HPS
HOMESTEAD PUBLIC SERVICES
ENERGY
Community-Owned Services Since 1916

Subject: Storm Hardening Report for Homestead Energy Services (City of Homestead) pursuant to Rule 25-6.0343, FAC

Pursuant to Rule 25-6.0343, Florida Administrative Code, attached is the Storm Hardening Report for 2023 for the City of Homestead.

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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 2023

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 2023

26,558

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, 2023, the 2023 NESC applies. Electrical facilities constructed prior to February 1, 2023, 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 as specified by http://windspeed.atcouncil.org/ 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. New underground facilities are placed on ground high enough to minimize the impact of flooding.

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. Between adding new circuits and converting some overhead lines to underground, Homestead Energy Services placed 7.58 miles of primary electrical circuits underground in Fiscal Year 2023. All new facilities are installed so that Homestead Energy Services' facilities are accessible by its crews and vehicles to ensure proper maintenance/repair work is performed as expeditiously and safely as possible. Homestead Energy Services 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 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. The agreements include language which specifies that the attacher, not Homestead Energy Services, has the burden of assessing pole strength and safety before they attach to the pole. Homestead Energy Services performs follow-up audits of attachments to ensure the attachment is properly installed and maintained.

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. A drone thermographic inspection of all transmission lines was completed in late 2017. A drone inspection was completed on Line 1 in March

2019. With the advent of drone technology, Homestead Energy Services is in the planning stages to complete a drone inspection of Line II in 2024.

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, Class I or concrete poles are used for new construction or for any Class IV or Class V poles that are found to be in need of replacement. Homestead Energy Services makes the determination regarding which class of pole to be used on a case-by-case basis.

Annually, a thermographic inspection is performed on all of the feeder circuits and any problems noted are repaired. This inspection was completed in May 2023.

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.

Drone inspection on 2383 distribution poles was completed in April, 2019.

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 2023.**

All transmission structures are concrete. Drone inspections are planned for Fiscal Year 2023/24.

Pole inspections are ongoing currently with Osmose for the Fiscal Year 23/24.

Describe the number and percentage of transmission poles and structures and distribution poles failing inspection in 2023 and the reason for the failure.

No inspections were completed in 2023

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 2023, including a description of the remediation taken.**

No transmission or distribution poles were replaced or remediated in 2023 as a result of an inspection. There are a few poles that were replaced during the year which were caused by accidents or self inspection and found to be in need of replacement. These are included in the list below.

In addition, the City of Homestead was awarded a Storm Hardening Mitigation Grant from FEMA in 2021. The Mitigation Assessment identified 1560 poles to be hardened by Homestead, which replaced the need for pole inspections through 2023. The City of Homestead has replaced the following wooden lateral poles with concrete poles and distribution poles also with concrete. See list below for replacements information.

Homestead Pole Change or New Install

Pre-Existing Size and Class	New Size and Class	How many changed	Wood (W) or Concrete ©
35'/5	35'/4	6	W
40'/2	40' III H	2	C
40'/2	40' III A	24	C
40'/4	40 III H	28	C
40'/4	40' III A	231	C
40'/4	45' III G	33	C
45'/2	45' III H	19	C
45'/3	45' III H	3	C
45'/4	45' III H	141	C
Total		487	

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. As a City department, Homestead Energy Services works with Public Works and Building and Zoning to ensure that appropriate landscaping is planned in the vicinity of electrical facilities.

b) **Describe the quantity, level, and scope of vegetation management planned and completed for transmission and distribution facilities in 2023.**

The City of Homestead currently trims and maintains vegetation on a two year cycle. The utility's tree trimming contractor, Asplundh, is tasked with Homestead Energy's vegetation management process. Asplundh has a certified arborist and a state certified Commercial Applicator with experience in right of ways and vegetation management around transmission and distribution facilities on staff.

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, Executive Director, FMEA, 850-224-3314, ext. 1, or azubaly@publicpower.com.