

**Homestead Energy Services
Homestead, Florida
Storm Hardening Report to the Florida Public Service
Commission Pursuant to Rule 25-6.0343, F.A.C.
Calendar Year 2015**

1) Introduction

- a) *Homestead Energy Services, Homestead, Florida*
- b) *675 N. Flagler Ave. Homestead, Florida 33030*
- c) *Jon A. Camoesas, General Foreman Ph. (305) 224-4734 Fax (305) 224-4769
jcamoesas@cityofhomestead.com*

2) Number of customers served in calendar year 2015

23,422

3) Standards of Construction

- a) National Electric Safety Code Compliance

Construction standards, policies, guidelines, practices, and procedures at Homestead Energy Services 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 Homestead Energy Services 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.

Homestead Energy Services is also participating in the Public Utility Research Center's (PURC) granular wind research study through the Florida Municipal Electric Association.

c) Flooding and Storm Surges

Electrical construction standards, policies, guidelines, practices, and procedures at Homestead Energy Services address the effects of flooding and storm surges on underground distribution facilities and supporting overhead facilities.

Homestead Energy Services 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 undergrounding facilities in preventing storm damage and outages through the Florida Municipal Electric Association

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

Electrical construction standards, policies, guidelines, practices, and procedures at Homestead Energy Services provide for placement of new and replacement distribution facilities so as to facilitate safe and efficient access for installation and maintenance.

All new residential services are in the front lot and are underground.

e) Attachments by Others

Electrical construction standards, policies, guidelines, practices, and procedures at Homestead Energy Services 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. All of these items are part of the Pole Attachment Agreements that Homestead Energy Services enters into with each attaching party.

4. Facility Inspections

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

All transmission poles are concrete.

Wooden distribution poles are inspected in accordance with standard industry guidelines including sound and bore and loading evaluations. HES employs a contractor to perform pole inspections on an eight-year cycle. All new wooden poles are CCA as are the majority of the poles currently installed in the system. Class II poles are used for new construction or for any Class IV poles that are found to be in need of replacement.

Annually, a thermographic inspection is performed on all of the feeder circuits and any problems noted are repaired. This inspection was completed in February, 2015.

- b) Number and percentage of transmission and distribution inspections planned and completed for 2015.

The entire transmission system was inspected in 2005. All transmission structures are concrete. These facilities are scheduled to be re-inspected in 2016

During the 2014/2015 Homestead did not inspect any poles as all of the poles have been inspected since 2008. The pole inspection program will continue during the 2015/2016 cycle with an inspection of approximately 15% of the system poles.

No transmission poles failed inspection in 2005. (Reference 4b)

- 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.

Transmission Poles: Not applicable, no inspections this cycle

Distribution Poles: Not applicable, no inspections this cycle

During the past year, the following pole repairs and replacements were completed based on the results of past inspections.

- *Removed thirteen (13) defective poles*
- *Removed five (5) 45 foot class 4 poles and converted to underground*
- *Reworked one (1) pole with defects*
- *Transferred facilities to three (3) storm hardened poles owned by others*
- *New installation of three (3) 55 foot class III H, one (1) 45 III H and one (1) 40 foot III H concrete poles*
- *Replaced two (2) 40 foot class 4 poles with two (2) 40 III H foot concrete poles*
- *Replaced one (1) 35 foot class 4 poles with class 2 poles*
- *Replaced five (5) 40 foot class 3 poles with class 2 poles*
- *Replaced four (4) 45 foot class 3 poles with class 2 poles*

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.

Homestead Energy Services employs a contractor for tree trimming services. Homestead's geographic area is small and it is estimated that the entire system is trimmed on a two-year cycle. The City of Homestead recently enacted Code changes that require property owners

to keep vegetation on private property trimmed to maintain six feet of clearance from HES facilities. There are no issues with vegetation management for transmission facilities.

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

See 5a.

6. Storm Hardening Research

Homestead Energy Services 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