

**City of Ocala Utility Services
Report to the Florida Public Service Commission Pursuant to
Rule 25-6.0343, F.A.C.
Calendar Year 2014**

1) Introduction

- a) **Ocala FL/ City of Ocala Utility Services**
- b) **1805 NE 30th Ave, Bldg. 400, Ocala, FL 34470**
- c) **David Anderson, Regulatory Manager, Office: (352) 351-6693, Fax: (352) 351-6630**

2) Number of meters served in calendar year 2014

City of Ocala Utility Services has a total electric service territory of 162 sq. miles and serves a total of 48,875 metered Electric Customers

Customer Break down:

Residential Customers	40,569
General Service Customers	7,331
General Service Demand Customers	975

3) Standards of Construction

a) National Electric Safety Code Compliance

City of Ocala Utility Services standards, policies, guidelines, practices and procedures comply with the NESC. For electric facilities constructed on or after February 1, 2012, the 2012 NESC applies. Electric facilities constructed prior to February 1, 2012 are governed by the NESC edition in effect at the time of their construction. On December 18, 2007, the City of Ocala passed an ordinance requiring all electrical facilities for new developments to be designed and installed using underground construction methods. This ordinance will help lessen exposure to wind damage, and speed restoration efforts after future storm events.

b) Extreme Wind Loading Standards

City of Ocala Utility Services standards, policies, guidelines, practices and procedures comply with the extreme wind loading standards of the NESC for:

- a. New Construction.
- b. Expansion, rebuild, or relocation of existing facilities.

The City of Ocala passed an ordinance on December 18, 2007 requiring electric distribution facilities for new developments to be underground. This ordinance will help lessen exposure to wind damage, and speed restoration efforts after future storm events.

c) Flooding and Storm Surges

Ocala is located 80 miles from the west coast of Florida and is not subject to storm surge and has limited exposure to flooding. Both the City of Ocala and Marion County require new developments to provide water retainage for 100 year, 24 hour events. The previous standard was a 10 year, 24 hour event. City of Ocala Utility Services practices do not allow poles and underground equipment within retention areas, swales or other flood prone areas. Where flooding occurs, Ocala evaluates the facilities for relocation to less flood prone areas.

City of Ocala Utility Services 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

Electric construction standards, policies, guidelines, practices, and procedures at the City of Ocala Utility Services provide for placement of new and replacement distribution facilities so as to facilitate safe and efficient access for installation and maintenance. Our policy is to install all new overhead and underground facilities adjacent to right-of-way or paved areas to allow for access.

e) Attachments by Others

City of Ocala Utility Services requires attachment agreements with all third-party attachees on its poles and requires permits for all new attachments. The permits include information for City of Ocala Utility Services to evaluate the impact of the attachment on pole loading. City of Ocala Utility Services is evaluating all new pole attachments for their impact to pole loading and compliance with the NESC. In addition, as part of our pole inspection cycle, City of Ocala Utility Services evaluates the impact of third party attachments as part of that inspection.

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.

Our policy and primary purpose is to be consistent with the Florida Public Service Commission's rules for wood pole inspections and to provide pole restoration where it is economically feasible. Currently we support an eight-year inspection cycle of our system. Our guidelines are selected on geographical areas based on the age of our poles. Practices and Procedures include Above-Ground Inspection, Excavation, Sounding, Boring, Chipping,

Internal Treatment, and Evaluation of each pole to determine remaining strength and reject criteria along with pole loading estimates.

b) Describe the number and percentage of transmission and distribution inspections planned and completed for 2014.

The following two tables show distribution and transmission poles inspected by year for the current 8 year inspection cycle. Since 100% of the transmission poles were inspected in 2007, transmission poles will not be inspected again until the start of our next 8 year inspection cycle (2015).

YEAR	TOTAL NUMBER OF DISTRIBUTION POLES ¹	POLES INSPECTED	% OF TOTAL DISTRIBUTION POLES INSPECTED
2007	28,000	2,056	6.19
2008	31,682	4,594	13.83
2009	31,573	3,150	9.49
2010	32,489	6,457	19.44
2011	31,950	4,592	13.82
2012	31,906	6,622	20.75
2013 ²	32,424	4,953	15.27
2014 ²	31,557	100% Completed in 2013	
TOTALS		32,424	100%

¹ The total number of poles and inspection percentages change each year based on system growth and shrinkage.

² All poles have been inspected at least once. OUS has re-inspected some poles.

YEAR	TOTAL NUMBER OF TRANSMISSION POLES	POLES INSPECTED	% OF TOTAL POLES INSPECTED
2007	672	672	100
2008	100% Completed in 2007		

c) Describe the number and percentage of transmission poles and structures and distribution poles failing inspection in 2014 and the reason for the failure.

The following two tables show rejection rates and reason for failure for distribution and transmission poles (transmission poles will be inspected again in 2015).

YEAR	NUMBER OF DISTRIBUTION POLES REJECTED ³	REJECT %	REASON FOR FAILURE
2007	180	8.8	SHELL ROT/DECAYED TOP
2008	480	10.4	SHELL ROT/DECAYED TOP
2009	381	12.1	SHELL ROT/DECAYED TOP
2010	612	9.5	SHELL ROT/DECAYED TOP
2011	502	10.9	SHELL ROT/DECAYED TOP
2012	802	12.1	SHELL ROT/DECAYED TOP
2013	278	5.6	SHELL ROT/DECAYED TOP
2014	100% Completed in 2013		
TOTALS	3,235	9.8	

³ Rejected poles include poles identified for mitigation by bracing, pole replacement or other field actions as necessary to assure pole integrity sufficient with storm hardening.

YEAR	NUMBER OF TRANSMISSION POLES REJECTED*	REJECT %	REASON FOR FAILURE
2007	35	5.21	SHELL ROT/DECAYED TOP
2007	61	9.08	OVERLOADED
2008	100% Completed in 2007		
2009	100% Completed in 2007		
2010	100% Completed in 2007		
2011	100% Completed in 2007		
2012	100% Completed in 2007		
2013	100% Completed in 2007		
2014	100% Completed in 2007		

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 2013, including a description of the remediation taken.

The following tables show distribution poles braced and replaced, transmission poles braced and replaced, distribution poles replaced by height and class and distribution poles braced by height and class.

Distribution Poles Braced, Replaced/Mitigated by Year				
YEAR	NUMBER OF POLES BRACED	NUMBER OF POLES REPLACED	% OF REJECTED POLES BRACED	% OF REJECTED POLES REPLACED
2007	80	100	44	56
2008	142	338	29.6	70.4
2009	109	272	28.6	71.4
2010	130	482	21.2	78.8
2011	47	455	8.6	91.4
2012	102	700	12.7	87.2
2013	18	260	6.5	93.5
2014 ⁴	Field Work Completed Is Reflected in Previous Years' Numbers			
TOTALS	628	2,607		

⁴The rejection data represents poles identified in a given inspection year. In order to complete inspection work ahead of the 8 year cycle, and to allow for needed remediation time, OUS made a very substantial effort in 2012 & 2013 to accelerate the inspection work, and allow for overall inspection work completion in 2013. OUS has completed 100% of pole inspections and bracing remediation. However, as part of the 2014 re-inspection work, there may be some additional pole mitigation work spread across both 2014 & 2015, to complete field work on poles identified in the inspection process, and reported here.

Transmission Poles Braced and Replaced by Year⁵				
YEAR	NUMBER OF POLES BRACED	NUMBER OF POLES REPLACED	% OF POLES BRACED	% OF POLES REPLACED
2007	65	31	67.71	32.29

⁵ Transmission pole bracing & replacement is 100% complete.

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 of Ocala Utility Services is required by the Florida Reliability Coordinating Council (FRCC) to submit an annual Transmission Vegetation Management Plan (TMVP), which must provide specific allowable distances, work methods, practices, and an annual work schedule for all transmission over 200kV.

A staff Utility Arborist is employed to plan and coordinate the work schedule and make contact with adjacent property owners when problem and hazard trees are identified along the 13 mile 230kV Transmission easement corridor, and over the Distribution System.

The work set forth in the work schedule is completed using a combination of manual, machinery, and chemical control methods performed by professional contractors and/or the City of Ocala’s four (4) man in-house Tree crew.

The Utility’s in-house Tree Crew performs most new construction clearing and tree related emergency response work required by the Utility. Additionally they perform demand work including pruning or removal of problem and hazard trees, customer requests, hotspot work, and routine vegetation maintenance.

A professional tree company is contracted primarily to perform routine vegetation maintenance over approximately one third of the entire distribution system annually. The contract contains Specifications set forth to ensure quality tree work and designated clearances as discussed during FMEA Storm Hardening research meetings.

Ocala Utility Services applies annually for Tree Line USA designation, which has been awarded for the past 12 years by the Arbor Day Foundation and Florida Forest Service.

Designation is based on the Utility following guidelines set forth in ANSI A300, and includes requirements for annual crew training, quality pruning and integrated vegetation management, as well as participating in a tree planting program, an Arbor Day celebration, and providing customer education.

All pruning is required to conform to the guidelines set forth in the ISA’s Best Management Practices “Utility Pruning of Trees” and the ANSI A300 Standards, and is overseen by an ISA Certified Arborist/ Utility Specialist on staff who provides information and guidance to Utility personnel, plans and participates in the Arbor Day Festival, and oversees line clearance operations as well as providing education and training to utility tree crews.

The City's Tree Ordinance (included in the City of Ocala Land Development Regulations) contains wording requiring specific planting distances from utility lines that depend on species natural growth habits. The City Planning Department uses these as a guide when approving site development plans.

In 2006 the Utility renewed its' affiliation with the American Public Power Association and committed to budget for a "Remove and Replace" tree voucher program. The program addresses problem and hazard trees on property adjacent to utility easements by providing removal services, and rewarding customers who cooperate with replacement vouchers and educational materials as an incentive.

In 2007, and again in 2009, FMEA and the Public Utility Research Center University of Florida held a vegetation management conference for the purpose of developing a guideline for "Best Practices in Vegetation Management". City of Ocala Utility Services staff Utility Arborist participated in the conferences and possesses copies of these reports, which are used to continually improve the vegetation management practices at the City of Ocala Utility.

In 2011 it was noted that many of tree related outages were caused by overhanging limbs, which had clearance, but broke off onto the lines. In response contract tree crews were instructed to reduce or remove all accessible overhanging limbs, and wording to that end was added to the Tree Trimming Contract that was put out to bid in February 2012.

As overhang is reduced and problem and hazard trees mitigated, tree related outages will inevitably become less problematic during afternoon storms and high wind events; as new plantings are thoughtfully planned, and proper pruning practices applied the overall health of the tree canopy near the lines will gradually improve, so that damage during future major storms should be greatly reduced.

In 2013 OUS launched a plan to reclaim the utility's easements in areas that had become problematic for a variety of reasons from access issues to canopy road designation. The new plan is being executed with the cooperation of local authorities in the interest of improving the reliability of electrical service system wide.

Recent storm outage numbers appear to indicate some success, and should continue to improve as the plan is carried out over the entire system.

In January 2013, a hazardous tree was identified during a windy weather event, that was immediately endangering OUS's 230kV transmission line. The large oak tree, having a very large crack in the central trunk, appeared close to falling into the line, potentially risking life & safety of area residents, as well as the reliability of electric service transmission to a substantial part of OUS's service territory. OUS immediately activated its Hazardous Tree procedures, systematically de-energized the 230kV line, obtained safe working line clearance, and removed the hazard tree (with the property owner's cooperation), and placed the 230kV line quickly back in service. This was a demonstration of OUS's plans and procedures for dealing with problem tree removal, outside of right-of-ways.

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

The Utility consists of approximately 1000 miles of lines; 766 miles are overhead primary, 84 miles transmission lines include 69kV that is mostly contiguous with under-built primary, and 13 miles of designated 230kV easement. Approximately one third of the system is scheduled for trimming annually.

In 2011 over 6 miles of the 13 mile 230kV transmission easement was cleared to new construction clearances as well as over 200 miles of primary/ 69kV transmission lines.

The annual work schedule for 2013 included a combination of trimming, mowing, and herbicide. Approximately 5 miles, or 1/3rd of the 230kV easement, and over 200 miles of primary/69kV lines were cleared.

In 2014, the 13 miles of 230kV transmission easement was maintained/cleared to the new construction clearances established in 2011. This included mowing of the entire 13 mile easement, as well as preventive chemical treating of identified areas of concern throughout the 230kV easement. Over 200 miles of primary/69kV lines were also cleared as part of the 3-year vegetation management cycle.

The annual work plan for 2015 includes clearing 1/3rd of both distribution and transmission system as described above, which is in line with the best management practices for utility line clearance.

6. Storm Hardening Research

City of Ocala Utility Services 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.