

**City of Ocala Utility Services**  
**Report to the Florida Public Service Commission Pursuant to**  
**Rule 25-6.0343, F.A.C.**  
**Calendar Year 2013**

**1) Introduction**

- a) **Ocala FL/ City of Ocala Utility Services**
- b) **1805 NE 30<sup>th</sup> 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 2013**

City of Ocala Utility Services has a total electric service territory of 160.2 sq. miles and serves a total of 48,456 metered Electric Customers

**Customer Break down:**

Residential Customers	40,187
General Service Customers	7,304
General Service Demand Customers	965

**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 2013.**

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.

YEAR	TOTAL NUMBER OF DISTRIBUTION POLES <sup>1</sup>	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	32,424	4,953	15.27
TOTALS		32,424	100%

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

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 2013 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 <sup>2</sup>	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
TOTALS	3,235	9.8	

<sup>2</sup> Rejected poles include poles mitigated by bracing and poles required to be replaced.

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	

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.

<b>Distribution Poles Braced and Replaced by Year</b>				
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
TOTALS	628	2,607		

The 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 there still remains pole replacement work to be done in 2014 & 2015 to compete poles identified in the completed inspection process, and reported here.

<b>Transmission Poles Braced and Replaced by Year<sup>3</sup></b>				
YEAR	NUMBER OF POLES BRACED	NUMBER OF POLES REPLACED	% OF POLES BRACED	% OF POLES REPLACED
2007	65	31	67.71	32.29

<sup>3</sup> Transmission pole bracing & replacement is 100% complete.

<b>2013 Distribution Poles Replaced by Height and Class</b>		
QUANTITY	HEIGHT (FT)	CLASS
61	30	5
113	35	3
72	40	3
10	45	3
4	50	1

2013 Distribution Poles Braced by Height and Class			
QUANTITY	HEIGHT (FT)	CLASS	REMEDICATION
0	30	5	C-TRUSS
0	35	3	C-TRUSS
13	40	3	C-TRUSS
4	45	3	C-TRUSS
1	50	1	C-TRUSS

**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 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 11 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 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.

**b) Describe the quantity, level, and scope of vegetation management planned and completed for transmission and distribution facilities in 2013.**

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 2012 and 2013 included a combination of trimming, mowing, and herbicide. Approximately 5 miles, or 1/3<sup>rd</sup> of the 230kV easement, and over 200 miles of primary/69kV lines were cleared.

The annual work plan for 2014 includes clearing 1/3<sup>rd</sup> 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](mailto:bmoline@publicpower.com).