CITY OF MOUNT DORA
PUBLIC WORKS AND UTILITIES

City Hall
510 N. Baker St.
Mount Dora, FL 32757

Office of the City Manager
352-735-7126
Fax: 352-735-4801

Finance Department
352-735-7118
Fax: 352-735-1406

Human Resources
352-735-7106
Fax: 352-735-9457

Planning and Development
352-735-7112
Fax: 352-735-7191

City Hall Annex
900 N. Donnelly St.
Mount Dora, FL 32757

Parks and Recreation
352-735-7183
Fax: 352-735-3681

Public Safety Complex
1300 N. Donnelly St.
Mount Dora, FL 32757

Police Department
352-735-7130
Fax: 352-383-4623

Fire Department
352-735-7140
Fax: 352-383-0881

Public Works Complex
1250 N. Highland St.
Mount Dora, FL 32757
352-735-7151
Alt. Tel: 352-735-7105
Fax: 352-735-1539
Alt. Fax: 352-735-2892

W. T. Bland Public Library
1995 N. Donnelly St.
Mount Dora, FL 32757
352-735-7180
Fax: 352-735-0074

Website:
www.cityofmountdora.com

VIA EMAIL (pbuys@psc.state.fl.us)

February 20, 2024

Penelope Buys
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850
Email: pbuys@psc.state.fl.us

Subject: Storm Hardening Report for City of Mount Dora, pursuant to Rule 25-6.0343, FAC

Dear Ms. Buys:

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

The City is submitting this report to you via email and electronically through the PSC Clerk's office as well.

https://secure.floridapsc.com/ClerkOffice/EfilingPublic

Please verify receipt of this report by an email response to me at my email address shown below.

If you have any questions, feel free to contact me.

Very truly yours,

Steve Langley
Electric Utility Director

Phone: (352) 735-7155, x1815
Email: langleys@cityofmountdora.com

City of Mount Dora Report to the Florida Public Service Commission Pursuant to Rule 25-6.0343, F.A.C.
Calendar Year 2023

1) Introduction

a) City of Mount Dora

b) 900 North Donnelly Street
Mount Dora, FL 32757

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

Mr. Steve Langley
Electric Utility Director
Phone: (352) 735-7155, ex 1815
Fax: (352) 735-1539
Email: langleys@cityofmountdora.com

2) Number of meters served in calendar year 2023

The City of Mount Dora has approximately 6142 customers.

3) Standards of Construction

a) National Electric Safety Code Compliance

Construction standards, policies, guidelines, practices, and procedures at the City of Mount Dora comply with the National Electrical Safety Code (NESC), (ANSI C-2). For electrical facilities constructed on or after January 1, 2017, the 2017 NESC applies. The edition of the NESC in effect at the time of the facility's initial construction governs electrical facilities constructed prior to January 1, 2017.

b) Extreme Wind Loading Standards

Construction standards, policies, guidelines, practices, and procedures at the City of Mount Dora are guided by the extreme wind loading standards as specified by *http://windspeed.atcouncil.org/* as recommended by the NESC for:

a) New construction.
b) Major planned work, including expansion, rebuild, or relocation of existing facilities, assigned on or after December 10, 2006.
c) Targeted critical infrastructure facilities and major thoroughfares.

c) Flooding and Storm Surges

The City of Mount Dora is in the process of evaluating our standards, policies, guidelines, practices and procedures that address the effects of flooding and storm surges on underground facilities and supporting overhead facilities. Through the Florida Municipal Electric Association, The City of Mount Dora participates 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. We continue to evaluate and address the effects of flooding and storm surge but we feel that it is important to wait for the results of this research to justify the effort and cost of converting overhead to underground. The City is a non-coastal utility, however recognizes many of the Lakes and Drainage within our service territory have potential within these issues.

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

Electrical construction standards, policies, guidelines, practices, and procedures at the City of Mount Dora 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 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 the City of Mount Dora include written safety, pole reliability, and designate compliance to pole loading capacity, and engineering standards and procedures for attachments by others to the utility's electric transmission and distribution poles. We inspect these attachments on an 8 year cycle.

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 electric system consists of distribution lines, poles, and structures – it owns no transmission facilities. Since its service territory is relatively small, the Electric Department has been able to make visual inspections of its six distribution feeders on an annual basis. Wood poles are visually inspected for cracks and a sounding technique is used to determine potential wood rot. On December 5, 2017, the City engaged a contractor to inspect and treat all wood poles in the electric service territory. This project was completed in 2019 and the City used the inspection results to establish a replacement priority. The City also makes comprehensive field inspections of its distribution lines, poles, and structures. The program consists of an annual field inspection of all six of the City's six distribution feeders, documented with a field report that identifies the following situations:

1. Pole Maintenance Items
2. Vegetation Maintenance
3. Transformer Maintenance
4. CATV Joint Use Attachment
5. Communications Joint Use Attachment

Once the field inspection reports have been completed, City staff goes back to each pole and makes the identified repairs. The City typically schedules the annual field inspections during the first quarter to enable a majority of repairs to be completed before hurricane season. If a third-party pole attachment appears damaged or does not meet NESC clearance requirements, the City notifies the respective party in writing.

To supplement the annual field inspections, the City makes additional inspections before the arrival of adverse weather events, such as hurricanes and tropical storms. The pre-storm inspections utilize the same inspection form as the annual field inspection. Some of the City's distribution lines are attached to 69 kV transmission poles owned by Duke Energy. Any observed problems with the transmission poles are reported directly to Duke Energy. The City utilizes a GIS mapping system for its electric distribution system. The GIS system is now being used to map and manage all of the City's distribution facilities including wood and concrete poles, attached hardware, pole attachments by other entities, and underground electrical facilities.

The City also makes comprehensive field inspections of its distribution lines, poles, and structures. The program consists of an annual field inspection of all six of the City's six distribution feeders, documented with a field report that identifies and reports resolution to any anomalies detected.

b) Describe the number and percentage of transmission and distribution inspections planned and completed for 2023.

The City completed its annual field inspections of its six distribution system during 2023. The City owns no transmission facilities so no inspections were made.

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

Pole inspections are conducted by the City on an eight (8) year cycle. The past inspection during 2017 all poles were inspected with corrective measures being complete. The next inspection is planned in 2025.

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.

The City remediated all of the issues identified in the annual field inspection and has replaced installed additional poles shown in the data below.

The City attaches its distribution circuits to certain Duke Energy 69 kV transmission poles that are within the City's electric service area. Of the 90 transmission poles, 34 are wood. Duke Energy has an on-going program of replacing its older wood poles with steel poles. While these transmission poles are not owned by the City, the pole replacement program improves the ability of the City's distribution system to better withstand storm events since its distribution circuits attach to the poles. Moreover, hardening the two Duke Energy 69 kV transmission circuits that feed the Mount Dora Substation improves overall reliability.

The following table lists all wood poles that were replaced / installed with concrete, fiberglass, or steel poles in 2023:

	Number of Poles at 1/01/22				Wood Pole Replacements	Added Poles	Removed Poles	Number of Poles at 12/30/2023	
Description	Original Count	Inventory Adjustment[1]	Revised Count	% of Total Poles	Count	Count	Count	Count	% of Total Poles
Wood Poles									
25 foot	143	0	143	4.9%				143	4.9%
30 foot	638	0	638	21.9%				638	21.7%
35 foot	39	0	39	1.3%				39	1.3%
40 foot	443	0	443	15.2%		2		445	15.1%
45 foot	453	0	453	15.5%				453	15.4%
50/55 foot	0	0	0	0.0%				0	0.0%
Duke Energy Transmission[2]	34	0	34	1.2%				34	1.2%
Total Wood Poles	1,750	0	1,750	60.0%	0	2	0	1,752	59.6%
Concrete/Fiberglass/Steel Poles									
30 foot	469	0	469	40.1%	5	1		475	39.9%
35 foot	0	0	0	0.0%				0	0.0%
40 foot	229	0	229	19.6%	6			235	19.7%
45 foot	387	0	387	33.1%	9			396	33.3%
50/55 foot	28	0	28	2.4%				28	2.4%
Duke Energy Transmission[2]	56	0	56	4.8%				56	4.7%
Total Concrete/Fiber/Steel	1,169	0	1,169	40.0%	20	1	0	1,190	40.4%
Total Poles:	2,919	0	2,919	100.0%	20	3	0	2,942	100.0%

(1) The number of poles in the table were adjusted to reflect field inventory updates for the GIS mapping system.
(2) Duke Energy Transmission Poles within the City's electric service area.

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.

The City's Electric Division trims trees on a 24 month cycle using an outside contractor with a two-man crew working 40 hours per week. This contractor focuses on clearing vegetation that could adversely impact the reliability of the City's electric distribution system and to insure compliance with the NESC. In addition to the contractor crew, the City employs one two-man crew that is continuously trimming trees and reducing vegetative growth throughout other parts of the City. In some situations, the City crew assists the contractor crew in trimming or removing large trees.

The City routinely removes limbs from trees located outside road right-of-ways or easements that could create clearance problems for its overhead distribution circuits. The City has also removed entire trees in such locations if those trees threaten overhead distribution circuits (usually dead trees in danger of falling).

The City believes that its vegetation management practices result in high reliability because it trims trees on a 24 month cycle, which is much more frequent than the practices of other Florida electric utilities. The City owns no transmission facilities.

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

The City Electric Division trimmed approximately 20 miles of distribution lines in maintaining a 24 month cycle. An outside contractor with a two-man crew working 40 hours per week. The City also removed limbs from trees located outside road right-of-ways or easements that could create clearance problems for its overhead distribution circuits. The City owns no transmission facilities

6. Storm Hardening Research

The City of Mount Dora 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 will provide the FPSC with a report of research activities. For further information, contact Amy Zubaly, Executive Director, FMEA, 850-224-3314, ext. 1001, or azubaly@flpublicpower.com.