



City of Green Cove Springs

321 Walnut Street
Green Cove Springs, FL 32043

Phone: (904) 297-7060
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February 25, 2015

Tom Ballinger
tballing@psc.state.fl.us

Dear Mr. Ballinger:

Subject: Storm Hardening Report for City of Green Cove Springs, Florida pursuant to Rule 25-6.0343, FAC

Pursuant to Rule 25-6.0343, Florida Administrative code, attached is the Storm Hardening Report for 2014 for the City of Green Cove Springs, Florida. The attachment contains 4 pages.

Sincerely,

Mark Schultz, Director of Electric Utility
321 Walnut Street
Green Cove Springs, Florida 32043
Phone (904) 297-7092
mschultz@greencovesprings.com

City of Green Cove Springs

Storm Hardening Report to the Florida Public Service Commission Pursuant to Rule 25-6.0343, F.A.C. Calendar Year 2014

1) Introduction

- a) City of Green Cove Springs
- b) 321 Walnut Street, Green Cove Springs, FL 32043
- c) Contact information:

Mark Schultz
Director Electric Utility
Phone: 904-297-7092
Fax: 904-284-7156
Email: mschultz@greencovesprings.com



2) Number of meter served in calendar year 2014

3,886

3) Standards of Construction

- a) National Electric Safety Code Compliance

Construction standards, policies, guidelines, practices, and procedures at the City of Green Cove Springs comply with the National Electrical Safety Code (ANSI C-2) [NESC]. For electrical facilities constructed on or after February 1, 2012, the 2012 NESC applies. Electrical facilities constructed prior to February 1, 2012, are governed by the edition of the NESC in effect at the time of the facility's initial construction.

- b) Extreme Wind Loading Standards

Construction standards, policies, guidelines, practices, and procedures at the City of Green Cove Springs are guided by the extreme wind loading standards specified by Figure 250-2(d) of the 2002 edition of the NESC for new construction.

The City of Green Cove Springs is also participating in the Public Utility Research Center's (PURC) granular wind research study through the Florida Municipal Electric Association. We continue to self-audit and evaluate our system to determine any immediate needs for

system upgrades and hardening in specific areas. We will monitor the results of this research to determine the most appropriate response for system upgrades and hardening.

c) Flooding and Storm Surges

Electrical construction standards, policies, guidelines, practices, and procedures at the City of Green Cove Springs address the effects of flooding and storm surges on underground distribution facilities and supporting overhead facilities. The city lies adjacent to the St. Johns River and as such could come under the coastal category. All facilities are installed a minimum of 8 inches above the roadway with appropriate grading to prevent erosion.

The City of Green Cove Springs is also participating in the Public Utility Research Center's (PURC) study on the conversion of overhead electric facilities to underground and the effectiveness of under grounding facilities in preventing storm damage and outages through the Florida Municipal Electric Association. We continue to evaluate and address the effects of flooding and storm surge but we feel that it is important to wait for the results of this research to justify the effort and cost of converting overhead to underground.

d) Safe and Efficient Access of New and Replacement Distribution Facilities

Electrical construction standards, policies, guidelines, practices, and procedures at the City of Green Cove Springs provide for placement of new and replacement of distribution facilities so as to facilitate safe and efficient access for installation and maintenance. All new residential development is required to be of an underground feed design, even in existing overhead areas. Commercial applications require truck access to the facility and feeder main lines have already been relocated to front lot lines. All facilities are installed and accessible by crews and vehicles to ensure proper maintenance/repair is performed as expeditiously and safely as possible. The City of Green Cove Springs decides on a case-by-case basis whether existing facilities need to be relocated. If it is determined that facilities need to be relocated, they will be placed in the safest, most accessible area available.

e) Attachments by Others

Attachment policies, guidelines, practices, and procedures at the City of Green Cove Springs are covered by city ordinances and joint use agreements with CATV and telephone entities. The pole attachment agreements between the City of Green Cove Springs and third-party attachers' include language which specifies that the attacher, not the City, has the burden of assessing pole strength and safety before they attach to the pole. The City of Green Cove Springs performs follow up audits of attachments to ensure the attachment is properly installed and maintained.

4. Facility Inspections

- a) Policies, guidelines, practices, and procedures for inspecting transmission and distribution lines, poles, and structures.

The City of Green Cove Springs does not own or operate transmission facilities as defined by 69 KV and above. We continue to evaluate the benefits of an inspection program vs. accomplishing the same activity during capital improvement programs like the 4.1 kV conversion to 13.2 kV on a portion of our system during 2015.

- b) Number and percentage of transmission and distribution inspections planned and completed for 2014.

We visually inspect any distribution pole we interface with under normal maintenance work flow patterns. In 2012 we began an internal inspection program and inspected 595 poles. In 2013 we inspected another 584 poles. In 2014 we inspected 225 poles on our 4.1 kV system in preparation for a voltage conversion to 13.2 kV as well as 192 poles during routine work. In all we have inspected 1,596 of our 2,996 poles or ~53%.

- c) Number and percentage of transmission poles and structures and distribution poles failing inspection and the reason for the failure.

In 2014 we replaced 7 of the 417 poles or 1.7% of the wood poles on visual inspection.

- d) Number and percentage of transmission poles and structures and distribution poles, by pole type and class of structure, replaced or for which remediation was taken after inspection, including a description of the remediation taken.

One (1) 30 ft. Class 3 Wood pole replaced due to rot.

Three (3) 40 ft. Class 3 Wood poles replaced due to rot.

Three (3) 45 ft. Class 5 Wood poles replaced due to rot.

5. Vegetation Management

- a) Utility's policies, guidelines, practices, and procedures for vegetation management, including programs addressing appropriate planting, landscaping, and problem tree removal practices for vegetation management outside of road right-of-ways or easements, and an explanation as to why the utility believes its vegetation management practices are sufficient.

The City of Green Cove Springs contracts annually to trim 100% of our entire system three phase primary circuits including all sub-transmission and distribution feeder facilities. Problem trees are trimmed and removed as identified.

- b) Quantity, level, and scope of vegetation management planned and completed for transmission and distribution facilities.

100% of our system three phase primary circuits were trimmed in 2014. Storm related clean up and laterals were trimmed by city crews as time allowed. Scheduled trimming cycle of our system for 2015 began January 1, 2015. The Public Utility Research Center

held two vegetation management workshops in 2007 and 2009. Through FMEA, Green Cove Springs Electric Utility has a copy of the report and will use the information to continually improve vegetation management practices. We will participate in future best-practice workshops if there is industry interest.

6. Storm Hardening Research

The City of Green Cove Springs is a member of the Florida Municipal Electric Association (FMEA), which is participating with all of Florida's electric utilities in storm hardening research through the Public Utility Research Center at the University of Florida. Under separate cover, FMEA is providing the FPSC with a report of research activities. For further information, contact Barry Moline, Executive Director, FMEA, 850-224-3314, ext. 1, or bmoline@publicpower.com.