City of Winter Park Report to the Florida Public Service Commission Pursuant to Rule 25-6.0343, F.A.C. Calendar Year 2016

1) Introduction

- a) Name of city/utility: City of Winter Park
- b) Address, street, city, zip: 401 Park Avenue South, Winter Park, FL. 32789
- c) Contact information: Name, title, phone, fax, email Mark Brown Electric Utility Department Compliance Coordinator 407-599-3457 mbrown@cityofwinterpark.org

2) Number of meters served in calendar year 2016

The City of Winter Park served a monthly average of 14403 electric customers.

3) Standards of Construction:

a) National Electric Safety Code Compliance

Construction standards, guidelines, practices, and procedures at the City of Winter Park comply with the National Electrical Safety Code (ANSI C-2) [NESC]. Electrical facilities constructed after February 1, 2007 comply with the 2007 NESC. The electrical facilities constructed prior to February 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

In January 2008, The City of Winter Park began an ambitious initiative to put its entire distribution system underground. Phase 1 was funded by \$14 million in bonds to fund the undergrounding of 9.3 miles of mainline feeder underground and provide \$2.5 million in matching funds for neighborhoods that want to participate in the funding to accelerate the undergrounding of the distribution system within their neighborhood and an additional three million per year has been budgeted for undergrounding the distribution system. The City of Winter Park requires that new residential electric services be installed underground. In 2016 the City Of Winter Park completed an estimated 6.1 miles of distribution undergrounding and to date, our distribution system is sixty percent (61.5%) underground.

The Winter Park electric distribution system was originally designed by Progress Energy Florida (PEF). When the system equipment requires replacement, the defective equipment is replaced with equivalent equipment. In some cases the City will install equipment upgrades. For instance, the City began a program to replace steel cross arms and switch arms with arms constructed of fiberglass. This has been a successful strategy to reduce the number of outages caused by animal contact and is consistent with the City's overall plans.

At this time, the City of Winter Park facilities are not designed to meet the extreme loading standards on a system wide basis. The City of Winter Park is 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

The City of Winter Park is not a coastal community and storm surges are not a major concern. Flooding was not a significant problem during the hurricanes of 2004 or subsequent tropical storms. The City of Winter Park 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 the City of Winter Park 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 City's facilities are accessible by its crews and vehicles to ensure proper maintenance/repair is performed as expeditiously and safely as possible. The City of Winter Park 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. One of the goals of the undergrounding projects is to improve accessibility by moving the back-lot line equipment out to the front of the property so that facilities are accessible from the street.

Attachments by Others

The City of Winter Park implemented a joint pole use agreement with Brighthouse Networks, Inc. during 2008 which covers the vast majority of the attachments on the City's poles. In addition, the City has attachment agreements with other utilities such as Embarq and AT&T.

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.

The City of Winter Park does not own transmission poles or lines. The City employed an outside contractor (Osmose Utility Services Inc.) to complete an inventory of distribution poles owned by the City. The initial inspection was completed in 2007. Wood pole inspections vary, three basic methods are used, and usually in combination, in order to assess the condition of a wood pole. Employees use a visual inspection and an assessment prior to climbing poles in conjunction with field work, and sounding a pole with a hammer to determine the soundness of a pole. The length of the inspection cycle is being evaluated to determine what is appropriate but it is presently planned not to exceed eight years or 12.5% per year. Replacement poles are pressure treated southern pine, and are class 1, 2, or 3.

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

The City of Winter Park does not own transmission poles or lines. The City Of Winter Park would contract for sound and bore with excavation testing remaining distribution poles. WPE employees use a visual inspection and sounding with a hammer to assess the soundness of a pole prior to climbing in conjunction with field work. The City did not contract pole inspections in 2016.

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

The City Of Winter Park did not contract pole inspections in 2016, however WPE Utility workers routinely inspect the poles that are involved with daily jobs and work orders. The City did replace one 30' class 1 wood light pole that was damaged during a seasonal storm, with a 30 'concrete light pole. The number of poles replaced is less than 1/2 of 1% of the number of poles in our system. The City's undergrounding program is eliminating many poles from our system and current practice is to replace poles that are no longer safe or serviceable or to underground that section of overhead conductor if practicable.

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.

Based on the 2007 full system inspection, all repairs and replacements have been made. The City of Winter Park routinely inspects the poles that are involved with daily jobs and work orders. Poles requiring remediation or replacement were class 1, 2, or 3 wood. Pole damage from decay or insects would be treated with chemicals to inhibit decay and discourage insects. On some restorable poles, a metal truss is recommended to reinforce the base of the pole; Winter Park Electric prefers to schedule the pole in question for replacement. Replacement poles are pressure treated southern pine, and are class 1, 2, or 3. As undergrounding projects are completed, unnecessary poles are removed.

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-ofways or easements, and an explanation as to why the utility believes its vegetation management practices are sufficient.

The City of Winter Park has hired a permanent employee to oversee the City's vegetation management program. The City's program is based on a three (3) year trim cycle, which is augmented as needed to maintain clearance between cycles. Dead and hazard trees located outside of right-of-way on private property, which present an imminent threat to power lines or equipment, are reported to the City's Urban Forester who has the authority to order the tree trimmed or removed. The City's contract language specifies that all routine trimming shall adhere to the National Arbor Day Foundation standards for Line Clearance and comply with ANSI A300 standards for tree trimming. This program of tree trimming, hazard tree and vine removals, combined with good pruning practices that direct future growth away from lines allows Winter Park Electric Utility to provide safe and reliable electrical service to customers on a day to day basis and reduces the potential for damage during storms. The Winter Park Electric Utility can see evidence of the effectiveness of its

vegetation management program by the steady improvements in the SAIDI and MAIFI reliability index.

b) Describe the quantity, level, and scope of vegetation management planned and completed for transmission and distribution facilities in 2016.

The City's vegetation management program is planned for a 3 year trimming cycle. The City has a mature, well developed canopy of Oak trees and our crews trimmed approximately 65.78 miles of distribution lines in 2016. The City believes that the quantity, level, and scope of its vegetation management are having a positive effect on production and the reliability indices for the City of Winter Park. The Public Utility Research Center has held two vegetation management workshops in 2007 and 2009. Through FMEA, The City of Winter Park Electric Utility has a copy of their reports and will use the information to continually improve vegetation management practices. We will participate in future best-practices workshops if there is interest.

6. Storm Hardening Research

The City of Winter Park Electric Utility 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 <u>azubaly@publicpower.com</u>.