

**Homestead Energy Services  
City of Homestead, Florida  
Storm Hardening Report to the Florida Public Service  
Commission Pursuant to Rule 25-6.0343, F.A.C.  
Calendar Year 2016**

**1) Introduction**

- a) *Homestead Energy Services, Homestead, Florida*
- b) *675 N. Flagler Ave. Homestead, Florida 33030*
- c) *Barbara S. Quiñones, Director Ph. (305) 224-4704 Fax (305) 224-4769  
bquinones@cityofhomestead.com*

**2) Number of customers served in calendar year 2016**

*23,936*

**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) **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.**

*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 or Class V 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 July, 2016.*

*Distribution pole inspections are on an 8 year cycle, with 12.5% of the population scheduled to be inspected each year. Actual inspections typically yield about a 15% inspection rate.*

*Pole selection has been done through a multi-city agreement coordinated by the Florida Municipal Power Association.*

**b) Describe the number and percentage of transmission and distribution inspections planned and completed for 2016.**

*The entire transmission system was inspected in 2005. All transmission structures are concrete. These facilities are scheduled to be re-inspected in 2017 via helicopter.*

*During the 2015/2016 Fiscal Year Homestead did not inspect any poles as 100% of the poles have been inspected since 2008. The pole inspection program will continue during the 2016/2017 cycle with an inspection of approximately 15% of the system poles.*

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

**c) Describe the number and percentage of transmission poles and structures and distribution poles failing inspection in 2016 and the reason for the failure.**

*Transmission Poles: Not applicable, no inspections this cycle*

*Distribution Poles: Not applicable, no inspections this cycle*

**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 2016, 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 ten (10) defective poles*
- *Reworked two (2) pole with defects*
- *Transferred facilities to two (2) storm hardened poles owned by others*
- *New installation of three (3) 55 foot class III H and three (3) 45 III H*
- *Replaced four (4) 35 foot class 4 poles with class 2 poles*
- *Replaced seven (7) 40 foot class 3 poles with class 2 poles*
- *Replaced fourteen (14) 45 foot class 3 poles with class 2 poles*

## **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.**

*Homestead Energy Services employs a contractor for tree trimming services, and added an additional tree trimming crew at the end of 2016. Customers are provided literature regarding trees recommended for planting near power lines as requested. 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) **Describe the quantity, level, and scope of vegetation management planned and completed for transmission and distribution facilities in 2016.**

*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 Amy Zubaly, Interim Executive Director, FMEA, 850-224-3314, ext.7, or [azubaly@publicpower.com](mailto:azubaly@publicpower.com).*