City of Bushnell
Storm Hardening Report to the Florida Public Service Commission Pursuant to Rule 25-6.0343, F.A.C.
Calendar Year 2014

1) Introduction

a) Name of city/utility: City of Bushnell

b) Address, street, city, zip: P.O. Box 115, Bushnell FL. 33513

c) Contact information: Name, title, phone, fax, email: Ronda M. Cason , Utilities Programs Coordinator, 352-793-8012, 352-793-8036, rcason@cityofbushnellfl.com.

2) Number of customers served in calendar year 2014

1,161

3) Standards of Construction

a) National Electric Safety Code Compliance

Response: Construction standards, policies, guidelines, practices, and procedures at the City of Bushnell 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

Response: Construction standards, policies, guidelines, practices, and procedures at the City of Bushnell 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 October 1, 2007.

c) Flooding and Storm Surges

Response: Electrical construction standards, policies, guidelines, practices, and procedures at the City of Bushnell do not address the effects of flooding and storm surges on underground distribution facilities and supporting overhead facilities because the Utility has no infrastructure in coastal communities and is not subject to major flooding/storm surge events.

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

Response: Electrical construction practices at the City of Bushnell provide for placement of new and replacement distribution facilities so as to facilitate safe and efficient access for installation and maintenance. For example, these distribution feeders are not permitted to be placed on back lot lines or other areas having no service vehicle access.

e) Attachments by Others

Response: Electrical construction standards, policies, guidelines, practices, and procedures at the City of Bushnell do not include "written" safety, pole reliability, pole loading capacity, and engineering standards and procedures for attachments by others to the utility's electric distribution poles. New attachments are approved by knowledgeable City personnel based upon visual inspection. All existing attachments are inspected as part of the City's pole inspection program initiated in 2007, to ensure that pole loading is acceptable. An attachment audit was completed in 2014 to verify the current number and location of existing attachments on the entire distribution system.

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.

Response: All poles in the utility distribution system were visually inspected and graded by condition in 2004 as part of a project that created a GIS map and data base of the distribution system. A comprehensive periodic inspection program covering all distribution system wood poles was initiated in 2007. The program includes visual, sound and bore inspections, pole condition rating, wind loading assessment, as well as development and maintenance of an inspection data base. The program ensures that all wood poles in the distribution system are inspected at least once over a seven year cycle. All rejected poles are usually replaced within 12 months following completion of inspection.

The City of Bushnell has no transmission facilities.

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

Response: 305 wood distribution poles were inspected in 2007; 319 wood distribution poles were inspected in February, 2009; 311 poles were inspected in January, 2010 and 237 poles were inspected in May 2011 at which time 100% of the system poles had been inspected for the first 7yr inspection interval. The next pole inspection interval commenced again in 2014, during which time 313 poles were inspected.

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

Response: The number of distribution poles that failed inspection was 15, which accounts for 4.8% of the poles inspected. Four of the poles were groundline zone rejects, while eleven were pole top rejects. The four groundline rejects were from shell rot. The eleven pole top rejects consisted of ten decayed tops and one pole with excessive woodpecker damage.

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, including a description of the remediation taken.

Response: As of the date of this report, five of the fifteen (33%) poles have been replaced. The other ten (66%) are scheduled to be replaced this spring.

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.

Response: The City of Bushnell maintains a tree trimming contract covering tree removal, power line trimming, and right-of-way clearing. Tree trimming is performed by the contractor annually in the spring of the year preceding the Hurricane season. All right-of-ways are trimmed every year with a goal of maintaining foliage cut back to a three year level. Distribution lines not located on right-of-ways are trimmed by City personnel on an "as needed" basis. "Problem trees" that threaten primary distribution lines, not located within right-of-ways or easements, are also removed by the City on an as needed basis.

The City's land development regulations specify the species of trees that may be planted under or within specified distances of any overhead utility wire or underground utilities. Also specified are distances that trees may be planted from curbs and sidewalks.

The City's vegetation management practices are believed to be effective based upon outage history dating back to the 2004 hurricane season. During calendar years 2004, 2005, and 2006 combined, the City's distribution system experienced 118 outages, 11 of which were identified as due to vegetation management issues. The longest single outage was 1 hour and 15 minutes due to a vegetation management issue. Recent outage history also validates the effectiveness of the program.

b) Describe the quantity, level, and scope of vegetation management planned and completed for transmission and distribution facilities in 2014.

Response: See above response.

The Public Utility Research Center held a vegetation management conference March 5-6, 2007. Through FMEA, the City of Bushnell has a copy of the report and will use the information to continually improve vegetation management practices.

6. Storm Hardening Research

Response: The City of Bushnell 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 has provided 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.