



February 28, 2025

Lee County Electric Cooperative, Inc. (LCEC)
PO Box 3455
N Ft Myers, FL 33918-3455

Mr. Thomas Ballinger, Director
Engineering Division
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Dear Mr. Ballinger,

Please find enclosed Lee County Electric Cooperative, Inc.'s (LCEC) Annual Report on Standards of Construction, Facility Inspections, and Vegetation Management for calendar year 2024. This filing is pursuant to Rule 25-6.0343 F.A.C.

As outlined in our 2023 annual report and the enclosed report and matrix summarizing LCEC's 2024 activities, we completed a two-year inspection of all transmission and distribution poles, including those over water. The inspection confirmed that all transmission poles met structural standards, and none were found deficient based on the defined inspection criteria outlined in our standard operating procedures.

If you have any questions, please do not hesitate to call me (239) 656-2433.

Sincerely,
Amanda Smelker

Amanda Smelker
Director, Administrative Services

cc: Clark Hawkins
Bill Piland
Rusty Snider
Frank Sherkus

**Annual Report on Lee County Electric Cooperative, Inc.'s (LCEC)
Standards of Construction, Facility Inspections, and Vegetation Management
for calendar year 2024**

Standards of Construction:

- a) LCEC's construction standards comply with the National Electrical Safety Code (ANSI C-2) [NESC]. Electrical facilities constructed through December 31, 2024 comply with the edition of the code in effect at the time of the facility's initial construction.
- b) LCEC has construction standards, for required facilities, that meet the extreme wind loading standards specified by the 2023 edition of the NESC.
- c) Although not waterproof, LCEC's equipment and constructed facilities are designed to be water resistant. The majority of our underground facilities (excluding conduits and cables) are at or above existing/surrounding grade.
- d) Although often at odds with the desires of customers and governmental entities, LCEC's current practice is to place the majority of new and replacement distribution facilities in the front of lots. This does provide in most cases the safest and most efficient access for installation and maintenance. If necessary, easements for placement of distribution facilities are requested from customers.
- e) LCEC's standards for joint use provide clearances (distances) for conductors, equipment, and risers. The joint use agreements that are entered into with pole attachment parties detail the process for evaluating pole-loading capacity. Additionally, the agreements define the responsibilities for pole reliability and upgrading. Currently, LCEC does not permit attachments to transmission poles.

Facility Inspections:

- a) Helicopter aerial inspection: An aerial inspection of the entire transmission system is performed in the spring and fall of each year. These aerial inspections are completed by a crew that includes both transmission and vegetation maintenance personnel.

Infrared thermography scans: These inspections are performed during high-load periods annually on all transmission, substation, and distribution assets.

Transmission inspection 2-year cycle (138 kV): Inspect all poles and structures by climbing or with the use of a bucket truck. Inspect poles, structures, guys, anchors, insulators, crossarms, conductors, shield wires, right-of-way, for any structural deficiency or any situation that may impact the structural integrity of the facility. Also, ground-level visual inspections are performed on all transmission structures to detect visible rot, rust, broken hardware, lightning damage, or broken static wires. If a structure is inaccessible due to terrain conditions the inspectors use all-terrain vehicles, amphibious track vehicles, boats, and/or unmanned aerial vehicle (UAV) to inspect the structure or return to conduct the inspection when access is improved.

In 2024, LCEC inspected 938 transmission poles and structures from a total of 2008, or 47% of the 138 kV facilities. The 2024 planned inspections targeted 938 poles and structures with 938 completed, or 100%. None of the 938 transmission poles and structures failed the inspection criteria.

During 2024, LCEC replaced 15 transmission wood structures due to rot. The replacement poles are concrete and steel; the majority being concrete.

- b) Distribution inspection: 2-year cycle visual inspection: Inspect all poles for splitting, cracking, visual decay, twisting, and bird damage.

10-year cycle physical pole inspection: Physically inspect all two & three-phase poles for splitting, cracking, visual decay, twisting, and bird damage by either climbing or bucket truck. Patch minor woodpecker holes. Digging around ground line of poles for ground rod checks, check pole for ground rot. Sounding and assessing each pole for deteriorating by probing with a screwdriver. Examine concrete poles for evidence of cracks and physical damage. Plumb poles if they are (1+) pole top out of plumb.

In 2015, LCEC implemented a multi-year Targeted Pole Change Out initiative, a proactive step towards replacing poles nearing the end of their life expectancy.

In 2024, LCEC completed inspections on 29,151 distribution poles. 23,975 were planned. This was 121.6% of inspections scheduled and 17% of total Distribution poles.

During the 2024 inspection of the distribution poles, 1168 poles (4% of inspected) failed inspection criteria. Of these, 950 failed due to rot/decay/split top/out of plumb, 177 were due to damage hurricane or other. 41 failed due to woodpecker damage.

In 2024, LCEC repaired through re-plumbing 230 poles; through patching 30 (22.3% of total that failed inspection). Pole replacement consisted of twenty-four (24) Class-1; thirteen (13) Class-2; one hundred ninety-five (195) Class-3; eight hundred seventy-seven (877) Class-4; two hundred twenty-six (226) Class-5; one hundred twenty-one (121) Class-6. Total replacement 1456

Vegetation Management:

- (a) LCEC has developed the following Vegetation Management Program for the control of vegetation on its distribution facilities. This Program covers the maintenance of vegetation for the 4002 miles of single, double and three-phase overhead distribution lines. Goals and strategies of the program are:
- 1) Maintain reliability of the distribution lines by controlling vegetation to meet the requirements of NESC and ANSI.
 - 2) Strategies for control include cultural, mechanical, manual, and chemical treatments.
 - 3) LCEC's practices planned circuit clearing on a three to five-year cycle for single phase and a three-year cycle for double and three-phase distribution.
 - 4) Approved procedures include directional pruning techniques per ANSI A300 standards, maintaining radial clearances of 8-10 feet from primary lines, or employing the use of the directional pruning technique of taking the cut to the next

lateral beyond the standard clearance point. Standard ground/horizontal clearance is one foot below the lowest communications attachment, or 12 feet from the primary, whichever is greater. Palm fronds are cut back to the trunk or tipped to avoid contact with primary. Overhanging branches less than 15 feet above the primary are removed. All vines are cut and treated.

The LCEC Tree Wise program is aimed at educating customers, contractors, and tree care professionals about the importance of safety around trees and power lines. In addition, the program emphasizes planting the right tree in the right place. Key messages are incorporated into the customer newsletter at least twice a year, on bill inserts and bill messages, and through the LCEC SmartHub online and mobile app. In addition, digital messages are included on two local news station apps and on local billboards. A brochure is available on lcec.net in English and Spanish and also distributed to landscapers, government, builders, and local agencies throughout the year.

LCEC maintains a biannual ground inspection of ROW Restriction Vegetation with maintenance performed as required.

- (b) 2024's Planned Vegetation Management for transmission and distribution was completed as follows:

2024 Vegetation Management Schedule			
	YE Actual	YE Goal	% YE
Three-phase trimming*	411	411	100%
Single-phase trimming*	1120	1120	100%
Transmission mowing and Trimming*	11.1	11.1	100%
138 kV inspection	Jan thru Dec	Annual	100.0%
ROW Restriction Inspection/Maintenance	Q2, Q4	Bi-Annually	100.0%

* Miles

Summary of Rural Electric Cooperative Utility Reports Pursuant to Rule 25-6.0343, F.A.C. – Calendar Year 2024

Utility	The extent to which Standards of Construction address:						Transmission & Distribution Facility Inspections:					Vegetation Management:	
	Comply with the 2023 NESC	Guided by Extreme Wind Loading per NESC 2023			Effects of flooding & storm surges on UG & OH distribution facilities	Placement of distribution facilities to facilitates safe and efficient access	Written safety, pole reliability, pole loading capacity, and engineering stds for Attachments	Description of policies, guidelines, practices, procedures, cycles	No. & Pct. of poles & structures planned & completed	No. & Pct. of poles & structures failing inspection w/ reasons	No. & Pct. of poles & structures, by class, replaced or remediated w/ description	Description of policies, guidelines, practices, procedures, tree removals, w/ sufficiency	Quantify, level, & scope planned and completed for transmission and distribution.
		New Const.	Major Planned Work, Expansion, Rebuild, or Relocation	Targeted Critical Infrastructure and major thoroughfares									
Lee County Electric Cooperative Inc.	Yes.	Guided by 2023 NESC			Yes.	Yes.	Yes.	Transmission:2-Yr Distribution:10-Yr	Transmission: Planned 938 (47% of all 138 kV poles) Completed 938 (100% of Planned) Distribution: Planned 23,975 (14% of Total Population) Completed 29,151 (121.6% of Planned) (17% of Total Population)	Transmission: Failed 0 0 decay; 0 woodpecker, Distribution: Failed 1168 (4% of total inspected) 950 were rot/decay/split/top/out of plumb 177 were damage hurricane or other 41 woodpecker damage	<u>Transmission:</u> 15 replaced in 2024. 15 wood due to rot, 0 concrete due to life expectancy. 0 poles were repaired by rust remediation and structural strengthening. <u>Distribution:</u> 230 Re-plumb; 30 Patch; 0 Trussed; Replaced (1456 total) 24 Class 1; 13 Class 2; 195 Class 3; 877 Class 4; 226 Class 5; 121 Class 6;	Transmission: 138KV - Annual inspection and maintenance, including mowing and herbicide. Distribution: 2&3Phase Cir Maintenance is a 3-Yr Cycle 1 Phase Cir Maintenance is a 3-5-Yr cycle based on reliability and/or budget.	Transmission: Inspection and Maintenance - 100% of plan Distribution: Circuit Maintenance – 100% of plan