

City of Bartow
Storm Hardening Report to the Florida Public Service Commission Pursuant
to Rule 25-6.0343, F.A.C.
Calendar Year 2012

1) Introduction

- a) Name of city/utility

City of Bartow

- b) Address, street, city, zip

450 North Wilson Avenue, Bartow, FL 33830

- c) Contact information: Name, title, phone, fax, email

Matt Culverhouse
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2) Number of meters served in calendar year 2012

11,205

3) Standards of Construction

- a) National Electric Safety Code Compliance**

Construction standards, policies, guidelines, practices, and procedures at the City of Bartow currently comply with the National Electric Safety Code (ANSI C-2) [NESC]. The City of Bartow's distribution standards were updated and made effective June 1, 2008. For electrical facilities constructed on or after July 1, 2008, the 2007 NESC applies. Electrical facilities constructed prior to July 1, 2008, were built to comply with prior editions of the NESC.

- b) Extreme Wind Loading Standards**

Construction standards, policies, guidelines, practices, and procedures at the City of Bartow are currently guided by the extreme wind loading standards specified by Figure 250-2(d) of the 2002 edition of the NESC for new construction. The City of Bartow lies within the 100-110 mph region. Wind loading standards for this region were included in the City's 2008 standards update.

c) Flooding and Storm Surges

We are not located in a coastal area. Flooding and Storm surges do not apply to the City of Bartow.

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

Electrical construction standards, policies, guidelines, practices, and procedures at the City of Bartow 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 of Bartow's facilities are accessible by its crews and vehicles to ensure proper maintenance/repair is performed as expeditiously and safely as possible. We decide 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

Currently, we have attachment agreements with the local telephone and cable providers. These agreements require that any new attachments or changes to existing attachments will be designed and executed per the NESC code in force at the time of the attachment is made. We follow up the attachments with quarterly inspections required by the PSC and make corrections as necessary.

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 Bartow has developed a policy to inspect our facilities based on an eight year cycle. We chose to elicit the help of a contractor to perform pole inspections on a percentage of our utility system. The contractor we have chosen has many years of experience in pole inspections. Each year, said contractor will receive a grouping of facilities based on age determined via the City's facility database. All facilities initially receive a visual inspection with notes made of any problems discovered. Tests are also done to identify shell rot and insect infestation. The facilities are then excavated to a depth of 18 inches while measurements are made to determine the strength remaining. All facilities passing the visual inspection and having 40 percent or greater strength remaining are treated with a life extending process and reported so. Any facilities not meeting these criteria are noted in the report for further action.

- b) Describe the number and percentage of transmission and distribution inspections planned and completed for 2012.**

In 2012, the City planned to inspect 1,500 facilities, approximately one eighth of our system. At year end, we had inspected 1,339 poles which places us slightly behind of our proposed 1,500 poles per year target. Total poles inspected during this cycle number 8,211. Considering our targeted 1,500 inspections annually over the past five years we are currently 711 poles inspected above and beyond our cycle goals.

- c) Describe the number and percentage of transmission poles and structures and distribution poles failing inspection in 2012 and the reason for the failure.**

Of the 1,339 inspections completed, 236 distribution poles, or approximately 18 percent, returned below standard results for various reasons including rotten ground decay or rotten pole top decay.

- 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 2012, including a description of the remediation taken.**

Please see the attached spreadsheet listing pole type, class, and remediation method.

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.**

We are currently on a 5 year tree trimming cycle. We try to trim out our distribution at a 6-10 foot clearance depending on the situation and type of vegetation. We have a licensed arborist on staff and currently use such practices as basal bark treatment, foliage treatment, cut-stump treatment, & herbicide application along with our regular trimming. We remove problem trees when deemed necessary by our crews or when the history of the tree reveals problems. Our reliability analysis indicates that our vegetation management practices are effective.

- b) Describe the quantity, level, and scope of vegetation management planned and completed for transmission and distribution facilities in 2012.**

We feel that a 4 year trimming cycle would be more effective for reliability purposes. We are currently planning on contracting additional line clearance personnel to get us on a 4 year cycle. This along with other vegetation management practices mentioned in 5a are and will be effective in offering great reliability to our customers for now and for years to come. Also, the Public Utility Research Center held two vegetation management

workshops in 2007 & 2009. Through FMEA, the City of Bartow has a copy of their reports and will use the information to continually improve vegetation management practices. We will participate in future best-practice workshops if there is interest.

6. Storm Hardening Research

The City of Bartow 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.

City of Bartow Pole Replacement Report

Poles Replaced 2-29-12 thru 2-12-13

<u>Facility ID</u>	<u>Pole Length/Class</u>	<u>Pole Type</u>	<u>Remediation</u>
NN	30/5	Southern Pine	Replaced
11103	30/5	Southern Pine	Replaced
10216	30/5	Southern Pine	Replaced
10207	30/5	Southern Pine	Replaced
6538	30/5	Southern Pine	Replaced
8560	30/5	Southern Pine	Replaced
NN	30/5	Southern Pine	Replaced
8352	30/5	Southern Pine	Replaced
11727	30/5	Southern Pine	Replaced
10046	35/4	Southern Pine	Replaced
8349	35/4	Southern Pine	Replaced
4990	35/5	Southern Pine	Replaced
760	35/5	Southern Pine	Replaced
8350	35/5	Southern Pine	Replaced
8351	35/5	Southern Pine	Replaced
8343	35/5	Southern Pine	Replaced
8533	35/5	Southern Pine	Replaced
9439	35/5	Southern Pine	Replaced
398	40/4	Southern Pine	Replaced
10230	40/4	Southern Pine	Replaced
752	40/4	Southern Pine	Replaced
10364	40/4	Southern Pine	Replaced
9267	40/4	Southern Pine	Replaced
404	40/4	Southern Pine	Replaced
10309	40/5	Southern Pine	Replaced
11118	40/5	Southern Pine	Replaced
953	40/5	Southern Pine	Replaced
11100	40/5	Southern Pine	Replaced
11102	40/5	Southern Pine	Replaced
954	40/5	Southern Pine	Replaced
957	40/5	Southern Pine	Replaced
948	40/5	Southern Pine	Replaced
950	40/5	Southern Pine	Replaced
2655	40/5	Southern Pine	Replaced
10217	40/5	Southern Pine	Replaced
10200	40/5	Southern Pine	Replaced
10215	40/5	Southern Pine	Replaced
945	40/5	Southern Pine	Replaced
10214	40/5	Southern Pine	Replaced
10212	40/5	Southern Pine	Replaced
10210	40/5	Southern Pine	Replaced
10211	40/5	Southern Pine	Replaced
1769	40/5	Southern Pine	Replaced

11115	40/5	Southern Pine	Replaced
11117	40/5	Southern Pine	Replaced
10209	40/5	Southern Pine	Replaced
1768	40/5	Southern Pine	Replaced
11114	40/5	Southern Pine	Replaced
10202	40/5	Southern Pine	Replaced
947	40/5	Southern Pine	Replaced
10203	40/5	Southern Pine	Replaced
956	40/5	Southern Pine	Replaced
951	40/5	Southern Pine	Replaced
10206	40/5	Southern Pine	Replaced
10205	40/5	Southern Pine	Replaced
265	40/5	Southern Pine	Replaced
10042	40/5	Southern Pine	Replaced
10059	40/5	Southern Pine	Replaced
2130	40/5	Southern Pine	Replaced
1858	40/5	Southern Pine	Replaced
10424	40/5	Southern Pine	Replaced
511	40/5	Southern Pine	Replaced
10151	40/5	Southern Pine	Replaced
10146	40/5	Southern Pine	Replaced
10150	40/5	Southern Pine	Replaced
10357	40/5	Southern Pine	Replaced
10355	40/5	Southern Pine	Replaced
10145	40/5	Southern Pine	Replaced
10152	40/5	Southern Pine	Replaced
10156	40/5	Southern Pine	Replaced
8936	40/5	Southern Pine	Replaced
2584	40/5	Southern Pine	Replaced
744	40/5	Southern Pine	Replaced
746	40/5	Southern Pine	Replaced
11340	40/5	Southern Pine	Replaced
11000	40/5	Southern Pine	Replaced
11012	40/5	Southern Pine	Replaced
526	40/5	Southern Pine	Replaced
734	40/5	Southern Pine	Replaced
10374	40/5	Southern Pine	Replaced
8346	40/5	Southern Pine	Replaced
1628	40/5	Southern Pine	Replaced
10363	40/5	Southern Pine	Replaced
10370	40/5	Southern Pine	Replaced
9211	40/5	Southern Pine	Replaced
10307	45/4	Southern Pine	Replaced
10857	45/4	Southern Pine	Replaced
10856	45/4	Southern Pine	Replaced
8347	45/4	Southern Pine	Replaced
9203	45/4	Southern Pine	Replaced
1102	45/4	Southern Pine	Replaced
9483	45/4	Southern Pine	Replaced
10306	45/5	Southern Pine	Replaced

949	45/5	Southern Pine	Replaced
939	45/5	Southern Pine	Replaced
10693	45/5	Southern Pine	Replaced
1308	45/5	Southern Pine	Replaced
10842	50/3	Southern Pine	Replaced
10305	50/4	Southern Pine	Replaced