basis, and 0.97% on a the three-month average basis. From 21 these averages, 1.00% represents a reasonable spread for the yield on A-rated public 22

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1 utility bonds over Treasury bonds.

2 How have you used these data to project the yield on a-rated public utility Q. bonds for the purpose of your Risk Premium analyses? 3 Shown below is my calculation of the prospective yield on A-rated public utility 4 Α. bonds using the building blocks discussed above, i.e., the Blue Chip forecast of 5 Treasury bond yields and the public utility bond yield spread. For comparative 6 purposes, I also have shown the Blue Chip forecasts of Aaa-rated and Baa-rated 7 8 corporate bonds. These forecasts are:

		Blue Chip Financial Forecasts				
		Corp	orate	30-Year	A-rated Pu	blic Utility
Year	Quarter	Aaa-rated	Baa-rated	Treasury	Spread	Yield
2014	First	4.7%	5.5%	3.9%	1.00%	4.90%
2014	Second	4.8%	5.6%	4.0%	1.00%	5.00%
2014	Third	4.9%	5.7%	4.1%	1.00%	5.10%
2014	Fourth	5.0%	5.8%	4.2%	1.00%	5.20%
2015	First	5.1%	5.9%	4.3%	1.00%	5.30%
2015	Second	5.2%	6.0%	4.4%	1.00%	5.40%

9 Q. Are there additional forecasts of interest rates that extend beyond those shown

```
10 above?
```

11 A. Yes. Twice yearly, <u>Blue Chip</u> provides long-term forecasts of interest rates. In its

12 December 1, 2013 publication, <u>Blue Chip</u> published longer-term forecasts of

13 interest rates, which were reported to be:

	Blue Chip Financial Forecasts			
	30-Year	Corporate		
Averages	Treasury	Aaa-rated	Baa-rated	
2015-19	5.0%	5.7%	6.7%	
2020-24	5.5%	6.3%	7.0%	

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- Given these forecasted interest rates, a 5.50% yield on A-rated public utility bonds
 represents a reasonable expectation.
- 3 Q. What equity Risk Premium have you determined for this case?

To develop an appropriate equity risk premium, I analyzed the results from Stocks, 4 A. Bonds, Bills and Inflation ("SBBI") 2014 Classic Yearbook published by Ibbotson 5 Associates that is part of Morningstar. My investigation reveals that the equity risk 6 premium varies according to the level of interest rates. That is to say, the equity 7 risk premium increases as interest rates decline and it declines as interest rates 8 This inverse relationship is revealed by the summary data presented 9 increase. below and shown on page 1 of Schedule 11. 10

Common Equity Risk Premiums

Low Interest Rates	7.60%	
Average Across All Interest Rates	5.79%	
High Interest Rates	3.98%	

Based on my analysis of the historical data, the equity risk premium was 7.60% 12 when the marginal cost of long-term government bonds was low (i.e., 3.01%, which 13 was the average yield during periods of low rates). Conversely, when the yield on 14 long-term government bonds was high (i.e., 7.28% on average during periods of 15 high interest rates) the spread narrowed to 3.98%. Over the entire spectrum of 16 interest rates, the equity risk premium was 5.79% when the average government 17 bond yield was 5.15%. With the recent upward movement of interest rates that I 18 described above from historically low levels, I have utilized a 6.50% equity risk 19

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1		premium. This equity risk premium is between the 7.60% premium related to
2		periods of low interest rates and the 5.79% premium related to average interest rates
3		across all levels.
4		
5		CAPITAL ASSET PRICING MODEL
6	Q.	What are the features of the CAPM as you have used it?
7	А.	The CAPM uses the yield on a risk-free interest bearing obligation plus a rate of
8		return premium that is proportional to the systematic risk of an investment. As
9		shown on page 2 of Schedule 1, the result of the CAPM is 10.84% including
10		flotation costs. To compute the cost of equity with the CAPM, three components
11		are necessary: a risk-free rate of return ("Rf"), the beta measure of systematic risk
12		(" β "), and the market risk premium ("Rm-Rf") derived from the total return on the
13		market of equities reduced by the risk-free rate of return. The CAPM specifically
14		accounts for differences in systematic risk (i.e., market risk as measured by the
15		beta) between an individual firm or group of firms and the entire market of equities.
16	Q.	What betas have you considered in the CAPM?
17	А.	For my CAPM analysis, I initially utilized the Value Line betas. As shown on page
18		2 of Schedule 3, the average beta is 0.73 for the Electric Group.
19	Q.	What risk-free rate have you used in the CAPM?
20	А.	As shown on page 1 of Schedule 12, I provided the historical yields on Treasury
21		notes and bonds. For the twelve months ended December 2013, the average yield
22		on 30-year Treasury bonds was 3.45%. For the six- and three-months ended

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1	December 2013, the yields on 30-year Treasury bonds were 3.76% and 3.79%,
2	respectively. During the twelve-months ended December 2013, the range of the
3	yields on 30-year Treasury bonds was 2.93% to 3.89%.
4	The low yields that existed during recent periods can be traced to the
5	financial crisis and its aftermath commonly referred to as the Great Recession. The
6	resulting decline in the yields on Treasury obligations was attributed to a number of
7	factors, including: the sovereign debt crisis in the euro zone, concern over a
8	possible double dip recession, the potential for deflation, and the Federal Reserve's
9	large balance sheet that was expanded through the purchase of Treasury obligations
10	and mortgage-backed securities (also known as QEI, QEII, and QEIII), and the
11	reinvestment of the proceeds from maturing obligations and the lengthening of the
12	maturity of the Fed's bond portfolio through the sale of short-term Treasuries and
13	the purchase of long-term Treasury obligations (also known as "operation twist").
14	Essentially, low interest rates were the product of the policy of the FOMC in
15	its attempt to deal with stagnant job growth, which is part of its dual mandate.
16	Recently, there has been an increase in Treasury bond yields from their trough that
17	can be attributed to the slow reduction in its bond purchasing program of the
18	FOMC. The term commonly used to describe this reduction in bond purchases is
19	called "tapering." This represents the beginning of the wind-down of the latest
20	quantitative easing by the FOMC, and has put upward pressure on interest rates.
21	There is a strong indication that the recent increase in interest rates will
22	continue, and indeed there is the significant prospect that further increases in

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1		interest rates will occur. As shown on page 2 of Schedule 12, forecasts published
2		by Blue Chip on January 1, 2014 indicate that the yields on long-term Treasury
3		bonds are expected to be in the range of 3.9% to 4.4% during the next six quarters.
4		The longer term forecasts described previously show that the yields on 30-year
5		Treasury bonds will average 5.0% from 2015 through 2019 and 5.5% from 2020 to
6		2024. For the reasons explained previously, forecasts of interest rates should be
7		emphasized at this time in selecting the risk-free rate of return in CAPM. Hence, I
8		have used a 4.50% risk-free rate of return for CAPM purposes, which considers not
9		only the Blue Chip forecasts, but also the recent trend in the yields on long-term
10		Treasury bonds.
11	Q.	What market premium have you used in the CAPM?
12	А.	As shown in the lower panel of data presented on page 2 of Schedule 12, the market
13		premium is derived from historical data and the Value Line and S&P 500 returns.
14		For the historically based market premium, I have used the arithmetic mean
15		obtained from the data presented on page 1 of Schedule 11. On that schedule, the
16		market return was 12.17% on large stocks during periods of low interest rates.
17		During those periods, the yield on long-term government bonds was 3.01% when
18		interest rates were low. As I describe above, interest rates have been trending
19		
20		upward. To recognize that trend, I have given weight to the average returns and
20		yields that existed across all interest rate levels. As such, I carried over to page 2 of
20		upward. To recognize that trend, I have given weight to the average returns and yields that existed across all interest rate levels. As such, I carried over to page 2 of Schedule 12 the average large common stock returns of 12.11% (12.17% + 12.05%

1		$(3.01\% + 5.15\% = 8.16\% \div 2)$. These financial returns rest between those
2		experienced during periods of low interest rates and those experienced across all
3		levels of interest rates. The resulting market premium is 8.03% (12.11% - 4.08%)
4		based on historical data, as shown on page 2 of Schedule 12. For the forecast
5		returns, I calculated an 8.68% total market return from the Value Line data and a
6		DCF return of 11.69% for the S&P 500. With the average forecast return of
7		10.19% (8.68% + 11.69% = 20.37% ÷ 2), I calculated a market premium of 5.69%
8		(10.19% - 4.50%) using forecast data. The market premium applicable to the
9		CAPM derived from these sources equals 6.86% ($5.69\% + 8.03\% = 13.72\% \div 2$).
10	Q.	Are there adjustments to the CAPM that are necessary to fully reflect the rate
11		of return on common equity?
12	А.	Yes. The technical literature supports an adjustment relating to the size of the
13		company or portfolio for which the calculation is performed. As the size of a firm
14		
		decreases, its risk and required return increases. Moreover, in his discussion of the
15		decreases, its risk and required return increases. Moreover, in his discussion of the cost of capital, Professor Brigham has indicated that smaller firms have higher
15 16		decreases, its risk and required return increases. Moreover, in his discussion of the cost of capital, Professor Brigham has indicated that smaller firms have higher capital costs than otherwise similar larger firms. ⁷ Also, the Fama/French study (see
15 16 17		decreases, its risk and required return increases. Moreover, in his discussion of the cost of capital, Professor Brigham has indicated that smaller firms have higher capital costs than otherwise similar larger firms. ⁷ Also, the Fama/French study (see "The Cross-Section of Expected Stock Returns"; The Journal of Finance, June
15 16 17 18		decreases, its risk and required return increases. Moreover, in his discussion of the cost of capital, Professor Brigham has indicated that smaller firms have higher capital costs than otherwise similar larger firms. ⁷ Also, the Fama/French study (see "The Cross-Section of Expected Stock Returns"; The Journal of Finance, June 1992) established that the size of a firm helps explain stock returns. In an October
15 16 17 18 19		decreases, its risk and required return increases. Moreover, in his discussion of the cost of capital, Professor Brigham has indicated that smaller firms have higher capital costs than otherwise similar larger firms. ⁷ Also, the Fama/French study (see "The Cross-Section of Expected Stock Returns"; The Journal of Finance, June 1992) established that the size of a firm helps explain stock returns. In an October 15, 1995 article in Public Utility Fortnightly, entitled "Equity and the Small-Stock
15 16 17 18 19 20		decreases, its risk and required return increases. Moreover, in his discussion of the cost of capital, Professor Brigham has indicated that smaller firms have higher capital costs than otherwise similar larger firms. ⁷ Also, the Fama/French study (see "The Cross-Section of Expected Stock Returns"; The Journal of Finance, June 1992) established that the size of a firm helps explain stock returns. In an October 15, 1995 article in Public Utility Fortnightly, entitled "Equity and the Small-Stock Effect," it was demonstrated that the CAPM could understate the cost of equity

⁷See Fundamentals of Financial Management, Fifth Edition, at 623.

1		SBBI Yearbook that the returns for stocks in lower deciles (i.e., smaller stocks) had
2		returns in excess of those shown by the simple CAPM. In this regard, the market-
3		based equity capitalization of CUC is \$578 million (9,638,230 shares x \$60.02 price
4		per share) according to the Value Line the Small & Mid-Cap Survey. ⁸ For my
5		CAPM analysis, I have adopted the mid-cap adjustment of 1.14%, as revealed on
6		page 3 of Schedule 12.
7		COMPARABLE EARNINGS APPROACH
8	Q.	How have you applied the Comparable Earnings approach in this case?
9	A.	The Comparable Earnings approach determines the equity return based upon results
10		from non-regulated companies. It is the oldest of all rate of return methods, having
11		been around for about one century. Because regulation is a substitute for
12		competitively determined prices, the returns realized by non-regulated firms with
13		comparable risks to a public utility provide useful insight into a fair rate of return.
14		In order to identify the appropriate return, it is necessary to analyze returns earned
15		(or realized) by other firms within the context of the Comparable Earnings standard.
16		The firms selected for the Comparable Earnings approach should be companies
17		whose prices are not subject to cost-based price ceilings (i.e., non-regulated firms)
18		so that circularity is avoided.
19		There are two avenues available to implement the Comparable Earnings
20		approach. One method involves the selection of another industry (or industries)
21		with comparable risks to the public utility in question, and the results for all

⁸<u>Value Line</u> report dated December 6, 2013.

1		companies within that industry serve as a benchmark. The second approach
2		requires the selection of parameters that represent similar risk traits for the public
3		utility and the comparable risk companies. Using this approach, the business lines
4		of the comparable companies become unimportant. The latter approach is
5		preferable with the further qualification that the comparable risk companies exclude
6		regulated firms in order to avoid the circular reasoning implicit in the use of the
7		achieved earnings/book ratios of other regulated firms. The United States Supreme
8		Court has held that:
9 10 11 12 13 14 15 16 17 18 19 20 21 22		A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. [Bluefield Water Works and Improvement Co. v. Public Service Comm'n., 262 U.S. 679, 692 (1923)].
23		It is important to identify the returns earned by firms that compete for capital with a
24		public utility. This can be accomplished by analyzing the returns of non-regulated
25		firms that are subject to the competitive forces of the marketplace.
26	Q.	How have you implemented the Comparable Earnings Approach?
27	A.	In order to implement the Comparable Earnings approach, non-regulated companies
28		were selected from The Value Line Investment Survey for Windows that have six
29		categories of comparability designed to reflect the risk of the Electric Group. These

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1		screening criteria were based upon the range as defined by the rankings of the
2		companies in the Electric Group. The items considered were: Timeliness Rank,
3		Safety Rank, Financial Strength, Price Stability, Value Line betas, and Technical
4		Rank. The definitions for these parameters are provided on page 3 of Schedule 13.
5		The identities of the companies comprising the Comparable Earnings group and
6		their associated rankings within the ranges are identified on page 1 of Schedule 13.
7		Value Line data was relied upon because it provides a comprehensive basis
8		for evaluating the risks of the comparable firms. As to the returns calculated by
9		Value Line for these companies, there is some downward bias in the figures shown
10		on page 2 of Schedule 13, because Value Line computes the returns on year-end
11		rather than average book value. If average book values had been employed, the
12		rates of return would have been slightly higher. Nevertheless, these are the returns
13		considered by investors when taking positions in these stocks. Because many of the
14		comparability factors, as well as the published returns, are used by investors in
15		selecting stocks, and the fact that investors rely on the Value Line service to gauge
16		returns, it is an appropriate database for measuring comparable return opportunities.
17	Q.	What data have you used in your Comparable Earnings analysis?
18	А.	I have used both historical realized returns and forecasted returns for non-utility
19		companies. As noted previously, I have not used returns for utility companies in
20		order to avoid the circularity that arises from using regulatory-influenced returns to
21		determine a regulated return. It is appropriate to consider a relatively long
22		measurement period in the Comparable Earnings approach in order to cover

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conditions over an entire business cycle. A ten-year period (five historical years 1 2 and five projected years) is sufficient to cover an average business cycle. Unlike the DCF and CAPM, the results of the Comparable Earnings method can be applied 3 directly to the book value capitalization. In other words, the Comparable Earnings 4 5 approach does not contain the potential misspecification contained in market models when the market capitalization and book value capitalization diverge 6 significantly. A point of demarcation was chosen to eliminate the results of highly 7 profitable enterprises, which the Bluefield case stated were not the type of returns 8 that a utility was entitled to earn. For this purpose, I used 20% as the point where 9 those returns could be viewed as highly profitable and should be excluded from the 10 Comparable Earnings approach. And to minimize the effect of a skewed 11 distribution, I removed from the average the returns that were less than 8%. The 12 historical rate of return on book common equity was 13.3% using only the returns 13 that were less than 20% and above 8%, as shown on page 2 of Schedule 13. The 14 forecast rates of return as published by Value Line are shown by the 13.3% also 15 using values less than 20% and above 8%, as provided on page 2 of Schedule 13. 16 Using these data my Comparable Earnings result is 13.30%, as shown on page 2 of 17 Schedule 1. 18 19 CONCLUSION ON COST OF EQUITY

20

Q.

What is your conclusion regarding FPU's cost of common equity?

- A. Based upon the application of a variety of methods and models described
- 22 previously, it is my opinion that a reasonable cost of common equity for FPU is

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1		11.25%. My cost of equity recommendation is obtained from a range of results and
2		should be considered reasonable in the context of FPU's risk characteristics as
3		compared to the Electric Group. It is essential that the Commission employ a
4		variety of techniques to measure the FPU's cost of equity because of the
5		limitations/infirmities that are inherent in each method. And equally important, the
6		Commission should recognize the proposed capital structure of FPU in order to
7		provide the Company with a financial profile that will both accommodate the
8		Company's unique risks, as well as provide it with the wherewithal to attract the
9		capital it needs to complete its large construction program.
10	Q.	Does this conclude your direct testimony at this time?
11	А.	Yes, it does.

EDUCATIONAL BACKGROUND, BUSINESS EXPERIENCE <u>AND QUALIFICATIONS</u>

3	I was awarded a degree of Bachelor of Science in Business Administration by
4	Drexel University in 1971. While at Drexel, I participated in the Cooperative Education
5	Program which included employment, for one year, with American Water Works Service
6	Company, Inc., as an internal auditor, where I was involved in the audits of several
7	operating water companies of the American Water Works System and participated in the
8	preparation of annual reports to regulatory agencies and assisted in other general
9	accounting matters.
10	Upon graduation from Drexel University, I was employed by American Water
11	Works Service Company, Inc., in the Eastern Regional Treasury Department where my
12	duties included preparation of rate case exhibits for submission to regulatory agencies, as
13	well as responsibility for various treasury functions of the thirteen New England
14	operating subsidiaries.
15	In 1973, I joined the Municipal Financial Services Department of Betz
16	Environmental Engineers, a consulting engineering firm, where I specialized in financial
17	studies for municipal water and wastewater systems.
18	In 1974, I joined Associated Utility Services, Inc., now known as AUS
19	Consultants. I held various positions with the Utility Services Group of AUS
20	Consultants, concluding my employment there as a Senior Vice President.
21	In 1994, I formed P. Moul & Associates, an independent financial and regulatory
22	consulting firm. In my capacity as Managing Consultant and for the past twenty-nine
23	years, I have continuously studied the rate of return requirements for cost of service-

1	regulated firms. In this regard, I have supervised the preparation of rate of return studies,
2	which were employed, in connection with my testimony and in the past for other
3	individuals. I have presented direct testimony on the subject of fair rate of return,
4	evaluated rate of return testimony of other witnesses, and presented rebuttal testimony.
5	My studies and prepared direct testimony have been presented before thirty-seven
6	(37) federal, state and municipal regulatory commissions, consisting of: the Federal
7	Energy Regulatory Commission; state public utility commissions in Alabama, Alaska,
8	California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana,
9	Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota,
10	Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma,
11	Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Virginia, West Virginia,
12	Wisconsin, and the Philadelphia Gas Commission, and the Texas Commission on
13	Environmental Quality. My testimony has been offered in over 200 rate cases involving
14	electric power, natural gas distribution and transmission, resource recovery, solid waste
15	collection and disposal, telephone, wastewater, and water service utility companies.
16	While my testimony has involved principally fair rate of return and financial matters, I
17	have also testified on capital allocations, capital recovery, cash working capital, income
18	taxes, factoring of accounts receivable, and take-or-pay expense recovery. My testimony
19	has been offered on behalf of municipal and investor-owned public utilities and for the
20	staff of a regulatory commission. I have also testified at an Executive Session of the
21	State of New Jersey Commission of Investigation concerning the BPU regulation of solid
22	waste collection and disposal.

A-2

1	I was a co-author of a verified statement submitted to the Interstate Commerce
2	Commission concerning the 1983 Railroad Cost of Capital (Ex Parte No. 452). I was
3	also co-author of comments submitted to the Federal Energy Regulatory Commission
4	regarding the Generic Determination of Rate of Return on Common Equity for Public
5	Utilities in 1985, 1986 and 1987 (Docket Nos. RM85-19-000, RM86-12-000, RM87-35-
6	000 and RM88-25-000). Further, I have been the consultant to the New York Chapter of
7	the National Association of Water Companies, which represented the water utility group
8	in the Proceeding on Motion of the Commission to Consider Financial Regulatory
9	Policies for New York Utilities (Case 91-M-0509). I have also submitted comments to
10	the Federal Energy Regulatory Commission in its Notice of Proposed Rulemaking
11	(Docket No. RM99-2-000) concerning Regional Transmission Organizations and on
12	behalf of the Edison Electric Institute in its intervention in the case of Southern California
13	Edison Company (Docket No. ER97-2355-000). Also, I was a member of the panel of
14	participants at the Technical Conference in Docket No. PL07-2 on the Composition of
15	Proxy Groups for Determining Gas and Oil Pipeline Return on Equity.
16	In late 1978, I arranged for the private placement of bonds on behalf of an
17	investor-owned public utility. I have assisted in the preparation of a report to the
18	Delaware Public Service Commission relative to the operations of the Lincoln and
19	Ellendale Electric Company. I was also engaged by the Delaware P.S.C. to review and
20	report on the proposed financing and disposition of certain assets of Sussex Shores Water
21	Company (P.S.C. Docket Nos. 24-79 and 47-79). I was a co-author of a Report on
22	Proposed Mandatory Solid Waste Collection Ordinance prepared for the Board of County
23	Commissioners of Collier County, Florida.

A-3

1	I have been a consultant to the Bucks County Water and Sewer Authority
2	concerning rates and charges for wholesale contract service with the City of Philadelphia.
3	My municipal consulting experience also included an assignment for Baltimore County,
4	Maryland, regarding the City/County Water Agreement for Metropolitan District
5	customers (Circuit Court for Baltimore County in Case 34/153/87-CSP-2636).

Florida Public Utilities Company

Docket No. 140025-EI

Financial Exhibits

To Accompany

The Direct Testimony

Of

Paul R. Moul, Managing Consultant P. Moul & Associates, Inc.

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Florida Public Utilities Company

Proposed Rate of Return

Projected Test Year, 2015

Type of Capital	Ratios	Cost Rate	Weighted Cost Rate
Long-term Debt - FPU Legacy Debt	1.09%	12.74%	0.14%
Long-term Debt - Parent Company	34.21%	4.90%	1.68%
Short-term Debt - Parent Company	6.50%	3.70%	0.24%
Total Debt	41.79%		2.06%
Common Equity - Parent Company	58.21%	11.25%	6.55%
Total	100.00%		8.60%

Indicated levels of fixed charge coverage assuming that

the Company could actually achieve its proposed rate of return:

Pre-tax coverage of interest expense based upon a 35.000% federal income tax rate	
(12.13% ÷ 2.06%)	5.90 x
Post-tax coverage of interest expense	
(8.60% ÷ 2.06%)	4.19 x

Florida Public Utilities Company Cost of Equity as of December 31, 2013

Discounted Cash Flow (DCF)				D1/P0	(1) +	g ⁽²⁾	=	k	x	flot. ⁽³⁾	=	к
Electric Group				4.15%	+	5.25%	=	9.40%	x	1.02	=	9.59%
Risk Premium (RP)				I ⁽⁴⁾	+	RP ⁽⁵⁾	=	k	+	flot.	=	к
Electric Group				5.50%	+	6.50%	=	12.00%	+	0.19%	=	12.19%
Capital Asset Pricing Model (CAPM)	Rf ⁽⁶⁾	+	B ⁽⁷⁾	x (Rm-Rf	⁽⁸⁾) +	size ⁽⁹⁾	=	k	+	flot.	=	к
Electric Group	4.50%	+	0.73	x(6.86%)+	1.14%	=	10.65%	+	0.19%	=	10.84%
Comparable Earnings (CE) ⁽¹⁰⁾								Historica	I	Forecast		Average
Comparable Earnings Group								13.3%		13.3%		13.30%

References (1) Schedule 05 page 1

- (2) Schedule 07 page 1
- (3) Schedule 09 page 1

⁽⁴⁾ A-rated public utility bond yield comprised of a 4.50% risk-free rate of return (Schedule 12 page 2) and a yield spread of 1.00% (Schedule 10 page 3)

- ⁽⁵⁾ Schedule 11 page 1
- (6) Schedule 12 page 2
- ⁽⁷⁾ Schedule 03 page 2
- (8) Schedule 12 page 2
- (9) Schedule 12 page 3
- (10) Schedule 13 page 2

Florida Public Utilities Company Capitalization and Financial Statistics 2008-2012, Inclusive

	2012	2011	2010	2009	2008	
Amount of Capital Employed			(Millions of Dollars)			
Remanent Capital	¢ 11 0	\$ 12.2	\$ 427	\$ 97.1	\$ 084	
Short-Term Debt	\$ 44.5	\$ 43.5	\$ 42.7	\$ 57.1	\$ 127	
Total Capital	\$ 44.9	\$ 43.3	\$ 42.7	\$ 97.1	\$ 111.2	
						Average
Capital Structure Ratios						
Based on Permanent Capital:	0.00/	0.0%	0.09/	10.00/	50 10/	14 09/
Long-Term Debt	0.0%	0.0%	0.0%	19.6%	50.1%	14.0%
Common Equity ''	100.0%	100.0%	100.0%	80.2%	49.3%	85.9%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Based on Total Capital:			621.242	222222	121211212	
Total Debt incl. Short Term	0.0%	0.0%	0.0%	19.8%	55.8%	15.1%
Common Equity (1)	100.0%	100.0%	100.0%	80.2%	43.6%	84.8%
14 J. 160	100.0%	100.0%	100.0%	100.0%	99.9%	100.0%
Rate of Return on Book Common Equity	3.5%	1.5%	15.5%	3.8%	7.1%	6.3%
Operating Ratio (2)	96.0%	97.5%	90.1%	94.8%	94.6%	94.6%
Coverage incl. AFUDC (3)						
Pre-tax: All Interest Charges	3.37 x	1.77 x	5.47 x	2.03 x	2.10 x	2.95 x
Post-tax: All Interest Charges	2.47 x	1.48 x	3.85 x	1.56 x	1.72 x	2.22 x
Coverage excl AFUDC (3)						
Bre-tay: All Interest Charges	3 37 x	1 77 x	5 47 x	2 03 x	2 10 x	295 x
Post-tax: All Interest Charges	2.47 x	1.48 x	3.85 x	1.56 x	1.72 x	2.22 x
Quality of Famings & Cash Flow						
AEC/Income Avail for Common Equity	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Effective Income Tax Rate	38.1%	38.3%	36.3%	45.8%	34.1%	38.5%
Internal Cash Generation/Construction (4)	77.2%	105.4%	211.6%	118.5%	119.6%	126.5%
Gross Cash Flow Interest Coverage (5)	5.35 x	3.39 x	5.73 x	4.89 x	4.36 x	4.74 x

See Page 2 for Notes.

Florida Public Utilities Company Capitalization and Financial Statistics 2008-2012, Inclusive

Notes:

- (1) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account..
- (2) Total operating expenses, maintenance, depreciation and taxes other than income as a percentage of operating revenues.
- (3) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
- (4) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
- (5) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.

Source of Information: Company provided Financial Statements

Electric Group Capitalization and Financial Statistics ⁽¹⁾ 2008-2012, Inclusive

	2012	2011	2010	2009	2008	
Amount of Capital Employed			(Millions of Dollars)			
Permanent Capital	\$ 26,267,6	\$ 21,883.7	\$ 20,615.4	\$ 19.820.8	\$ 18,250.0	
Short-Term Debt	\$ 793.1	\$ 629.7	\$ 532.0	\$ 430.0	\$ 731.5	
Total Capital	\$ 27,060.7	\$ 22,513.4	\$ 21,147.4	\$ 20,250.8	\$ 18,981.5	
Market-Based Financial Ratios						Average
Price-Earnings Multiple	16 x	13 x	12 x	13 x	14 x	14 x
Market/Book Ratio	176.9%	167.5%	155.2%	146.8%	175.8%	164.4%
Dividend Yield	4.1%	4.4%	4.8%	5.2%	4.5%	4.6%
Dividend Payout Ratio	68.3%	57.7%	59.0%	66.8%	63.2%	63.0%
Capital Structure Ratios						
Based on Permanent Captial:	a	127127-121219	10210210200	1944 (1974)	1.121-211-2111	
Long-Term Debt	55.4%	55.0%	55.7%	57.3%	57.7%	56.2%
Preferred Stock	0.9%	0.9%	0.7%	0.6%	0.7%	0.8%
Common Equity (2)	43.7%	44.2%	43.5%	42.1%	41.5%	43.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Based on Total Capital:	100000	0.000	122 223	1227122	20100	202 1977
Total Debt Incl. Short Term	56.7%	56.2%	56.9%	58.2%	59.1%	57.4%
Preferred Stock	0.9%	0.9%	0.7%	0.6%	0.7%	0.7%
Common Equity (2)	42.4%	43.0%	42.4%	41.3%	40.2%	41.8%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Rate of Return on Book Common Equity (2)	9.6%	12.8%	13.7%	11.4%	13.1%	12.1%
Operating Ratio ⁽³⁾	78.5%	79.7%	79.9%	82.2%	84.2%	80.9%
Coverage incl. AFUDC (4)						
Pre-tax: All Interest Charges	3.11 x	3.72 x	3.75 x	3.05 x	3.24 x	3.37 x
Post-tax: All Interest Charges	2.48 x	2.87 x	2.78 x	2.43 x	2.55 x	2.62 x
Overall Coverage: All Int. & Pfd. Div.	2.44 x	2.84 x	2.75 x	2.40 x	2.51 x	2.59 x
Coverage excl. AFUDC (4)						
Pre-tax: All Interest Charges	3.01 x	3.61 x	3.65 x	2.83 x	3.06 x	3.23 x
Post-tax: All Interest Charges	2.38 x	2.76 x	2.68 x	2.21 x	2.37 x	2.48 x
Overall Coverage: All Int. & Pfd. Div.	2.35 x	2.73 x	2.65 x	2.18 x	2.33 x	2.45 x
Quality of Earnings & Cash Flow						
AFC/Income Avail. for Common Equity	7.0%	5.9%	6.6%	15.5%	12.3%	9.5%
Effective Income Tax Rate	29.6%	31.0%	34.8%	29.5%	30.9%	31.2%
Internal Cash Generation/Construction ⁽⁵⁾	81.5%	88.7%	89.6%	81.3%	70.3%	82.3%
Gross Cash Flow/ Avg. Total Debt (6)	21.3%	21.9%	22.1%	20.8%	20.7%	21.4%
Gross Cash Flow Interest Coverage (7)	5.88 x	5.19 x	4.86 x	4.70 x	4.43 x	5.01 x
Common Dividend Coverage (8)	4.15 x	4.23 x	4.37 x	4.25 x	4.09 x	4.22 x

See Page 2 for Notes.

Electric Group Capitalization and Financial Statistics 2008-2012, Inclusive

Notes:

- (1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group.
- (2) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account.
- (3) Total operating expenses, maintenance, depreciation and taxes other than income taxes as a percent of operating revenues.
- (4) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
- (5) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
- (6) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
- (7) Gross Cash Flow plus interest charges divided by interest charges.
- (8) Common dividend coverage is the relationship of internally-generated funds from operations after payment of preferred stock dividends to common dividends paid.

Basis of Selection:

The Electric Group includes companies reported in the basic service of <u>The Value Line</u> <u>Investment Survey</u>, within the group "Electric Utility Industry," their stock is traded on the New York Stock Exchange, they operate within the southeastern and south central regions as defined by the Federal Energy Regulatory Commission's Bureau of Power, and they are not currently the target of a merger or acquisition.

		Corporate Ci	redit Ratings	Stock	S&P Stock	Value Line Beta	
Ticker	Company	Moody's	S&P	Traded	Ranking		
AEP	American Electric Power	Baa1	BBB	NYSE	В	0.70	
CNP	CenterPoint Energy	Baa1	A-	NYSE	в	0.80	
CNL	Cleco Corp.	Baa2	BBB+	NYSE	В	0.70	
D	Dominion Resources, Inc.	A3	A-	NYSE	B+	0.70	
DUK	Duke Energy Corp.	A3	BBB+	NYSE	В	0.65	
ETR	Entergy Corp.	Baa2	BBB	NYSE	A	0.70	
NEE	NextEra Energy, Inc.	A2	A-	NYSE	A	0.70	
OGE	OGE Energy Corp.	A2	A-	NYSE	A-	0.85	
SCG	SCANA Corp.	Baa2	BBB+	NYSE	A-	0.70	
SO	Southern Company	A3	A	NYSE	A-	0.55	
TE	TECO Energy, Inc.	A3	BBB+	NYSE	В	0.95	
	Average	Baa1	BBB+		B+	0.73	

Note: Ratings are those of utility subsidiaries

Source of Information: Utility COMPUSTAT Moody's Investors Service Standard & Poor's Corporation S&P Stock Guide

Standard & Poor's Public Utilities Capitalization and Financial Statistics ⁽¹⁾ 2008-2012, Inclusive

	2012	2011	2010	2009	2008	
			(Millions of Dollars)			
Amount of Capital Employed						
Permanent Capital	\$ 21,620.0	\$ 18,840.8	\$ 17,587.3	\$ 16,618.6	\$ 15,620.1	
Short-Term Debt	\$ 648.9	\$ 531.4	\$ 435.4	\$ 415.0	\$ 803.5	
l otal Capital	\$ 22,268.9	\$ 19,372.2	\$ 18,022.7	\$ 17,033.6	\$ 16,423.6	
Market-Based Financial Ratios						Average
Price-Earnings Multiple	18 x	15 x	15 x	14 x	14 x	15 x
Market/Book Ratio	164.0%	155.2%	142.8%	137.1%	174.9%	154.8%
Dividend Yield	4.1%	4.4%	4.8%	5.2%	4.3%	4.6%
Dividend Payout Ratio	70.3%	64.7%	72.0%	72.2%	61.9%	68.2%
Capital Structure Ratios						
Based on Permanent Captial:						
Long-Term Debt	52.9%	52.9%	53.4%	54.2%	54.3%	53.5%
Preferred Stock	1.6%	1.3%	1.3%	1.5%	1.7%	1.5%
Common Equity (2)	45.5%	45.8%	45.3%	44.3%	44.0%	45.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Based on Total Capital:					N	
Total Debt incl. Short Term	54.5%	54.5%	54.7%	55.6%	57.1%	55.3%
Preferred Stock	1.6%	1.3%	1.3%	1.4%	1.6%	1.4%
Common Equity (2)	44.0%	44.3%	44.0%	43.0%	41.3%	43.3%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Rate of Return on Book Common Equity (2)	9.2%	10.5%	10.8%	10.1%	12.2%	10.6%
Operating Ratio (3)	81.3%	81.4%	81.6%	83.0%	84.1%	82.3%
Courses incl. AFUDO (4)						
Bro tow All Internet Charges	0.04	0.05	0.04.4	0.00	0.00	0.00
Post tax: All Interest Charges	2.94 X	3.35 X	3.34 X	3.06 X	3.39 X	3.22 X
Overall Coverage: All Int & Pfd Div	2.30 X	2.59 X	2.52 X	2.30 X	2.57 X	2.40 X
ovolali oovolage. Ali int, a r la. biv.	2.52 X	2.01 X	2.50 X	2.55 X	2.55 X	2.45 X
Coverage excl. AFUDC (4)						
Pre-tax: All Interest Charges	2.85 x	3.25 x	3.25 x	2.96 x	3.28 x	3.12 x
Post-tax: All Interest Charges	2.25 x	2.49 x	2.43 x	2.26 x	2.46 x	2.38 x
Overall Coverage: All Int. & Pfd. Div.	2.22 x	2.47 x	2.41 x	2.22 x	2.42 x	2.35 x
Quality of Earnings & Cash Flow						
AFC/Income Avail. for Common Equity	7.1%	5.7%	6.6%	7.8%	7.7%	7.0%
Effective Income Tax Rate	26.2%	36.8%	34.3%	31.8%	33.8%	32.6%
Internal Cash Generation/Construction (5)	75.0%	89.4%	108.0%	100.0%	83.1%	91.1%
Gross Cash Flow/ Avg. Total Debt (6)	21.9%	23.2%	23.9%	22.5%	22.6%	22.8%
Gross Cash Flow Interest Coverage (7)	5.37 ×	5.12 x	5.09 ×	4 85 x	4 75 x	5 04 x
Common Dividend Coverage (8)	4.31 x	4.58 x	4.88 x	4.73 x	4.95 x	4.69 x
						10.000.000.000.00

See Page 2 for Notes.

Standard & Poor's Public Utilities Capitalization and Financial Statistics 2008-2012, Inclusive

Notes:

- (1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group.
- (2) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account
- (3) Total operating expenses, maintenance, depreciation and taxes other than income taxes as a percent of operating revenues.
- (4) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
- (5) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
- (6) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) as a percentage of average total debt.
- (7) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
- (8) Common dividend coverage is the relationship of internally-generated funds from operations after payment of preferred stock dividends to common dividends paid.

Source of Information: Annual Reports to Shareholders Utility COMPUSTAT

Standard & Poor's Public Utilities

Company Identities

				Common	S&P	Value
		Credit R	Credit Rating (1)		Stock	Line
	Ticker	Moody's	S&P	Traded	Ranking	Beta
AGL Resources Inc.	GAS	A3	BBB+	NYSE	А	0.75
Ameren Corporation	AEE	Baa2	BBB	NYSE	В	0.80
American Electric Power	AEP	Baa2	BBB	NYSE	В	0.70
CMS Energy	CMS	Baa1	BBB	NYSE	В	0.75
CenterPoint Energy	CNP	Baa2	BBB+	NYSE	В	0.80
Consolidated Edison	ED	A3	A-	NYSE	B+	0.60
DTE Energy Co.	DTE	A3	BBB+	NYSE	B+	0.75
Dominion Resources	D	A3	A-	NYSE	B+	0.65
Duke Energy	DUK	A3	BBB+	NYSE	В	0.60
Edison Int'l	EIX	A3	BBB+	NYSE	В	0.75
Entergy Corp.	ETR	Baa2	BBB	NYSE	A+	0.70
EQT Corp.	EQT	Baa3	BBB	NYSE	B+	1.15
Exelon Corp.	EXC	A3	BBB	NYSE	B+	0.80
FirstEnergy Corp.	FE	Baa2	BBB-	NYSE	A-	0.80
Integrys Energy Group	TEG	A2	A-	NYSE	В	0.90
NextEra Energy Inc.	NEE	A2	A-	NYSE	A	0.75
NiSource Inc.	NI	Baa2	BBB-	NYSE	В	0.85
Northeast Utilities	NU	Baa2	A-	NYSE	В	0.70
NRG Energy Inc.	NRG	Ba3	BB-	NYSE	NR	1.10
ONEOK, Inc.	OKE	Baa2	BBB	NYSE	NR	0.95
PEPCO Holdings, Inc.	POM	Baa2	BBB+	NYSE	В	0.75
PG&E Corp.	PCG	A3	BBB	NYSE	В	0.55
PPL Corp.	PPL	Baa2	BBB	NYSE	B+	0.65
Pinnacle West Capital	PNW	Baa1	BBB+	NYSE	В	0.70
Public Serv. Enterprise Inc.	PEG	A3	BBB	NYSE	B+	0.75
SCANA Corp.	SCG	Baa2	BBB+	NYSE	A-	0.65
Sempra Energy	SRE	A2	A	NYSE	A-	0.80
Southern Co.	SO	A3	A	NYSE	A-	0.55
TECO Energy	TE	A3	BBB+	NYSE	В	0.85
Wisconsin Energy Corp.	WEC	A2	A-	NYSE	A	0.65
Xcel Energy Inc	XEL	A3	A	NYSE	B+	0.65
Average for S&P Utilities		Baa1	BBB+		A	0.75

Note:

⁽¹⁾ Ratings are those of utility subsidiaries

Source of Information:

Moody's Investors Service Standard & Poor's Corporation Standard & Poor's Stock Guide Value Line Investment Survey for Windows

Exhibit No. PRM-1 Page 10 of 25 Schedule 5 [1 of 1]

Monthly Dividend Yields for Electric Group for the Twelve Months Ending December 2013

Company	<u>Jan-13</u>	<u>Feb-13</u>	<u>Mar-13</u>	<u>Apr-13</u>	<u>May-13</u>	<u>Jun-13</u>	<u>Jul-13</u>	<u>Aug-13</u>	<u>Sep-13</u>	<u>Oct-13</u>	<u>Nov-13</u>	Dec-13	12-Month Average	6-Month <u>Average</u>	3-Month <u>Average</u>
American Electric Power Co. Inc.	4 19%	4.03%	3 89%	3 84%	4 29%	4 40%	4 27%	4 59%	4 55%	4 31%	4 26%	4 31%			
CenterPoint Energy Inc. (CNP)-N	4 10%	3.88%	3 48%	3 39%	3 59%	3 55%	3 37%	3.63%	3 48%	3 40%	3 55%	3.60%			
Cleco Corporation (CNI)-NYSE	3 18%	3.05%	2.88%	2 95%	3 19%	3 14%	3.01%	3 22%	3 25%	3 15%	3 18%	3 13%			
Dominion Resources Inc. (D)-NY-	4.19%	4.02%	3.88%	3.67%	4 02%	3.97%	3 82%	3.85%	3.61%	3 55%	3 50%	3 49%			
Duke Energy Corporation (DUK)-1	4.49%	4.43%	4.24%	4.10%	4.58%	4.56%	4.44%	4.77%	4.70%	4.39%	4.47%	4.55%			
Entergy Corporation (ETR)-NYSE	5.20%	5.35%	5.28%	4.71%	4.83%	4.80%	4.98%	5.27%	5.30%	5.19%	5.38%	5.29%			
NextEra Energy, Inc. (NEE)-NYSE	3.69%	3.67%	3.41%	3.24%	3.49%	3.25%	3.06%	3.29%	3.30%	3.13%	3.12%	3.09%			
OGE Energy Corp. (OGE)-NYSE	2.85%	2.90%	2.40%	2.31%	2.47%	2.46%	2.24%	2.38%	2.33%	2.27%	2.44%	2.48%			
SCANA Corp. (SCG)-NYSE	4.37%	4.20%	3.98%	3.77%	4.06%	4.15%	3.93%	4.26%	4.42%	4.38%	4.35%	4.34%			
Southern Company (SO)-NYSE	4.48%	4.37%	4.21%	4.25%	4.64%	4.63%	4.58%	4.90%	4.97%	5.02%	5.02%	4.98%			
TECO Energy, Inc. (TE)-NYSE	<u>5.01%</u>	5.11%	<u>4.97%</u>	4.64%	5.01%	5.16%	<u>5.04%</u>	<u>5.34%</u>	5.36%	<u>5.18%</u>	<u>5.18%</u>	<u>5.14%</u>			
Average	<u>4.16%</u>	4.09%	3.87%	3.72%	4.02%	4.01%	3.89%	4.14%	4.12%	4.00%	4.04%	<u>4.04%</u>	4.01%	4.04%	4.03%

Note: Monthly dividend yields are calculated by dividing the annualized quarterly dividend by the month-end closing stock price adjusted by the fraction of the ex-dividend.

Source of Information: http://finance.yahoo.com/

SNL Financial LC

 $K = \frac{D_0 (1+g)^0 + D_0 (1+g)^0 + D_0 (1+g)^1 + D_0 (1+g)^1}{P_0} + g$ Forward-looking Dividend Yield 1/2 Growth D₀/P₀ D₁/P₀ (.5g) 4.14% 4.04% 1.026250 $K = \frac{D_{0}(1+g)^{26} + D_{0}(1+g)^{26} + D_{0}(1+g)^{16} + D_{0}(1+g)^{160}}{P_{0}} + g$ D_o/P_o D₁/P₀ Discrete Adj. 4.04% 1.032603 4.17% $k = \left[\left(1 + \frac{D_0 (1+g)^{25}}{P_0} \right)^4 - 1 \right] + g$ D₀/P₀ D₁/P₀ Quarterly Adj. 1.0096% 1.012874 4.15% 4.15% Average Growth rate 5.25% ĸ 9.40%

Historical Growth Rates Earnings Per Share, Dividends Per Share, Book Value Per Share, and Cash Flow Per Share

	Earnings p	per Share	Dividends	per Share	Book Value	per Share	Cash Flow per Share		
	Value	Line	Value	Line	Value	Line	Value Line		
Electric Group	5 Year	10 Year	5 Year	10 Year	5 Year	10 Year	5 Year	10 Year	
American Electric Power	1.00%	2.00%	4.00%	-3.00%	4.50%	2.50%	0.50%	-	
CenterPoint Energy	3.00%	-1.50%	7.00%	-4.50%	13.50%	-4.00%	2.00%	-	
Cleco Corp.	13.00%	5.50%	4.50%	2.50%	9.00%	8.00%	14.50%	6.00%	
Dominion Resources, Inc.	7.00%	5.00%	7.00%	4.50%	3.50%	2.50%	2.50%	2.50%	
Duke Energy Corp.	4.50%	1999 - 1999 -	18.00%	-	-1.00%	-		-	
Entergy Corp.	5.50%	7.50%	7.50%	10.00%	5.00%	4.00%	10.50%	9.50%	
NextEra Energy	10.00%	8.50%	7.50%	7.00%	8.50%	8.00%	7.00%	6.50%	
OGE Energy Corp.	7.50%	8.00%	2.50%	1.50%	8.50%	7.00%	9.00%	5.50%	
SCANA Corp.	2.50%	3.00%	3.00%	5.00%	4.50%	4.00%	-0.50%	3.00%	
Southern Company	3.00%	3.50%	4.00%	3.50%	5.50%	4.50%	3.50%	3.00%	
TECO Energy, Inc.	0.50%	-5.50%	2.00%	-4.50%	4.00%	-2.50%	1.50%	-3.50%	
Average	5.23%	3.60%	6.09%	2.20%	5.95%	3.40%	5.05%	4.06%	

Source of Information:

Value Line Investment Survey, November 22, 2013 and December 20, 2013

Analysts' Five-Year Projected Growth Rates Earnings Per Share, Dividends Per Share, Book Value Per Share, and Cash Flow Per Share

							Value Li	ne	
Electric Group	I/B/E/S First Call	Zacks	Morningstar	SNL	Earnings Per Share	Dividends Per Share	Book Value Per Share	Cash Flow Per Share	Percent Retained to Common Equity
American Electric Power	3.99%	4.00%	8.30%	4.60%	5.50%	4.00%	4.00%	4.00%	4.50%
CenterPoint Energy	4.50%	5.30%	3.00%	5.00%	6.00%	4.00%	5.00%	4.50%	6.00%
Cleco Corp.	8.00%	8.00%	-	-	5.50%	10.00%	5.00%	5.00%	4.50%
Dominion Resources, Inc.	7.18%	6.00%	6.60%	6.70%	5.00%	5.50%	4.50%	5.50%	4.50%
Duke Energy Corp.	3.83%	3.70%	5.90%	3.00%	4.00%	2.00%	3.50%	4.00%	3.00%
Entergy Corp.	NMF	NA	NMF	NMF	NMF	0.50%	3.00%	1.00%	3.50%
NextEra Energy	6.62%	6.20%	7.40%	6.80%	5.50%	8.50%	6.50%	5.00%	5.50%
OGE Energy Corp.	5.00%	6.00%	6.10%	7.00%	5.00%	8.50%	7.00%	2.00%	5.50%
SCANA Corp.	4.20%	4.40%	4.90%	5.10%	4.50%	2.50%	5.50%	3.00%	4.50%
Southern Company	3.83%	4.10%	3.50%	3.00%	3.00%	3.50%	4.00%	3.50%	3.00%
TECO Energy, Inc.	2.72%	5.00%	5.40%	5.00%	3.00%	2.00%	1.50%	3.00%	4.00%
Average	4.99%	5.27%	5.68%	5.13%	4.70%	4.64%	4.50%	3.68%	4.41%

Source of Information : Yahoo Finance, December 17, 2013

Zacks, December 17, 2013

Morningstar, December 17, 2013

SNL, December 17, 2013

Value Line Investment Survey, November 22, 2013 and December 20, 2013

Electric Group Market Capitalization

	American	CenterPoint	Cleco	Dominion	Duke Energy	Entergy	NextEra	OGE Energy	SCANA	The Southern		
	Electric Power	Energy, Inc.	Corporation	Resources, Inc	Corporation	Corporation	Energy, Inc.	Corporation	Corporation	Company	TECO Energy,	
	Co(NYSE:AEP)	(NYSE:CNP)	(NYSE:CNL)	(NYSE:D)	(NYSE:DUK)	(NYSE:ETR)	(NYSE:NEE)	(NYSE:OGE)	(NYSE:SCG)	(NYSE:SO)	Inc. (NYSE:TE)	Average
Fiscal Year	12/31/13	12/31/13	12/31/13	12/31/13	12/31/13	12/31/13	12/31/13	12/31/13	12/31/13	12/31/13	12/31/13	
Capitalization at Fair Values												
Debt(D)	19,672,000	8,670,000	1,420,048	22,473,000	42,592,000	12,439,785	28,612,000	2,652,600	5,916,300	21,530,000	3,184,100	15,378,348
Preferred(P)	0	0	0	261,000	0	116,760	0	0	0	1,131,000	0	137,160
Equity(E)	22,798,714	9,944,220	2,818,390	37,584,890	48,721,060	11,285,524	37,244,700	6,725,760	6,617,130	36,476,903	3,746,252	20,360,322
Total	42.470.714	18.614.220	4.238.438	60.318.890	91.313.060	23.842.069	65,856,700	9.378.360	12.533.430	59,137,903	6.930.352	35.875.831
Capital Structure Ratios												
Debt(D)	46.32%	46.58%	33.50%	37.26%	46.64%	52.18%	43.45%	28.28%	47.20%	36.41%	45.94%	42.16%
Preferred(P)	0.00%	0.00%	0.00%	0.43%	0.00%	0.49%	0.00%	0.00%	0.00%	1.91%	0.00%	0.26%
Equity(E)	53.68%	53,42%	66.50%	62.31%	<u>53.36%</u>	47.33%	56.55%	71.72%	52.80%	<u>61.68%</u>	54.06%	57.58%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Common Stock												
Issued	508,113.964	429,000.000	61,047.006	581,000.000	706,000.000	254,752.788	435,000.000	198,500.000	141,000.000	893,000.000	217,300.000	
Treasury	20,336.592	0.000	592.486	0.000	0.000	76,381.936	0.000	100.000	0.000	5,700.000	0.000	
Outstanding	487,777.372	429,000.000	60,454.520	581,000.000	706,000.000	178,370.852	435,000.000	198,400.000	141,000.000	887,300.000	217,300.000	
Market Price	\$ 46.74	\$ 23.18	\$ 46.62	\$ 64.69	\$ 69.01	\$ 63.27	\$ 85.62	\$ 33.90	\$ 46.93	\$ 41.11	\$ 17.24	

Analysis of Public Offerings of Common Stock Years 2007-2011

	Vectren Corp	Energy East	Empire District	ITC Holdings	Ottertail Corp	OGE Energy	PNM Resources	IDACORP	Progress Energy
Date of Offering	2/22/2007	3/21/2007	12/6/2007	1/18/2008	9/19/2008	11/20/2008	11/27/2008	12/5/2008	1/7/2009
No. of shares offered (000) Dollar amt. of offering (\$000)	4,600 \$ 130,318	9,000 \$ 218,250	3,000 \$ 69,000	5,583 \$ 291,669	4,500 \$ 135,000	2,500 \$ 62,500	3,417 \$ 27,883	3,000 \$ 85,215	12,500 \$ 468,750
Price to public	\$ 28.330	\$ 24.250	\$ 23.000	\$ 50.150	\$ 30.000	\$ 25.000	\$ 8.160	\$ 28.405	\$ 37.500
Underwriter's discounts and commission	\$ 0.990	\$ 0.728	\$ 0.997	\$ 2.131	\$ 1.088	\$ 1.500	<u>\$ -</u>	\$ 0.284	\$ 1.125
Gross Proceeds	\$ 27.340	\$ 23.522	\$ 22.003	\$ 48.019	\$ 28.913	\$ 23.500	\$ 8.160	\$ 28.121	\$ 36.375
Estimated company issuance expenses	\$ 0.092	\$ 0.018	\$ 0.083	\$ 0.161	\$ 0.089	\$ 0.058	N/A	N/A	\$ 0.024
Net proceeds to company per share	\$ 27.248	\$ 23.504	\$ 21.920	\$ 47.858	\$ 28.824	\$ 23.442	\$ 8.160	\$ 28.121	\$ 36.375
Underwriter's discount as a percent of offering price	3.5%	3.0%	4.3%	4.2%	3.6%	6.0%	0.0%	1.0%	3.0%
as a percent of offering price Total Issuance and selling expense as	<u>0.3%</u>	0.1%	0.4%	<u>0.3%</u>	<u>0.3%</u>	0.2%	<u>N/A</u>	<u>N/A</u>	<u>0.1%</u>
as a percent of offering price	<u>3.8%</u>	3.1%	<u>4.7%</u>	<u>4.5%</u>	<u>3.9%</u>	6.2%	0.0%	1.0%	3.1%
	Portland General Elec	Northeast Utilities	American Elec Power	Great Plains Energy	UNITIL	UIL Holdings	Ameren	CenterPoint	Consolidated Edison
Date of Offering	3/5/2009	3/16/2009	4/1/2009	5/12/2009	5/20/2009	5/20/2009	9/9/2009	9/10/2009	11/20/2009
No. of shares offered (000) Dollar amt. of offering (\$000)	10,850 \$ 152,985	16,500 \$ 333,300	60,000 \$1,470,000	10,000 \$ 140,000	2,400 \$ 48,000	4,000 \$ 84,000	19,000 \$ 479,750	21,000 \$ 252,000	5,000 \$ 213,150
Price to public	\$ 14.100	\$ 20.200	\$ 24.500	\$ 14.000	\$ 20.000	\$ 21,000	\$ 25.250	\$ 12.000	\$ 42.630
Underwriter's discounts and commission	\$ 0.494	\$ 0.657	\$ 0.735	\$ 0.490	\$ 1.050	\$ 1.050	\$ 0.758	\$ 0.420	<u>s</u> -
Gross Proceeds	\$ 13.606	\$ 19.543	\$ 23.765	\$ 13.510	\$ 18.950	\$ 19.950	\$ 24.492	\$ 11.580	\$ 42.630
Estimated company issuance expenses	\$ 0.035	\$ 0.020	\$ 0.007	\$ 0.030	N/A	\$ 0.081	\$ 0.024	N/A	\$ 0.100
Net proceeds to company per share	\$ 13.606	\$ 19.543	\$ 23.765	\$ 13.510	\$ 18.950	\$ 19.950	\$ 24.492	\$ 11.580	\$ 42.630
Underwriter's discount as a percent of offering price	3.5%	3.3%	3.0%	3.5%	5.3%	5.0%	3.0%	3.5%	0.0%
as a percent of offering price Total Issuance and	0.2%	0.1%	0.0%	0.2%	<u>N/A</u>	0.4%	0.1%	<u>N/A</u>	0.2%
selling expense as as a percent of offering price	3.7%	3.4%	3.0%	<u>3.7%</u>	<u>5.3%</u>	5.4%	3.1%	3.5%	0.2%
	Pinnacle West Capital Corp.	SCANA Corp.	CenterPoint	UIL Holdings	Consolidated Edison	Westar	Black hills Corp.	PPL Corp.	
Date of Offering	4/8/2010	5/11/2010	6/9/2010	9/16/2010	9/27/2010	11/4/2010	11/10/2010	2/11/2011	
No. of shares offered (000) Dollar amt. of offering (\$000)	6,000 \$ 228,000	7,150 \$ 264,550	22,000 \$ 283,800	17,700 \$ 455,775	6,300 \$ 305,928	7,500 \$ 191,550	4,000 \$ 119,000	80,000 \$2,024,000	
Price to public	\$ 38.000	\$ 37.000	\$ 12.900	\$ 25.750	\$ 48.560	\$ 25.540	\$ 29,750	\$ 25.300	
Underwriter's discounts and commission	\$ 1.330	\$ 1.295	\$ 0.452	\$ 1.094	<u>s -</u>	\$ 0.894	\$ 1.040	\$ 0.759	
Gross Proceeds	\$ 36.670	\$ 35.705	\$ 12.448	\$ 24.656	\$ 48.560	\$ 24.646	\$ 28.710	\$ 24.541	
Estimated company issuance expenses	\$ 0.032	N/A	\$ 0.013	\$ 0.018	\$ 0.079	N/A	\$ 0.069	\$ 0.013	
Net proceeds to company per share	\$ 36.670	\$ 35.705	\$ 12.448	\$ 24.656	\$ 48.560	\$ 24.646	\$ 28.710	\$ 24.541	
Underwriter's discount as a percent of offering price	3.5%	3.5%	3.5%	4.2%	0.0%	3.5%	3.5%	3.0%	AVERAGE 3.2%
Issuance expense as a percent of offering price Total Issuance and	<u>0,1%</u>	N/A	0.1%	<u>0.1%</u>	0.2%	N/A	0.2%	0.0%	0.2%
selling expense as as a percent of offering price	3.6%	3.5%	3.6%	4.3%	0.2%	3.5%	3.7%	3.0%	3.3%

and the Twelve Months Ended December 2013										
Years	Aa Rated	A Rated	Baa Rated	Average						
2008	6 18%	6 53%	7 24%	6.65%						
2009	5 75%	6.04%	7.06%	6.28%						
2010	5 24%	5 46%	5.96%	5.55%						
2011	4 78%	5.04%	5.57%	5.13%						
2012	3.83%	4.13%	4.86%	4.27%						
Five-Year										
Average	5.16%	5.44%	6.14%	5.58%						
	_									
<u>Months</u>										
Jan-13	3.90%	4.15%	4.66%	4.24%						
Feb-13	3.95%	4.18%	4.74%	4.29%						
Mar-13	3.95%	4.20%	4.72%	4.29%						
Apr-13	3.74%	4.00%	4.49%	4.08%						
May-13	3.91%	4.17%	4.65%	4.24%						
Jun-13	4.27%	4.53%	5.08%	4.63%						
Jul-13	4.44%	4.68%	5.21%	4.78%						
Aug-13	4.53%	4.73%	5.28%	4.85%						
Sep-13	4.58%	4.80%	5.31%	4.90%						
Oct-13	4.48%	4.70%	5.17%	4.78%						
Nov-13	4.56%	4.77%	5.24%	4.86%						
Dec-13	4.59%	4.81%	5.25%	4.89%						
Twelve-Month										
Average	4.24%	4.48%	4.98%	4.57%						
Six-Month	4 500/	1 750/	5 049/	1 9 1 0/						
Average	4.53%	4.75%	5.24%	4.04%						
Three-Month		1 700/	E 00%	4.040/						
Average	4.54%	4.76%	5.22%	4.84%						

Interest Rates for Investment Grade Public Utility Bonds Yearly for 2008-2012 and the Twelve Months Ended December 2013

Source: Mergent Bond Record





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Exhibit No. PRM-1 Page 17 of 25 Schedule 10 [3 of 3]

A rated Public Utility Bonds over 30-Year Treasuries

	A-rated	30-Year T	reasuries		A-rated	30-Year T	reasuries		A-rated	30-Year	Treasuries
Year	Public Utility	Yield	Spread	Year	Public Utility	Yield	Spread	Year	Public Utility	Yield	Spread
Dec-98	6.91%	5.06%	1.85%								
lan 00	6 070/	E 4 00/	1 0 1 0/	100.04	0 4 50/			1 00	0.000/	0.400/	0.000/
Jan-99	6.97%	5.16%	1.81%	Jan-04	6.15%			Jan-09	6.39%	3.13%	3.26%
Feb-99	7.09%	5.37%	1.72%	Feb-04	6.15%			Feb-09	6.30%	3.59%	2.71%
Mar-99	7.26%	5.58%	1.68%	Mar-04	5.97%			Mar-09	6.42%	3.64%	2.78%
Apr-99	7.22%	5.55%	1.67%	Apr-04	6.35%			Apr-09	6.48%	3.76%	2.72%
May-99	7.47%	5.81%	1.66%	May-04	6.62%			May-09	6.49%	4.23%	2.26%
Jun-99	7.74%	6.04%	1.70%	Jun-04	6.46%			Jun-09	6.20%	4.52%	1.68%
Jul-99	7.71%	5.98%	1.73%	Jul-04	6.27%			Jul-09	5.97%	4.41%	1.56%
Aug-99	7.91%	6.07%	1.84%	Aug-04	6.14%			Aug-09	5.71%	4.37%	1.34%
Sep-99	7 93%	6.07%	1 86%	Sep-04	5 98%			Sen-09	5 53%	4 19%	1 34%
Oct-99	8.06%	6.26%	1 80%	Oct 04	5 04%			Oct 09	5.55%	4.10%	1 36%
Nev 00	7.049/	0.20%	1.00%	New 04	5.54%			New 00	5.55%	4.1370	1.30%
NOV-99	7.9470	0.15%	1.79%	100-04	5.97%			1404-09	5.64%	4.31%	1.33%
Dec-aa	8,14%	0.35%	1.79%	Dec-04	5.92%			Dec-0a	5.79%	4.49%	1.30%
Jan-00	8.35%	6.63%	1.72%	Jan-05	5.78%			Jan-10	5.77%	4.60%	1.17%
Feb-00	8.25%	6.23%	2.02%	Feb-05	5.61%			Feb-10	5.87%	4.62%	1.25%
Mar-00	8.28%	6.05%	2.23%	Mar-05	5.83%			Mar-10	5.84%	4.64%	1.20%
Apr-00	8.29%	5.85%	2 44%	Apr-05	5.64%			Apr-10	5.81%	4.69%	1 12%
May-00	8 70%	6 15%	2 55%	May-05	5 53%			May-10	5 50%	4 29%	1 21%
lup-00	8 36%	5 03%	2 4304	lup 05	5 40%			lup 10	5 46%	A 1304	1 3 2 9/
Jul 00	0.30%	5.95%	2.43%	Jun-05	5.40%			Juli-10	5.40%	4.13%	1.33%
301-00	0.25%	0.60%	2.40%	Jui-05	5.51%			JULIO	5.26%	3.99%	1.27%
Aug-00	8.13%	5.72%	2.41%	Aug-05	5.50%			Aug-10	5.01%	3.80%	1.21%
Sep-00	8.23%	5.83%	2.40%	Sep-05	5.52%			Sep-10	5.01%	3.77%	1.24%
Oct-00	8.14%	5.80%	2.34%	Oct-05	5.79%			Oct-10	5.10%	3.87%	1.23%
Nov-00	8.11%	5.78%	2.33%	Nov-05	5.88%			Nov-10	5.37%	4.19%	1.18%
Dec-00	7.84%	5.49%	2.35%	Dec-05	5.80%			Dec-10	5.56%	4.42%	1.14%
Jan-01	7.80%	5.54%	2.26%	Jan-06	5.75%			Jan-11	5.57%	4.52%	1.05%
Feb-01	7.74%	5.45%	2.29%	Feb-06	5.82%	4.54%	1.28%	Feb-11	5.68%	4.65%	1.03%
Mar-01	7.68%	5.34%	2.34%	Mar-06	5.98%	4.73%	1.25%	Mar-11	5.56%	4.51%	1.05%
Apr-01	7.94%	5.65%	2.29%	Apr-06	6.29%	5.06%	1.23%	Apr-11	5.55%	4.50%	1.05%
May-01	7.99%	5.78%	2.21%	May-06	6.42%	5.20%	1.22%	May-11	5.32%	4.29%	1.03%
Jun-01	7 85%	5 67%	2 18%	Jun-06	6 40%	5 15%	1 25%	Jun-11	5 26%	4 23%	1.03%
Jul 01	7 78%	5.61%	2 1704	Jul 06	6 37%	5 1 2 %	1 2494	Jul 11	5 27%	A 27%	1.00%
Jui-01	7.7070	5.01%	2.1770	Jui-00	0.37%	5.13%	1.2470	Juri	5.27%	4.2770	1.00%
Aug-01	7.59%	5.48%	2.11%	Aug-06	6.20%	5.00%	1.20%	Aug-11	4.09%	3.65%	1.04%
Sep-01	1.15%	5.48%	2.27%	Sep-06	6.00%	4.85%	1.15%	Sep-11	4.48%	3.18%	1.30%
Oct-01	7.63%	5.32%	2.31%	Oct-06	5.98%	4.85%	1.13%	Oct-11	4.52%	3.13%	1.39%
Nov-01	7.57%	5.12%	2.45%	Nov-06	5.80%	4.69%	1.11%	Nov-11	4.25%	3.02%	1.23%
Dec-01	7.83%	5.48%	2.35%	Dec-06	5.81%	4.68%	1.13%	Dec-11	4.33%	2.98%	1.35%
lan-02	7 66%	5 4 5%	2 21%	lan-07	5 96%	4 85%	1 1 1 %	lan-12	4 34%	3 03%	1 31%
Eab.02	7 54%	5 40%	2 1 4 94	Ech 07	5 00%	4.00%	1.08%	Eab 12	1 36%	3 1 1 04	1.0170
Mar 02	7.769/	5.4070	2.1470	Nec 07	5.00%	4.02 /0	1.00%	1 CD-12	4.00%	0.1170	1.20%
Mar-02	7.70%			Mar-07	5.65%	4.7270	1.13%	Md1-12	4.4070	3.20%	1.20%
Apr-02	7.57%			Apr-07	5.97%	4.87%	1.10%	Apr-12	4.40%	3.18%	1.22%
May-02	7.52%			May-07	5.99%	4.90%	1.09%	May-12	4.20%	2.93%	1.27%
Jun-02	7.42%			Jun-07	6.30%	5.20%	1.10%	Jun-12	4.08%	2.70%	1.38%
Jul-02	7.31%			Jul-07	6.25%	5.11%	1.14%	Jul-12	3.93%	2.59%	1.34%
Aug-02	7.17%			Aug-07	6.24%	4.93%	1.31%	Aug-12	4.00%	2.77%	1.23%
Sep-02	7.08%			Sep-07	6.18%	4.79%	1.39%	Sep-12	4.02%	2.88%	1.14%
Oct-02	7.23%			Oct-07	6.11%	4.77%	1.34%	Oct-12	3.91%	2.90%	1.01%
Nov-02	7.14%			Nov-07	5.97%	4.52%	1.45%	Nov-12	3.84%	2.80%	1.04%
Dec-02	7.07%			Dec-07	6.16%	4.53%	1.63%	Dec-12	4.00%	2.88%	1.12%
Jan-03	7.07%			Jan-08	6.02%	4.33%	1.69%	Jan-13	4.15%	3.08%	1.07%
Feb-03	6.93%			Feb-08	6.21%	4 52%	1 69%	Feb-13	4.18%	3 17%	1 01%
Mar-03	6 79%			Mar-08	6 21%	4 30%	1 82%	Mar-13	4 20%	3 16%	1 04%
Apr 03	6 6 4 9/			Mar-00	6.20%	4.5370	1.02.70	Apr 13	4.20%	2,029	1.04%
Apr-03	0.04%			Apr-08	0.29%	4.4470	1.00%	Apr-13	4.00%	2.9370	1.07%
may-03	6.36%			May-08	6.28%	4.60%	1.68%	May-13	4.1/%	3.11%	1.06%
Jun-03	6.21%			Jun-08	6.38%	4.69%	1.69%	Jun-13	4.53%	3.40%	1.13%
Jul-03	6.57%			Jul-08	6.40%	4.57%	1.83%	Jul-13	4.68%	3.61%	1.07%
Aug-03	6.78%			Aug-08	6.37%	4.50%	1.87%	Aug-13	4.73%	3.76%	0.97%
Sep-03	6.56%			Sep-08	6.49%	4.27%	2.22%	Sep-13	4.80%	3.79%	1.01%
Oct-03	6.43%			Oct-08	7.56%	4.17%	3.39%	Oct-13	4.70%	3.68%	1.02%
Nov-03	6.37%			Nov-08	7.60%	4.00%	3.60%	Nov-13	4.77%	3.80%	0.97%
Dec-03	6.27%			Dec-08	6.52%	2.87%	3.65%	Dec-13	4.81%	3.89%	0.92%
				500.00						A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.	

Average: 12-months 6-months 3-months

1.03% 0.99% 0.97%

Common Equity Risk Premiums Years 1926-2013

	Large Common Stocks	Long- Term Corp. Bonds	Equity Risk Premium	Long- Term Govt. Bonds Yields
Low Interest Rates	12.17%	4.57%	7.60%	3.01%
Average Across All Interest Rates	12.05%	6.26%	5.79%	5.15%
High Interest Rates	11.93%	7.95%	3.98%	7.28%

Source of Information: Stocks, Bonds, Bills, and Inflation (SBBI) 2014 Classic Yearbook

Basic Series Annual Total Returns (except yields)

Year	Large Common Stocks	Long- Term Corp. Bonds	Long- Term Govt. Bonds Yields
1940	-9.78%	3.39%	1.94%
1941	-11.59%	2.73%	2.04%
1949	18,79%	3.31%	2.09%
1946	-8.07%	1.72%	2.12%
1950	31.71%	2.12%	2.24%
1939	-0.41%	3.97%	2.26%
1948	5.50%	4.14%	2.37%
2012	16.00%	10.68%	2.41%
1947	20.34%	2.60%	2.43%
1944	19,75%	4.73%	2.46%
1943	25.90%	2.83%	2.48%
2011	2.11%	17.95%	2.48%
1938	31.12%	6.13%	2.52%
1936	33.92%	6.74%	2.55%
1951	52 62%	-2,09%	2.03%
1937	-35.03%	2.75%	2.73%
1953	-0.99%	3.41%	2.74%
1935	47.67%	9.61%	2.76%
1952	18.37%	3.52%	2.79%
1934	-1.44%	13.84%	2.93%
1955	31.56%	0.48%	2.95%
1932	-8 19%	10.82%	3 15%
1927	37.49%	7.44%	3.16%
1957	-10,78%	8.71%	3.23%
1930	-24.90%	7.98%	3.30%
1933	53.99%	10.38%	3.36%
1928	43.61%	2.84%	3.40%
1929	-8.42%	3.27%	3,40%
1926	11 62%	7 37%	3 54%
2013	32.39%	-7.07%	3.67%
1960	0.47%	9.07%	3.80%
1958	43.36%	-2.22%	3.82%
1962	-8.73%	7.95%	3.95%
1931	-43.34%	-1.85%	4.07%
2010	15.06%	12.44%	4.14%
1963	22.80%	2 19%	4.15%
1964	16.48%	4.77%	4.23%
1959	11.96%	-0.97%	4.47%
1965	12.45%	-0.46%	4.50%
2007	5.49%	2.60%	4.50%
1966	-10.06%	0.20%	4.55%
2009	20.46%	5.97%	4.58%
2002	-22 10%	16.33%	4.84%
2004	10.88%	8.72%	4.84%
2006	15.79%	3.24%	4.91%
2003	28.68%	5.27%	5.11%
1998	28.58%	10.76%	5.42%
1967	23.98%	-4.95%	5.56%
2000	-11 89%	12.07%	5,56%
1971	14.30%	11.01%	5.97%
1968	11.06%	2.57%	5.98%
1972	18.99%	7.26%	5.99%
1997	33.36%	12.95%	6.02%
1995	37.58%	27.20%	6.03%
1970	3.00%	18,37%	0.46% 6.54%
1996	22.96%	1.40%	6.73%
1999	21.04%	-7.45%	6.82%
1969	-8.50%	-8.09%	6.87%
1976	23.93%	18.65%	7.21%
1973	-14.69%	1.14%	7.26%
1992	7.62%	9.39%	7.26%
1991	-26 47%	-3.06%	7.30%
1986	18.67%	19.85%	7.89%
1994	1.32%	-5.76%	7.99%
1977	-7.16%	1.71%	8.03%
1975	37.23%	14.64%	8.05%
1989	31.69%	16.23%	8.16%
1990	-3.10%	0.78%	8.44%
1988	16.61%	10 70%	9 18%
1987	5.25%	-0.27%	9.20%
1985	31.73%	30.09%	9.56%
1979	18.61%	-4.18%	10.12%
1982	21.55%	42.56%	10.95%
1984	6.27%	16.86%	11.70%
1963	32 50%	-2 76%	11.9/%
1981	-4.92%	-1.24%	13.34%

Years	1-Year	2-Year	3-Year	5-Year	7-Year	10-Year	20-Year	30-Year
2008	1.82%	2.00%	2.24%	2.80%	3.17%	3.67%	4.36%	4.28%
2009	0.47%	0.96%	1.43%	2.19%	2.81%	3.26%	4.11%	4.08%
2010	0.32%	0.70%	1.11%	1.93%	2.62%	3.21%	4.03%	4.25%
2011	0.18%	0.45%	0.75%	1.52%	2.16%	2.79%	3.62%	3.91%
2012	0.18%	0.28%	0.38%	0.76%	1.22%	1.80%	2.54%	2.92%
Five-Year								
Average	0.59%	0.88%	1.18%	1.84%	2.40%	2.95%	3.73%	3.89%
Months								
Jan-13	0.15%	0.27%	0.39%	0.81%	1.30%	1.91%	2.68%	3.08%
Feb-13	0.16%	0.27%	0.40%	0.85%	1.35%	1.98%	2.78%	3.17%
Mar-13	0.15%	0.26%	0.39%	0.82%	1.32%	1.96%	2.78%	3.16%
Apr-13	0.12%	0.23%	0.34%	0.71%	1.15%	1.76%	2.55%	2.93%
May-13	0.12%	0.25%	0.40%	0.84%	1.31%	1.93%	2.73%	3.11%
Jun-13	0.14%	0.33%	0.58%	1.20%	1.71%	2.30%	3.07%	3.40%
Jul-13	0.12%	0.34%	0.64%	1.40%	1.99%	2.58%	3.31%	3.61%
Aug-13	0.13%	0.36%	0.70%	1.52%	2.15%	2.74%	3.49%	3.76%
Sep-13	0.12%	0.40%	0.78%	1.60%	2.22%	2.81%	3.53%	3.79%
Oct-13	0.12%	0.34%	0.63%	1.37%	1.99%	2.62%	3.38%	3.68%
Nov-13	0.12%	0.30%	0.58%	1.37%	2.07%	2.72%	3.50%	3.80%
Dec-13	0.13%	0.34%	0.69%	1.58%	2.29%	2.90%	3.63%	3.89%
Twelve-Month								
Average	0.13%	0.31%	0.54%	1.17%	1.74%	2.35%	3.12%	3.45%
Six-Month								
Average	0.12%	0.35%	0.67%	1.47%	2.12%	2.73%	3.47%	3.76%
Three-Month								
Average	0.12%	0.33%	0.63%	1.44%	2.12%	2.75%	3.50%	3.79%

Yields for Treasury Constant Maturities Yearly for 2008-2012 and the Twelve Months Ended December 2013

Source: Federal Reserve statistical release H.15

Measures of the Risk-Free Rate & Corporate Bond Yields The forecast of Treasury and Corporate yields per the consensus of nearly 50 economists reported in the <u>Blue Chip Financial Forecasts</u> dated January 1, 2014

			Corporate					
		1-Year	2-Year	5-Year	10-Year	30-Year	Aaa	Baa
Year	Quarter	Bill	Note	Note	Note	Bond	Bond	Bond
			1					
2014	First	0.2%	0.4%	1.6%	2.9%	3.9%	4.7%	5.5%
2014	Second	0.2%	0.5%	1.7%	3.0%	4.0%	4.8%	5.6%
2014	Third	0.3%	0.6%	1.8%	3.1%	4.1%	4.9%	5.7%
2014	Fourth	0.3%	0.8%	2.0%	3.3%	4.2%	5.0%	5.8%
2015	First	0.5%	0.9%	2.1%	3.3%	4.3%	5.1%	5.9%
2015	Second	0.6%	1.1%	2.3%	3.4%	4.4%	5.2%	6.0%

Measures of the Market Premium

	Value Line Re	tur	n			
			Median		Median	
	Dividend	A	ppreciatio	n	Total	
As of:	Yield		Potential		Return	
January 3, 2014	1.9%	+	6.78%	=	8.68%	

	DCF Result fo	r the S&F	500 Composi	ite	
D/P	(1+.5g)	+	g		k
1.93%	(1.0484)	+	9.67%	=	11.69%
where:	Price (P)	at	31-Dec-13	=	1848.36
	Dividend (D)	for	3rd Qtr. '13	=	8.91
	Dividend (D)		annualized	=	35.64
	Growth (g)	by	First Call	=	9.67%
		Summa	rv		
Value Line	9				8.68%
S&P 500					11.69%
Average	Ð				10.19%
Risk-free I	Rate of Return (Rf)			4.50%
Forecas	st Market Premiu	ım			5.69%
Historical	Market Premium	n (Rm)	(Rf)		
1926-20	013 Arith. mean	12.119	4.08%	Ċ.	8.03%
Average -	Forecast/Histor	ical			6.86%

This phenomenon can also be viewed graphically, as depicted in the Graph 7-2. The security market line is based on the pure CAPM without adjusting for the size premium. Based on the risk (or beta) of a security, the expected return should fluctuate along the security market line. However, the expected returns for the smaller deciles of the NYSE/AMEX/NASDAQ lie above the line, indicating that these deciles have had returns in excess of that which is appropriate for their systematic risk.

 Table 7-6: Size-Decile Portfolios of the NYSE/AMEX/NASDAQ

 Long-Term Returns in Excess of CAPM

			Actual	CAPM	Size
		Arith-	Return	Return	Premium
		metic	in Excess	in Excess	(Return in
		Mean	of Riskless	of Riskless	Excess of
		Return	Rate**	Rate'	CAPM)
Decile	Beta*	(%)	(%)	(%)	(%)
1-Largest	0.91	11.13	6.03	6.37	-0.33
2	1.03	13.09	8.00	7.20	0.80
3	1.10	13.68	8.59	7.66	0.93
4	1.13	14.12	9.03	7.84	1.19
5	1.16	14.88	9.79	8.07	1.72
6	1.19	15.11	10.02	8.26	1.75
7	1.24	15.48	10.39	8.64	1.75
8	1.30	16.62	11.53	9.05	2.48
9	1.35	17.23	12.14	9.37	2.76
10-Smallest	1.40	20.88	15.79	9.77	6.01
Mid-Cap 3-5	1.12	14.02	8.93	7.79	1.14
Low-Cap 6-8	1.23	15.51	10.41	8.54	1.87
Micro-Cap 9-10	1.36	18.38	13.29	9.45	3.84

Data from 1926-2013.

 Betas are estimated from monthly returns in excess of the 30-day U.S. Treasury bill total return, January 1926–December 2013.

**Historical riskless rate measured by the 88-year arithmetic mean income return component of 20-year government bonds (5.09 percent).

'Calculated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is estimated by the arithmetic mean total return of the S&P 500 (12.05 percent) minus the arithmetic mean income return component of 20-year government bonds (5.09 percent) from 1926–2013.

Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2014 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission. Graph 7-2: Security Market Line Versus Size-Decile Portfolios of the NYSE/AMEX/NASDAQ



Data from 1926-2013.

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Serial Correlation in Small Company Stock Returns

In four of the last ten years, large-capitalization stocks (deciles 1–2 NYSE/AMEX/NASDAQ) have outperformed small-capitalization stocks (deciles 9–10 NYSE/AMEX/ NASDAQ). This has led some to speculate that there is no size premium, but statistical evidence suggests that periods of underperformance should be expected. For instance, since 1926, large-capitalization stocks have outperformed small-capitalization stocks nearly 50 percent of the time.

It should be noted, however, that large-capitalization stocks' average historical outperformance has been less than the average historical outperformance of small-capitalization stocks.

History tells us that small companies are riskier than large companies. Table 7-1 [see page 100] shows the standard deviation (a measure of risk) for each decile of the NYSE/ AMEX/NASDAQ. As one moves from larger to smaller deciles, the standard deviation of return grows. Investors are compensated for taking on this additional risk by the higher returns provided by small companies. It is important to note, however, that the risk/return profile is over the long term. If small companies did not provide higher long-term returns, investors would be more inclined to invest in the less risky stocks of large companies.

Exhibit No. PRM-1 Page 23 of 25 Schedule 13 [1 of 3]

Comparable Earnings Approach Price Stability of 90 to 100; Betas of .55 to .95; and Technical Rank of 2, 3 & 4 Timeliness of 2, 3 & 4; Safety Rank of 1, 2 & 3; Financial Strength of B++ & A; Using Non-Utility Companies with

Company	Industry	Timeliness Rank	Safety Rank	Financial Strength	Price Stability	Beta	Technical Rank
			<u></u>				
Alleghany Corp.	INSPRPTY	3	2	A	90	0.75	3
AmerisourceBergen	MEDICNON	3	1	A	95	0.70	3
AptarGroup	PACKAGE	3	2	B++	95	0.90	3
Ball Corp.	PACKAGE	4	2	B++	95	0.85	3
Beam Inc.	BEVERAGE	4	3	B++	100	0.90	3
Bemis Co.	PACKAGE	4	2	A	90	0.90	3
Berkley (W.R.)	INSPRPTY	3	2	B++	95	0.65	3
Bio-Rad Labs. 'A'	MEDICNON	4	2	B++	90	0.85	3
Brown & Brown	FINSERV	3	1	A	95	0.75	3
Campbell Soup	FOODPROC	4	2	B++	100	0.60	3
Cincinnati Financial	INSPRPTY	3	2	B++	95	0.85	4
Clorox Co.	HOUSEPRD	4	2	B++	100	0.60	3
Commerce Bancshs.	BANKMID	3	1	A	90	0.85	3
ConAgra Foods	FOODPROC	4	1	A	100	0.65	3
Cullen/Frost Bankers	BANK	4	1	A	95	0.80	2
DaVita HealthCare	MEDSERV	2	2	B++	90	0.70	2
Dentsply Int'l	MEDICINV	3	2	B++	90	0.95	3
Dollar General	RETAIL	2	2	B++	90	0.60	3
Ecolab Inc.	CHEMSPEC	3	1	A	100	0.70	3
Equifax Inc.	INFOSER	3	2	A	90	0.90	3
Fidelity National	FINSERV	3	2	A	90	0.80	3
Fiserv Inc.	ITSERV	3	2	B++	95	0.90	3
Forest Labs.	DRUG	3	3	A	90	0.80	2
Gallagher (Arthur J.)	FINSERV	3	1	A	90	0.75	3
Hanover Insurance	INSPRPTY	3	2	B++	95	0.75	4
Henry (Jack) & Assoc.	ITSERV	3	2	B++	95	0.85	2
Hershey Co.	FOODPROC	4	2	B++	100	0.60	3
Hormel Foods	FOODPROC	3	1	A	100	0.65	4
Int'l Flavors & Frag.	CHEMSPEC	3	1	A	95	0.85	3
Kellogg	FOODPROC	2	1	A	100	0.60	3
Kroger Co.	GROCERY	2	2	B++	95	0.65	4
L-3 Communic.	DEFENSE	2	2	B++	90	0.90	3
Laboratory Corp.	MEDSERV	3	1	А	100	0.70	2
Lorillard Inc.	TOBACCO	3	2	А	90	0.60	3
Mercury General	INSPRPTY	3	2	B++	90	0.75	3
Molson Coors Brewing	BEVERAGE	3	2	B++	90	0.75	3
Motorola Solutions	TELEQUIP	3	1	A	100	0.80	2
NeuStar Inc.	TELEQUIP	3	3	B++	90	0.85	2
Owens & Minor	MEDICNON	3	2	A	90	0.75	3
Paychex Inc.	ITSERV	3	1	A	95	0.85	3
Philip Morris Int'l	TOBACCO	3	2	B++	95	0.75	3
Praxair Inc.	CHEMSPEC	2	2	A	90	0.95	2
RLI Corp.	INSPRPTY	3	2	B++	95	0.75	4
Rollins Inc.	INDUSRV	3	2	A	90	0.85	3
Ross Stores	RETAILSL	3	2	A	90	0.75	3
Stericycle Inc.	ENVIRONM	3	2	B++	95	0.65	3
Synopsys Inc.	SOFTWARE	3	1	A	95	0.80	3
Teleflex Inc.	MEDICINV	4	2	A	90	0.75	3
Tim Hortons	RESTRNT	3	2	A	95	0.85	3
Total System Sycs.	FINSERV	3	2	B++	95	0.80	3
United Parcel Serv.	AIRTRANS	3	1	A	95	0.90	3
Waste Management	ENVIRONM	3	2	A	95	0.80	3
Weis Markets	GROCERY	4	1	A	95	0.65	3
West Pharmac. Svcs.	MEDICNON	4	2	B++	90	0.80	3
Average		3	2	A	94	0.77	3
			-				
Electric Group	Average	3	2	B++	98	0.73	3

Source of Information: Value Line Investment Survey for Windows, December 2013

Comparable Earnings Approach Five -Year Average Historical Earned Returns for Years 2008-2012 and Projected 3-5 Year Returns

Company	2008	2009	2010	2011	2012	Average	Projected 2016-18
Alleghany Corp.	4.4%	4.4%	4.6%	4.9%	2.6%	4.2%	7.0%
AmerisourceBergen	17.3%	18.8%	21.6%	24.6%	28.8%	22.2%	32.0%
AptarGroup	13.6%	9.9%	13.6%	14.2%	11.8%	12.6%	13.0%
Ball Corp.	32.3%	24.3%	35.8%	36.6%	36.5%	33.1%	27.0%
Beam Inc.	12.4%	7.2%	7.6%	3.2%	8.6%	7.8%	9.5%
Bemis Co.	12.3%	8.2%	10.5%	11.6%	10.6%	10.6%	15.0%
Berkley (W.R.)	16.5%	10.2%	11.4%	7.7%	8.8%	10.9%	11.0%
Bio-Rad Labs, 'A'	11.2%	11.5%	10.8%	10.2%	8.1%	10.4%	11.0%
Brown & Brown	13.4%	11.2%	10.7%	10.0%	10.2%	11.1%	12.5%
Campbell Soup	60.5%	105.9%	91.1%	77.8%	87.2%	84.5%	52.5%
Cincinnati Financial	8.2%	4.5%	5.4%	2.4%	7.7%	5.6%	9.0%
Clorox Co.	-		NMF	NMF	NMF	-	NMF
Commerce Bancshs.	12.0%	9.0%	11.0%	11.8%	12.4%	11.2%	11.0%
ConAgra Foods	9.7%	14.7%	15.8%	16.2%	17.3%	14.7%	18.5%
Cullen/Frost Bankers	11.8%	9.5%	10.1%	9.5%	9.8%	10.1%	9.5%
DaVita HealthCare	19.2%	19.8%	22.8%	22.5%	16.3%	20.1%	20.0%
Dentsply Int'l	18.0%	15.1%	15.1%	15.7%	14.5%	15.7%	12 5%
Dollar General	3.8%	10.0%	15.5%	16.4%	19.1%	13.0%	18.0%
Ecolab Inc.	29.5%	23.9%	24.9%	10.5%	14.7%	20.7%	15.0%
Equifax Inc.	24.6%	18.4%	17.5%	18.1%	18.6%	19.4%	17.0%
Fidelity National	3.3%	1.2%	7.0%	7.6%	8.0%	5.4%	9.5%
Fiserv Inc.	20.3%	18.2%	19.0%	20.3%	20.7%	19.7%	18.0%
Forest Labs.	25.6%	21.8%	23.3%	18.0%	0.7%	17.9%	7.5%
Gallagher (Arthur J.)	15.1%	14.9%	14.8%	11.9%	11.8%	13.7%	13.5%
Hanover Insurance	9.7%	8.0%	6.2%	1.3%	1.8%	5.4%	9.5%
Henry (Jack) & Assoc.	17.5%	16.5%	15.7%	15.6%	15.8%	16.2%	15.5%
Hershev Co.	135.3%	69.3%	65.1%	76.4%	71.4%	83.5%	46.0%
Hormel Foods	14.2%	16.1%	17.0%	17.8%	17.7%	16.6%	16.5%
Int'l Flavors & Frag.	38.6%	27.9%	26.4%	24.1%	26.1%	28.6%	20.5%
Kellogg	79.3%	53.3%	57.8%	69.9%	53.6%	62.8%	30.5%
Kroger Co.	24.1%	23.2%	21.1%	30.0%	33.8%	26.4%	22.5%
L-3 Communic.	14.7%	13.2%	14.0%	14.4%	14.8%	14.2%	12.0%
Laboratory Corp.	30.4%	25.3%	23.7%	25.8%	24.4%	25.9%	15.5%
Lorillard Inc.	NMF	NMF	-	NMF	NMF	-	NMF
Mercury General	7.7%	10.0%	6.4%	8.2%	6.3%	7.7%	10.0%
Molson Coors Brewing	8.6%	10.0%	8.6%	8.8%	5.5%	8.3%	8.5%
Motorola Solutions	19922 03	1857860778 -	11.1%	17.0%	29.2%	19.1%	52.0%
NeuStar Inc.	20.2%	20.1%	17.8%	24.6%	24.1%	21.4%	22.5%
Owens & Minor	14.7%	14.3%	14.4%	13.4%	11.3%	13.6%	15.0%
Paychex Inc.	48.1%	39.8%	34.0%	34.4%	34.2%	38.1%	37.0%
Philip Morris Int'l	91.9%	111.0%	207.0%	NMF	NMF	136.6%	NMF
Praxair Inc.	33.3%	23.6%	20.6%	30.5%	27.9%	27.2%	24.0%
RLI Corp.	15.3%	12.2%	13.9%	14.7%	10.9%	13.4%	8.5%
Rollins Inc.	30.2%	30.2%	30.2%	31.1%	31.4%	30.6%	26.0%
Ross Stores	30.7%	38.3%	41.6%	44.0%	44.5%	39.8%	29.0%
Stericycle Inc.	22.8%	21.1%	20.4%	20.2%	18.7%	20.6%	14.5%
Synopsys Inc.	13.1%	10.8%	9.1%	10.2%	9.8%	10.6%	9.5%
Teleflex Inc.	12.9%	8.6%	8.9%	6.1%	7.4%	8.8%	11.5%
Tim Hortons	26.2%	25.5%	24.7%	33.2%	33.9%	28.7%	35.0%
Total System Svcs.	25.6%	18.7%	15.9%	16.9%	17.1%	18.8%	13.0%
United Parcel Serv.	52.8%	30.4%	44.7%	59.6%	NMF	46.9%	45.0%
Waste Management	18.4%	15.7%	16.2%	16.6%	15.2%	16.4%	19.0%
Weis Markets	7.1%	9.1%	9.4%	10.1%	10.4%	9.2%	9.0%
West Pharmac. Svcs.	16.8%	12.5%	11.6%	12.5%	13.3%	13.3%	14.5%
						CLEMAN	200-320 ⁻¹
Average						23.1%	18.9%
Median						16.3%	15.0%
Average (excluding value	es <8% and >20	%)				13.3%	13.3%

Comparable Earnings Approach Screening Parameters

Timeliness Rank

The rank for a stock's probable relative market performance in the year ahead. Stocks ranked 1 (Highest) or 2 (Above Average) are likely to outpace the yearahead market. Those ranked 4 (Below Average) or 5 (Lowest) are not expected to outperform most stocks over the next 12 months. Stocks ranked 3 (Average) will probably advance or decline with the market in the year ahead. Investors should try to limit purchases to stocks ranked 1 (Highest) or 2 (Above Average) for Timeliness.

Safety Rank

A measure of potential risk associated with individual common stocks rather than large diversified portfolios (for which Beta is good risk measure). Safety is based on the stability of price, which includes sensitivity to the market (see Beta) as well as the stock's inherent volatility, adjusted for trend and other factors including company size, the penetration of its markets, product market volatility, the degree of financial leverage, the earnings quality, and the overall condition of the balance sheet. Safety Ranks range from 1 (Highest) to 5 (Lowest). Conservative investors should try to limit purchases to equities ranked 1 (Highest) or 2 (Above Average) for Safety.

Financial Strength

The financial strength of each of the more than 1,600 companies in the VS II data base is rated relative to all the others. The ratings range from A++ to C in nine steps. (For screening purposes, think of an A rating as "greater than" a B). Companies that have the best relative financial strength are given an A++ rating, indicating ability to weather hard times better than the vast majority of other companies. Those who don't quite merit the top rating are given an A+ grade, and so on. A rating as low as C++ is considered satisfactory. A rating of C+ is well below average, and C is reserved for companies with very serious financial problems. The ratings are based upon a computer analysis of a number of key variables that determine (a) financial leverage, (b) business risk, and (c) company size, plus the judgment of Value Line's analysts and senior editors regarding factors that cannot be quantified across-the-board for companies. The rating that are indexed and studied include equity coverage of debt, equity coverage of intangibles, "quick ratio", accounting methods, variability of return, fixed charge coverage, stock price stability, and company size.

Price Stability Index

An index based upon a ranking of the weekly percent changes in the price of the stock over the last five years. The lower the standard deviation of the changes, the more stable the stock. Stocks ranking in the top 5% (lowest standard deviations) carry a Price Stability Index of 100; the next 5%, 95; and so on down to 5. One standard deviation is the range around the average weekly percent change in the price that encompasses about two thirds of all the weekly percent deviation is high and the stock's Price Stability Index is low.

Beta

A measure of the sensitivity of the stock's price to overall fluctuations in the New York Stock Exchange Composite Average. A Beta of 1.50 indicates that a stock tends to rise (or fall) 50% more than the New York Stock Exchange Composite Average. Use Beta to measure the stock market risk inherent in any diversified portfolio of, say, 15 or more companies. Otherwise, use the Safety Rank, which measures total risk inherent in an equity, including that portion attributable to market fluctuations. Beta is derived from a least squares regression analysis between weekly percent changes in the price of a stock and weekly percent changes in the NYSE Average over a period of five years. In the case of shorter price histories, a smaller time period is used, but two years is the minimum. The Betas are periodically adjusted for their long-term tendency to regress toward 1.00.

Technical Rank

A prediction of relative price movement, primarily over the next three to six months. It is a function of price action relative to all stocks followed by Value Line. Stocks ranked 1 (Highest) or 2 (Above Average) are likely to outpace the market. Those ranked 4 (Below Average) or 5 (Lowest) are not expected to outperform most stocks over the next six months. Stocks ranked 3 (Average) will probably advance or decline with the market. Investors should use the Technical and Timeliness Ranks as complements to one another.