

Fort Pierce Utilities Authority
Report to the Florida Public Service Commission Pursuant to
Rule 25-6.0343, F.A.C.
Calendar Year 2012

1) Introduction

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2) Number of meters served in calendar year 2012

27,363 at the end of calendar year 2012

3) Standards of Construction

a) National Electric Safety Code Compliance

Construction standards, policies, guidelines, practices, and procedures at Fort Pierce Utilities Authority 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

At this time, Fort Pierce Utilities Authority facilities are not designed to be guided by the extreme loading standards on a system-wide basis. However, Fort Pierce Utilities Authority is guided by the extreme wind loading standard NESC 2007 of 150mph for:

- a) New construction.
- b) Major planned work, including expansion, rebuilds, or relocation of existing facilities assigned on or after February 1, 2007
- c) Targeted critical infrastructure.

Fort Pierce Utilities Authority 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 Fort Pierce Utilities Authority address the effects of flooding and storm surges on underground distribution facilities and supporting overhead facilities. Fort Pierce Utilities Authority is abiding by the FEMA 100 Year Flood zone for new construction of underground facilities. As an example, Fort Pierce Utilities Authority has installed submersible vacuum switch gear, to minimize the effects of flooding and storm surges in areas susceptible to these events

Fort Pierce Utilities Authority is participating in the Public Utility Research Center's (PURC) study on the conversion of overhead electric facilities to underground and the effectiveness of undergrounding 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 Fort Pierce Utilities Authority provide for placement of new and replacement distribution facilities so as to facilitate safe and efficient access for installation and maintenance. Wherever new facilities are placed (i.e. front, back or side of property), all facilities are installed so that Fort Pierce Utilities Authority's facilities are accessible by its crews and vehicles to ensure proper maintenance/repair is performed as expeditiously and safely as possible. Fort Pierce Utilities Authority 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

Electrical construction standards, policies, guidelines, practices, and procedures at Fort Pierce Utilities Authority include written safety, pole reliability, pole loading capacity, and engineering standards and procedures for attachments by others to the utility's electric transmission and distribution poles. We inspect these attachments on an 8 year cycle.

4. Facility Inspections

a) Describe the utility's policies, guidelines, practices, and procedures for inspecting transmission and distribution lines, poles, and structures including, but not limited to, pole inspection cycles and pole selection process.

Transmission: Fort Pierce Utilities Authority has 446 transmission poles, including wood, concrete and steel. Prior to this year all 250 wood poles are inspected annually. Concrete

(106) and steel (90) poles were included in the inspection every third year to inspect the hardware, bolts and bonding on these poles and the wood poles. Wood poles are tested using the sound and bore method.

Beginning in 2012 we changed our process to inspect all transmission poles in a 3 year cycle. Each year will be a combination of one third wood poles, one third concrete and one third steel. Hardware, bolt and bonding inspection will be performed on all poles, as well as excavation, sound and bore test on wood poles during this inspection.

Distribution: Fort Pierce Utilities Authority hired OSMOSE Utility Services to perform a system wide inspection of all distribution lines, poles, and structures in December 2008. Staff believed, because of the utilities size, it was more efficient to inspect the entire distribution system every 8 years. After 3 years of monitoring our results, we changed our process to a 5 year cycle and will inspect one fifth of distribution poles every year beginning in fiscal year 2013.

b) Describe the number and percentage of transmission and distribution inspections planned and completed for 2012.

Transmission: Eighty Four (84) wood transmission poles, Thirty Five (35) concrete, and Thirty (30) Steel pole inspections were completed in 2012. This included hardware, bolt and bonding inspection as well as excavation, sound and bore test.

Distribution: Fort Pierce Utilities Authority hired OSMOSE to perform a 100% system wide inspection of all distribution lines, poles, and structures. Inspection of 12,128 wood distribution poles was completed in December 2008. Since 100% of the distribution system was inspected in 2008, no inspections were done in 2012.

See explanation in 4a above for our new process.

c) Describe the number and percentage of transmission poles and structures and distribution poles failing inspection in 2012 and the reason for the failure.

Transmission: No transmission poles failed inspection in 2012.

Distribution: There were no distribution inspections in 2012. See explanation in 4a above.

d) Describe the 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 in 2012, including a description of the remediation taken.

Transmission: No transmission poles failed inspection in 2012.

Distribution: There were no distribution inspections in 2012. See explanation in 4a above. Fort Pierce Utilities Authority continues working with ATT on their replacement program and is transferring attachments to their new poles.

After our most recent system-wide inspection completed in 2008, all problem poles identified have been repaired or replaced.

5. Vegetation Management

- a) **Describe the 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.**

Fort Pierce Utilities Authority maintains a tree trimming contract covering tree removal, power line trimming, and right-of-way clearing. The contractor performs tree trimming year round with particular attention paid to critical infrastructure in the spring preceding Hurricane season. All transmission distribution lines are trimmed on a 3-year cycle with a goal of maintaining foliage cut back to a three-year level. "Problem trees" that threaten primary distribution lines, not located within right-of-ways or easements, are also removed by the Utility on an as needed basis.

The transmission lines are patrolled annually for vegetation management. Twelve trees are identified as trees that need to be monitored. These trees are visited quarterly to ensure there is no trimming needed.

Fort Pierce Utilities Authority works with developers and suggests which species of trees may be planted under or within specified distances of any overhead utility wire or underground utilities.

The vegetation management practices are believed to be effective based upon outage history dating back to the 2004 hurricane season. During calendar years 2005 through 2012 the Utility's distribution system averaged 693 outages per year. There was an average of 40 outages per year identified as due to vegetation management issues. This represents 5.8% of outages are vegetation management related. The Fort Pierce Utilities Authority staff believes this is an indication that our vegetation management practices are sound.

- b) **Describe the quantity, level, and scope of vegetation management planned and completed for transmission and distribution facilities in 2012.**

Fort Pierce Utilities Authority plans to continue to provide resources for the same quantity, level and scope of vegetation management as in the past.

The Public Utility Research Center has held two vegetation management workshops in 2007 and 2009. Through FMEA, Fort Pierce Utilities Authority has a copy of their reports and will use the information to continually improve vegetation management practices. We will participate in future best-practice workshops if there is interest.

6. Storm Hardening Research

Fort Pierce Utilities Authority 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.