

**City of Bartow**  
**Storm Hardening Report to the Florida Public Service Commission Pursuant**  
**to Rule 25-6.0343, F.A.C.**  
**Calendar Year 2020**

**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

Roger Murphy  
Interim Assistant Director of Electric Utilities  
Phone: (863) 534-0142, Fax (863) 534-7196  
Email: rmurphy.electric@cityofbartow.net

**2) Number of meters served in calendar year 2020**

12,377

**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 September 1, 2016, the 2017 NESC applies. Electrical facilities constructed prior to September 1, 2016, 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 as specified in the 2017 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 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 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.**

In 2008 the City of Bartow developed a plan 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.

In 2016 the City began round two of our eight-year pole inspection cycle and elected to perform pole inspections every other year for the years to follow.

- b) Describe the number and percentage of transmission and distribution inspections planned and completed for 2020.**

In 2020, the City continued another round of our second inspection cycle by inspecting 1330 facilities, approximately one eighth of our system. At the completion of this inspection period, we had inspected 1330 poles which is one hundred percent completion of our goal.

- c) Describe the number and percentage of transmission poles and structures and distribution poles failing inspection in 2020 and the reason for the failure.**

Of the 1330 inspections completed, 220 distribution poles, or approximately 16 percent, returned below standard results for various reasons including, but not limited to, ground decay, rotten pole, shell rot, split top, woodpecker holes and 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 2020, 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 4-year tree trimming cycle. We trim out our distribution at a 6 to 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 2020.**

We feel that a 4-year trimming cycle is effective for reliability purposes. We are currently contracting additional line clearance personnel to keep 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 Amy Zubaly, Executive Director, FMEA, 850-224-3314, ext. 1001, or [azubaly@publicpower.com](mailto:azubaly@publicpower.com).

# City of Bartow Pole Remediation Report

## Poles Replaced - Calendar Year 2020

Facility ID	Pole Length/Class	Pole Type	Remediation
12749	30-5	Southern Pine	Replaced
8645	30-5	Southern Pine	Replaced
3132	30-5	Southern Pine	Replaced
7423	30-5	Southern Pine	Replaced
9907	30-5	Southern Pine	Replaced
NN	30-5	Southern Pine	Replaced
10785	30-5	Southern Pine	Replaced
6302	30-5	Southern Pine	Replaced
11783	30-5	Southern Pine	Replaced
11785	30-5	Southern Pine	Replaced
5706	30-5	Southern Pine	Replaced
20101	30-5	Southern Pine	Replaced
6783	30-5	Southern Pine	Replaced
8382	30-5	Southern Pine	Replaced
9585	30-5	Southern Pine	Replaced
11334	30-5	Southern Pine	Replaced
12214	30-5	Southern Pine	Replaced
12926	30-5	Southern Pine	Replaced
11101	30-5	Southern Pine	Replaced
9320	30-5	Southern Pine	Replaced
3171	30-5	Southern Pine	Replaced
7716	30-5	Southern Pine	Replaced
12227	35-5	Southern Pine	Replaced
301	35-5	Southern Pine	Replaced
8105	35-5	Southern Pine	Replaced
11426	35-5	Southern Pine	Replaced
11427	35-5	Southern Pine	Replaced
12217	35-5	Southern Pine	Replaced
NN	35-5	Southern Pine	Replaced
624	35-5	Southern Pine	Replaced
9070	35-5	Southern Pine	Replaced
NN	35-5	Southern Pine	Replaced
19190	40-5	Southern Pine	Replaced
302	40-5	Southern Pine	Replaced
7836	40-5	Southern Pine	Replaced
12327	40-5	Southern Pine	Replaced
9005	40-5	Southern Pine	Replaced
1606	40-5	Southern Pine	Replaced

1127	40-5	Southern Pine	Replaced
439	40-5	Southern Pine	Replaced
12283	40-5	Southern Pine	Replaced
1016	40-5	Southern Pine	Replaced
1415	40-5	Southern Pine	Replaced
3046	40-5	Southern Pine	Replaced
9317	40-5	Southern Pine	Replaced
5285	40-5	Southern Pine	Replaced
5702	40-5	Southern Pine	Replaced
1559	40-5	Southern Pine	Replaced
3567	40-5	Southern Pine	Replaced
5216	40-5	Southern Pine	Replaced
618	40-5	Southern Pine	Replaced
12216	40-5	Southern Pine	Replaced
249	40-5	Southern Pine	Replaced
1631	40-5	Southern Pine	Replaced
240	40-5	Southern Pine	Replaced
897	40-5	Southern Pine	Replaced
10959	40-5	Southern Pine	Replaced
10957	40-5	Southern Pine	Replaced
NN	40-5	Southern Pine	Replaced
NN	40-5	Southern Pine	Replaced
823	40-5	Southern Pine	Replaced
3064	40-5	Southern Pine	Replaced
3001	40-5	Southern Pine	Replaced
3003	40-5	Southern Pine	Replaced
10501	40-5	Southern Pine	Replaced
513	45-3	Concrete	Replaced
1573	45-4	Southern Pine	Replaced
10243	45-4	Southern Pine	Replaced
12225	45-4	Southern Pine	Replaced
1278	45-4	Southern Pine	Replaced
7699	45-4	Southern Pine	Replaced
10754	45-4	Southern Pine	Replaced
9321	45-4	Southern Pine	Replaced
5544	45-4	Southern Pine	Replaced
1581	45-4	Southern Pine	Replaced
498	45-4	Southern Pine	Replaced
10740	45-4	Southern Pine	Replaced
11708	45-4	Southern Pine	Replaced
1666	45-4	Southern Pine	Replaced
393	45-4	Southern Pine	Replaced
10996	45-4	Southern Pine	Replaced
10767	45-4	Southern Pine	Replaced
11609	45-4	Southern Pine	Replaced

10755	45-4	Southern Pine	Replaced
10768	45-4	Southern Pine	Replaced
11608	45-4	Southern Pine	Replaced
20020	45-4	Southern Pine	Replaced
11242	45-4	Southern Pine	Replaced
540	45-4	Southern Pine	Replaced
538	45-4	Southern Pine	Replaced
11643	45-4	Southern Pine	Replaced
11259	45-4	Southern Pine	Replaced
4452	45-4	Southern Pine	Replaced
11518	45-4	Southern Pine	Replaced
11647	45-4	Southern Pine	Replaced
11615	45-4	Southern Pine	Replaced
11670	45-4	Southern Pine	Replaced
5357	50-3	Southern Pine	Replaced
5358	50-3	Southern Pine	Replaced
5609	50-3	Southern Pine	Replaced
779	50-3	Southern Pine	Replaced
1520	50-3	Southern Pine	Replaced
7046	50-3	Southern Pine	Replaced
10554	50-3	Southern Pine	Replaced
5611	50-3	Southern Pine	Replaced
5072	50-3	Southern Pine	Replaced
5629	50-3	Southern Pine	Replaced
10434	50-3	Southern Pine	Replaced
10555	50-3	Southern Pine	Replaced
10525	50-3	Southern Pine	Replaced
484	50-3	Southern Pine	Replaced
11716	50-3	Southern Pine	Replaced