PO Box 301 | Sumterville, Florida 33585-0301 | 352.793.3801

February 26, 2021

Ms. Penelope Buys
Engineering Specialist
Division of Engineering
Florida Public Service Commission
2540 Shumard Oaks Blvd.
Tallahassee, FL 32399-0850

VIA: Electronic Filing

RE: SECO Energy Report to the Florida Public Service Commission Pursuant to Rule 25-6.0343, F.A.C. Calendar Year 2020

Dear Ms. Buys:

The attached report is being submitted by SECO Energy, pursuant to the Florida Public Service Commission Rule 25-6.0343, FAC for calendar year 2020.

The report details our storm hardening initiatives as they relate to construction standards, inspection cycles, and vegetation management for calendar year 2020.

SECO Energy places a high degree of emphasis on these programs and realizes the positive impact that they make on the reliability of our electric system.

Sincerely,

Mike White
Vice President of Engineering
(352)-569-9550

John LaSelva
Vice President of Operations
(352)-569-9530

SECO Energy Report to the Florida Public Service Commission Pursuant to Rule 25-6.0343, F.A.C. Calendar Year 2020

1. Introduction

SECO Energy
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2. Number of meters served in calendar year 2020

216,477 active meters were served by SECO Energy in calendar year 2020 as of December 31, 2020.

3. Standards of Construction

Distribution Facilities

SECO Energy promotes the installation of underground distribution facilities when providing service to residential and commercial customers. In addition, in areas with a history of vegetation related outages and reliability issues due to significant storm activities, SECO evaluates its existing overhead facilities and performs underground facilities conversion on a case-by-case basis. In 2020, SECO Energy added 208 miles to its distribution system, of which 91% was underground construction. SECO Energy has joined with all of Florida's electric utilities in retaining the Public Utility Research Center (PURC) to coordinate research efforts on electric infrastructure hardening and will continue to participate with other state utilities in evaluating the hardening of electric facilities.

National Electric Safety Code Compliance

SECO Energy's (SECO) design and construction standards, policies, and procedures comply with Rural Utilities Service (RUS) guidelines and the National Electrical Safety Code (ANSI C-2) (NESC). Electrical facilities constructed prior to February 1, 2017 are governed by the edition of the NESC that was in effect at the time of the facility's initial construction. However, for electrical facilities constructed on or after February 1, 2017, the 2017 NESC applies.

Extreme Wind Loading Standards

SECO's transmission facility design is guided by extreme-loading standards on a system-wide basis, and distribution facilities are designed to withstand 110 mph winds, in accordance with the NESC. The system is evaluated continuously for immediate storm hardening and system upgrade needs.

Flooding and Storm Surges

Although SECO serves a coastal county (Citrus), the closest facility to the coastline is 14 miles inland; therefore, storm surge is not a concern. SECO began a voluntary eight-year inspection of underground facilities in 2007. For the 2020 cycle, SECO used Transformer Maintenance Services (TMS) to inspect its underground facilities. TMS inspected 10.6% of SECO's underground facilities, equating to 6,702 pieces of equipment. As a result of this inspection, 446 underground facilities were replaced or retired, including 142 pad-mounted transformers, 13 switching cabinets, and 291 secondary enclosures. In addition, maintenance was performed at 278 locations, including items such as the replacement of lightning arresters, secondary covers, and leveling around equipment. In 2020, new guidelines were established due to the COVID-19 pandemic. Working within the pandemic parameters meant prioritizing critical over non-critical maintenance as well as deploying smaller fixed crews to address the COVID-related absences, social distancing, and on-site restrictions. This operational shift created sufficient construction delays such that the remediation for 446 pieces of equipment was not completed by December 2020. In 2020, SECO completed remediation on 61.9% of identified pieces of equipment.

Safe and Efficient Access of New and Replacement Distribution Facilities

Electrical construction standards and SECO policies dictate the placement of distribution facilities to allow for the safest and most efficient access during installation and maintenance. SECO installs electrical facilities on the front of lots, except in cases where prohibited by land covenants. Wherever new facilities are placed (i.e., front, back or side of property), they are installed for accessibility by crews and vehicles to ensure proper maintenance/repair is performed as safely and expeditiously as possible. If it is determined that facilities need to be relocated, they will be placed in the safest, most accessible area available.

Attachments by Others

SECO has developed a standardized process to manage requests from companies who express interest in attaching to SECO poles. Following a formal application review and a thorough field investigation, SECO enters into a binding contractual agreement with the requestor. Submission of a permit application from an attachment company is required in order to attach to a SECO pole. This permit application is reviewed by SECO personnel and then verified in the field to ensure that code requirements are met prior to attachment. SECO expedites the transfer of attachments and the removal of old poles so that they are completed in a timely manner; all pole replacements and code violations are logged and tracked in a database, which is monitored each month.

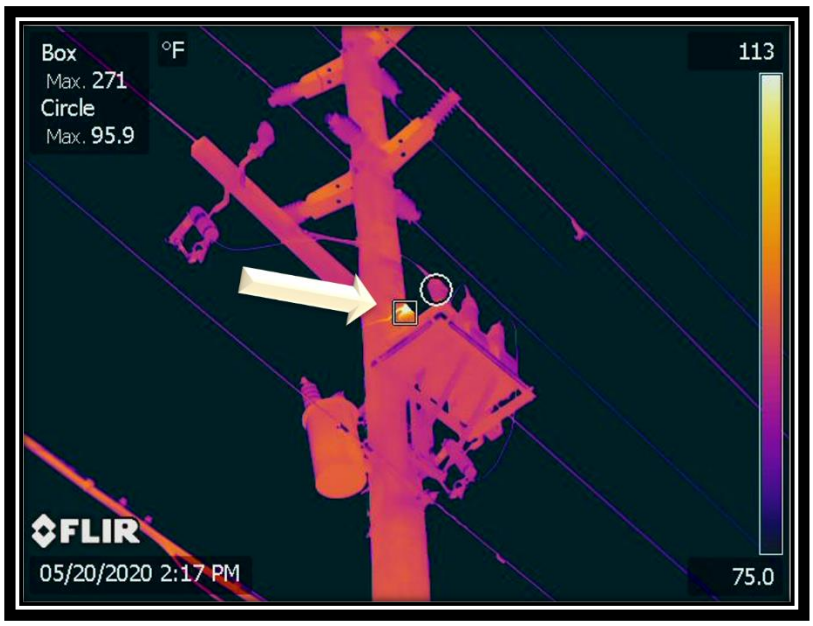
4. Facility Inspections

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 the pole selection process.

SECO inspects its transmission facilities, substation facilities, and distribution facilities on regular cycles in order to maintain a safe and reliable electrical system. The transmission facilities are of utmost importance because they serve the majority of members per line. In 2010, SECO implemented a policy to complete ground-line inspections of all transmission facilities on a five-year cycle. In 2015, SECO completed the final year of the 5-year ground-line inspection cycle and implemented a policy to replace all wood transmission poles with spun-concrete. The use of spun-concrete transmission poles allows for longer span lengths and requires fewer poles.

SECO performs annual visual and infrared inspections for SECO and Seminole Electric Cooperative (SECI) owned transmission lines. SECO conducts visual and thermographic inspections at every substation monthly. This method helps to quickly diagnose and resolve issues, thereby preventing potential substation outages to thousands of members.

As illustrated by the following infrared photo of a distribution pole capacitor bushing, this proactive approach allows SECO to detect even the slightest of hotspots and identify devices before they fail in order to minimize service interruptions to its members.



In 2007, SECO began performing ground-line and visual inspections of all distribution poles on an 8-year cycle. The ground-line inspection includes sounding and boring tests, as well as the excavation of all poles for treatment per RUS Bulletin 1730B-121. SECO inspects all Chromated Copper Arsenate (CCA) poles in excess of 27 years of age, as well as all non-CCA poles on an eight-year cycle. SECO selectively bores and excavates CCA-preserved poles under the age of 28 years. This is in accordance with PSC Docket 140082-EI and is similar to the CCA inspection process followed by Duke Energy Florida, Inc. (DEF) and Florida Power & Light, Inc. (FPL).

In accordance with the inspection criteria described above, Osmose Utilities Services, Inc. (Osmose) inspected 14,205 distribution poles for the 2020 inspection cycle. This represents 10.5% of the distribution poles on the SECO electrical system. There were 1,192 distribution poles identified during the inspection process that required remediation or replacement. This represented a failure rate of approximately 8.4%. In addition, the inspection process identified maintenance needed at 1,261 locations, including items such as the replacement of cross-arms and pole bonds.

b. Describe the number and percentage of transmission and distribution inspections planned and completed for the 2020 cycle year.

Year	System	# of Structures – Planned Inspections	% of Total Structures	# of Structures – Actual Inspected	% Complete vs. Planned
2020	Transmission	0	0%	0	- -
2020	Distribution Overhead	14,205	10.5%	14,205	100%
2020	Distribution Underground	6,702	10.6%	6,702	100%

c. Describe the number and percentage of transmission poles and structures and distribution poles failing inspection for the 2020 cycle year and the reason for the failure.

Year	System	# Failed	% Failed	Cause
2020	Transmission	0	0%	Ground Rot
2020	Transmission	0	0%	Top Deterioration
2020	Distribution	29	0.2%	Ground Rot
2020	Distribution	1,163	8.2%	Top Deterioration

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.

Transmission

As of 2020, all transmission line structures have been replaced with spun-concrete poles except for the Big Creek transmission line which comprises of 67 wood poles. The Big Creek transmission line is scheduled for upgrade to spun-concrete poles and relocation in 2022 or 2023.

Distribution

In 2019, significant SECO construction resources were displaced to assist with storm restoration activities after Hurricane Barry and the Texas tornadoes of October 2019. The displacement of resources created sufficient construction delays such that as of December 31, 2019 remediation has not been completed for 225 poles. SECO completed 98.8% of the distribution pole replacements and remediation as of December 31, 2020 as shown in categorical data table below. The remaining 21 distribution poles are being replaced in 2021 in conjunction with a road widening project due to the need to accommodate the new roadway width and identify the areas of no conflict within the of construction zone.

Distribution Poles - 2019			
Pole Type and Class	**# Failed**	**# Replaced**	**% Remediation Complete (as of 12/31/2020)**
25-7	1	1	100.0%
30-5	1	1	100.0%
30-6	392	392	100.0%
35-4	1	1	100.0%
35-5	51	51	100.0%
35-6	657	646	98.3%
40-1	1	1	100.0%
40-4	10	10	100.0%
40-5	533	524	98.31%
40-6	1	1	100.0%
45-3	20	19	95.0%
45-4	25	25	100.0%
45-5	11	11	100.0%
50-2	1	1	100.0%
50-4	1	1	100.0%
55-1	1	1	100.0%
Total	**1707**	**1686**	**98.8%**

In 2020, significant SECO construction resources were displaced to assist with storm restoration activities after Hurricane Isaias (August 2020), Hurricane Laura and Marco (August & September 2020), and Hurricane Sally (September 2020). The displacement of resources created sufficient construction delays such that as of December 31, 2020 remediation has not been completed for 253 poles. SECO completed 78.7% of the distribution pole replacements and remediation as of December 31, 2020 as shown in categorical data table below.

Distribution Poles - 2020			
Pole Type and Class	**# Failed**	**# Replaced**	**% Remediation Complete (as of 12/31/2020)**
25-6	1	1	100%
30-3	1	1	100%
30-5	2	2	100%
30-6	255	222	87.1%
35-5	21	20	95.2%
35-6	425	366	86.1%
40-3	1	0	0%
40-4	4	3	75.0%
40-5	456	301	66.0%
40-6	2	2	100%
45-3	2	2	100%
45-4	10	8	80.0%
45-5	10	9	90.0%
55-4	2	2	100%
Total	**1192**	**939**	**78.7%**

5. Vegetation Management

Program Summary

SECO's Vegetation Management program has a two-pronged approach to trimming and removing trees: cycle maintenance and non-cycle maintenance. SECO's cycle maintenance strategy is to be on a three (3) year trimming and tree removal cycle while providing a minimum 10-foot clearance with a desired clearance of 15-feet from distribution conductor. For transmission conductor, the specification is 30-feet clearance.

SECO's non-cycle maintenance tree trimming and removal is reactive in nature. Electrical system expansion, electrical system improvements, problematic danger trees, and member requests generate tree trimming / removal work.

SECO strives to maintain a balance of preserving the urban forest while providing safe and reliable electric service to members. This is accomplished through cycle and non-cycle maintenance trimming and removals. SECO requires all vegetation management contractors to follow ISA Best Management Practices and ANSI A300 Pruning Standards, utilizing directional trimming and proper pruning cuts to encourage regrowth away from the conductors. Adherence to these standards allows trees to remain healthy after pruning, while reducing crown failures that can cause storm-related reliability issues. This attention to protecting the environment is evidenced by SECO being designated as a "Tree Line USA" utility by the Arbor Day Foundation for the fourteenth year in a row.

Policies, Guidelines, Practices, and Procedures

Cycle Maintenance

SECO's objective is be on a three (3) year trimming and tree removal cycle. This means that SECO aims to clear approximately 1,500 miles of overhead lines per year. This includes the pruning or removal of all incompatible (tall growing) species of trees within the utility right-of-way. For all primary distribution pole structures, the minimum clearance specification is 10-feet, while the desired clearance specification is 15-feet. For transmission pole structures, the minimum clearance specification is 30-feet.

SECO uses ISA certified utility arborists to perform all work planning, auditing and customer notification. SECO issues the work plans to a line-clearing contractor whose work procedures and training certification meet all federal OSHA, ANSI Z133 standards (2015 or later), and State of Florida Safety requirements. SECO's cycle maintenance trimming contractors are primarily compensated on a "per-unit" basis to perform all overhead line clearance work on the SECO system. A unit is defined as a single trimming or removal operation (i.e., a side trim on a tree or a removal; each count as one unit). Unit-based compensation allows SECO to accurately track the type of units and costs associated with the work being performed.

SECO prioritizes its order of cut annually based on four weighted factors: SECO's pole inspection cycle, the date last trimmed, the number of members served by each circuit, and the total tree-related outages on each circuit. SECO coordinates its vegetation management program with its pole inspection cycle in order to improve the overall reliability of circuits and minimize the impact to customers (since tree-trimming, pole inspection and pole replacement all occur within the same 12-month period).

In 2020, SECO trimmed 412 total circuit miles and removed 41,973 trees from circuit easements, representing 63% of the total 66,744 trees that were addressed for line-clearance issues. The following table is a summary of the vegetation management work completed in 2020:

Description	Measurement
Distribution & Transmission line miles "Cycle Trimmed"	412 miles
Distribution line miles "Non-Cycle Trimmed" for system improvement projects	23 miles
Transmission line miles "Non-Cycle Trimmed" for system improvement projects and routine maintenance	6 miles
Total miles trimmed in 2020 (Distribution & Transmission)	441 miles
Total trees removed in "Cycle Trimming" process	41,973 trees

Over the past five (5) years, SECO has been unable to maintain a three (3) year trimming and tree removal cycle. This has primarily been due to a lack of contractor resources, financial constraints, and hurricane support / disaster recovery efforts. The following table contains a breakdown of SECO's target versus actual miles for the past five (5) years:

Year	Target Miles	Actual Miles
2016	1,500	1,354
2017	1,500	966
2018	1,500	492
2019	550	470
2020	767	412

Impact of COVID and Associated Financial Constraints

A shortage of available contract labor negatively impacted SECO's ability to meet unit and mileage completion targets in 2020. Although SECO targeted the completion of 767 miles for tree trimming and removals in 2020, SECO's primary vegetation management contractor was unable to align their production and staffing in early March to meet unit targets just as the COVID pandemic impacted the United States and SECO's service area.

At that time, SECO withdrew the request for additional staffing to preserve expense funds in case these monies would be needed to offset the forecasted financial challenges caused by the COVID pandemic (projected to leave many of SECO's members unable to pay to their

monthly bills). The purpose of this reduction in budgeted trimming dollars was to allow SECO to remain financially sound through the COVID crisis.

In late July, as the financial constraint of the pandemic eased to a certain extent, SECO once again pursued increased staffing for contractual resources to possibly meet year-end targets. SECO's primary contractor was unable to increase, much less maintain, their normal daily staffing due to COVID-related absences. An absence rate of approximately 16% of their workforce was consistent through much of the pandemic. From April to August 2020, contract field personnel averaged one (1) module down a month (approximately 15 people out at a time) for five (5) months due to COVID. In August 2020, SECO released two (2) modules for three (3) weeks to assist with storm restoration in New Jersey. In September 2020, SECO released three (3) modules for one (1) month to assist with storm restoration in Louisiana.

Based on a cost analysis performed prior to the bidding process in late 2020, SECO realized the need to consider additional contractors compensated at an hourly rate to augment its unit-based cycle maintenance program. In late 2020, SECO awarded contracts to two (2) additional contractors to improve prospects leading into 2021.

Tree Removals per Mile

Another factor that hindered SECO's ability to meet its 2020 target was an adjustment to clearance specifications that resulted in a drastic increase in the number of removals per mile. In late 2018, clarifications were made to SECO's desired clearance specification that increased the number of units per mile as well as associated tree removals. The average units per mile in 2019 and 2020 increased by 130% over the average trimmed in the 10 years prior (2008-2017). The average number of removals per mile in 2019 and 2020 skyrocketed by 514% over the preceding 10-year average (2008-2017). While tree removals are a one-time cost that dramatically improve electrical system reliability, this substantial increase in 2019 that continued into 2020 slowed down the progression of cycle maintenance and financially constrained SECO's ability to achieve its desired mileage target.

In 2021, SECO plans to modify its maintenance cycle approach. In order to increase the number of cycle maintenance miles addressed in 2021, SECO will pursue trimming in place of large removals where at all possible without negatively impacting reliability. Rather than aim for a "system-wide" three (3) year trimming and tree removal cycle, SECO is now targeting a five (5) year cycle until the tree removal rate drops. SECO's total cycle maintenance mileage goal for 2021 will be 740 miles.

Non-Cycle Maintenance

As stated above, SECO trims and removes trees that are not being addressed by the scheduled maintenance cycle. This is reactive work that supports and augments the cycle maintenance program. Non-cycle tree trimming and tree removal work is used to provide the necessary clearance for system improvement projects, electrical system expansion projects and where

new lines are to be constructed. The intent is to storm-harden the line by removing overhang and vegetation that would present a hazard during inclement weather.

Another important component of the non-cycle maintenance program is "danger tree" removal. A danger or problem tree is defined as a tree inside or outside the normal trim zone that may cause an outage if left untrimmed or is not removed until the next scheduled cycle. SECO continued its danger / hazard tree removal program in 2020. From January 1, 2020 through June 30, 2020, qualified line personnel patrolled every three (3) phase circuit on SECO's distribution system to identify all diseased, dying or dead trees that could potentially fall into an energized conductor. SECO removed those trees on a priority basis based on imminent failure capability. All danger trees were removed prior to December 31, 2020. Line personnel also submitted requests for "spot" trimming at locations where they felt that trees would likely cause an outage. This tree trimming work was performed within 90-days of identification.

The third and final component of non-cycle maintenance trimming is response to member-owner tree trimming / removal requests. When a member-owner notifies SECO that there is a potential vegetation encroachment condition, SECO sends an arborist to check on the location and determine if tree trimming and/or tree removal is needed. If it is, the work is scheduled and targeted for completion within 90-days of identification.

Reclamation of Easements

SECO has two types of easements – descriptive and prescriptive. When SECO plans the tree work on a property with a descriptive easement, SECO enforces all conditions contained in the easement, trimming and removing trees within 15-feet for distribution and 30-feet for transmission. SECO uses its bylaws and state regulations to maintain a 10-foot clearance for its prescriptive easements. Furthermore, SECO works with city, county, and state authorities to provide a 15-foot clearance for its utility lines that exist within the road right-of-way.

Tree Replacement

SECO's tree replacement program provides "utility-friendly" trees to customers who allow for the removal of vegetation growing in close proximity to its conductors. In 2020, SECO purchased 500 trees for members in exchange for these strategic removals.

Environmental Focus

By encouraging healthy growing areas for trees, shrubs, and ground cover, SECO seeks to maintain a favorable balance between urban forest conservation needs and the safety / reliability demands of its electrical system. SECO provides proper tree selection and planting guidelines to member owners and the general public through its website, newsletters, and public events. Each year SECO applies to be recognized as a "Tree Line USA" utility by the Arbor Day Foundation. In 2020, SECO received this designation for the fourteenth

consecutive year. This recognition is a by-product of SECO's continued commitment to being environmentally responsible.

In keeping with SECO's commitment to environmental sensitivity, SECO did not use a broadcast application of herbicide on its system in 2020. Herbicide was only applied to brush stems and tree stumps within 30 minutes of their removal. All applied stump spray contained dye material for ease in identification of treated stumps. The application of herbicide was performed in accordance with local, state, and federal laws, statutes, and regulations. Additionally, SECO maintains an active list of members who do not wish for herbicide to be used on their property due to livestock and/or personal considerations. SECO willingly complies with all of these requests.

Program Sufficiency

SECO's Vegetation Management program is evaluated on three (3) factors: trimming and removal specifications, capability of the plan to meet those specifications, and execution of the plan to trim and remove trees according to specifications. Based on ISA Best Management Practices and ANSI A300 Pruning Standards, SECO's trimming clearance and removal specifications are world-class. SECO's plan to follow those specifications is also first-rate. With certified utility arborists planning and auditing the work, a dual-core emphasis on cycle and non-cycle maintenance strategies, and an environmentally sensitive focus, SECO's plan is fully capable of adhering to its specifications.

In 2020, SECO faced many obstacles affecting its ability to carry out the plan, the most significant of which was a shortage of contract personnel due to the COVID pandemic and storm restoration assistance. In 2021, SECO will endeavor to achieve a five (5) year trimming and tree removal cycle. Cycle trimming, danger tree patrols, and non-cycle work processes all serve to reduce SECO's tree-caused outages while providing safe and reliable electric service to its member-owners.