

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 2012

1) Introduction

- a) City of Green Cove Springs
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2) Number of meter served in calendar year 2012

3,803

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, 2007, the 2007 NESC applies. Electrical facilities constructed prior to February 1, 2007, 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 1) new construction; 2) major planned work, including expansion, rebuild, or relocation of existing facilities, assigned on or after December 10, 2006; and 3) targeted critical infrastructure facilities and major thoroughfares.

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 KV conversion to 13 KV on a portion of our system during 2012. For the remainder of our overhead system we plan on contracting with Osmose or another entity using the sound and bore technique to perform pole inspections on an eight year cycle.

- b) Number and percentage of transmission and distribution inspections planned and completed for 2012.

We visually inspect any distribution pole we interface with under normal maintenance work flow patterns. With the limited number of wooden poles in our system (3,015 poles), and plans to upgrade two major sections of 4 KV in the next 4 years, we will have no problem completing these inspections in an 8 year cycle. The first major section of 4KV conversion was completed in 2008, with our crews inspecting over 335 poles or 11% of our system count. In 2012 we began an internal inspection program and inspected over 595 poles or another 19% of our system. This brings our total to 30% of the entire system.

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

In 2012 we replaced 45 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.

Six (6) 30 ft Class 3 Wood poles replaced due to rot.

Ten (10) 30 ft Class 5 Wood poles replaced due to rot.

Five (5) 35 ft Class 3 Wood poles replaced due to rot.

Four (4) 35 ft Class 5 Wood poles replaced due to rot.

Nineteen (19) 40 ft Class 3 Wood poles replaced due to rot.

One (1) 45 ft Class 3 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 primary was trimmed in 2012, the balance of dollars spent on Storm related clean up and laterals. Scheduled trimming cycle of our system for 2013 will begin in the fall. 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.