WITHLACOOCHEE RIVER ELECTRIC COOPERATIVE, INC.
Your Touchstone Energy® Cooperative

REPORT TO FLORIDA PSC PURSUANT TO RULE 25-6.0343, F.A.C. CALENDAR YEAR 2024 SUBMITTED MARCH 1, 2025

INTRODUCTION

Withlacoochee River Electric Cooperative, Inc.
P.O. Box 278
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352-567-5133
David B. Lambert, Executive V.P. & General Manager

. Number of meters served in calendar year 2024

271,749 (Services in place - December 2024)

. Standards of Construction

A. National Electric Safety Code Compliance

All electrical facilities constructed by Withlacoochee River Electric Cooperative, Inc. on or after January 1, 2017, will comply with the 2017 edition of the NESC; facilities constructed prior to this date comply with the edition in effect at the time of the initial construction.

Withlacoochee River Electric Cooperative's (WREC) Specifications and Drawings for 14.2/24.9 KV Overhead and Underground Distribution Line Construction are based on RUS bulletins, drawings and engineering specifications. All of those specifications meet or exceed the requirements of the National Electrical Safety Code (ANSI C-2) [NESC]. Due to the nature of capital funding from the Department of Agriculture (RUS), WREC is held accountable to a very comprehensive set of Federal guidelines (including the NESC). A Construction and Operations Manual was created and distributed to all line crews, supervisors, and other

affected employees. Lines, cables, and related equipment are installed and maintained according to these manuals, and both are used in the training program registered with the State of Florida. All field staking technicians have been trained in, and have access to, software that verifies NESC construction compliance. This Pole Foreman software is based on specific WREC design templates that include framing guides and corresponding material specifications. The program will calculate strength capabilities and clearances of specified spans, and compare results to the minimum NESC requirements (Grade C, B and Extreme Wind Loading).

B. Extreme Wind Loading Standards (Storm Hardening)

Storm hardening in the context of an electric utility, especially in a region prone to hurricanes like the Gulf Coast of Florida, involve reinforcing and fortifying the electrical infrastructure to better withstand severe weather conditions, particularly major hurricanes. We are evaluating increasing our wind speed from 90 mph to 120 mph with select areas increasing to 150 mph, identified, designed and approved by engineering. In addition to the increased wind speed, storm hardening is done by using larger class poles, shortening span lengths, and upgrading poles with stronger materials like steel or ductile iron. Due to the corrosive environment along the Gulf Coast, we will be specifying the use of ductile iron poles along these areas for long term durability.

C. Flooding and Storm Surges

Storm surge effects on WREC's underground distribution facilities and supporting structures have been evaluated and for several years all pad mounted equipment, transformers, switchgear, etc., is specified with stainless steel construction. This requirement helps mitigate the need for premature replacement due to coastal erosion and high surge saltwater intrusion.

We will continue to monitor all relative studies through the Florida Electric Cooperative Association and we will adjust our design standards accordingly. We strongly believe that it is essential to maintain current practices until we are able to thoroughly evaluate the results of current studies so that a cost/benefit can be established for conversion of overhead to underground.

All underground system designs include conduit installation for all primary and secondary cables, to both lengthen the life of the cable and shorten replacement times.

Additionally, WREC was the first Cooperative in the U.S. to receive RUS approval for cost capitalization of the rehabilitative "cable-cure" process. This process prolongs the useful life of the cable and drastically reduces outages associated with cable failures. EPR (Ethylene-Propylene-Rubber) insulated cable is used exclusively for all underground primary distribution installations. Compared to standard cross-linked

polyethylene insulation, EPR has a proven superior life span. All primary cables arc also fully jacketed and strand-filled for additional long-term reliability.

D. Safe and Efficient Access of New and Replacement Distribution Facilities

In 2020 WREC relocated approximately 6 miles of overhead primary lines from rear lot lines to the street, changing out older poles and facilities. This practice will continue until all of the older areas have been upgraded.

E. Attachments by Others

All joint use attachment requests are evaluated on a case by case basis. Joint use companies send a written request to attach to WREC's poles. Each request is evaluated as to loading and clearance requirements per the NESC and Pole Foreman software (referenced in 3(a) above). WREC has extensive written and signed joint use agreements on file with each joint use company that specify compliance with the NESC and Rural Utilities Services (RUS) requirements, specifications, and drawings. Such items as placing, transferring, or rearranging attachments, erecting, replacing, or relocating poles arc specifically addressed to meet all requirements as per the NESC and RUS.

. Facility Inspections

a) Description of policies, guidelines, practices and procedures for inspection transmission and distribution lines, poles and structures including pole inspection cycles and pole selection process.

WREC utilizes well over 280 full-time personnel to constantly monitor conditions and we are continuously developing realistic practices to evaluate the integrity and condition of our system as a whole. The group mentioned here consists of a combination of Operations and Engineering employees who are charged with the duty of line patrols while in the normal course of their daily work. Additionally, circuits and line segments having decreased performance are identified through data obtained with our Outage Management System and specific inspections are assigned accordingly. Annually, thousands of Service Orders are initiated, processed and the appropriate corrective action is taken. For several years WREC has utilized Infrared cameras during line inspections and in 2019 WREC added Drones to our line inspection program with in-house operator certifications.

With over 7,267 miles of overhead distribution lines, a considerable portion of WREC's system is physically inspected annually according to the following methods:

Line Patrol	**2,568.0 Miles**
Right-of-Way	**747.8 Miles**
Total	**3,315.8 Miles (Approximate for year 2024)**

b) Transmission and distribution inspections planned and completed.

Year	System	# of planned inspections	% of Structures	# of structures inspected	% of completed
2024	Transmission Structures	1,042	100.00%	1042	100.00%
2024	Distribution Structures	26,683	12.00%	27,290	103.00%

WREC owns and maintains 76 miles of transmission line with voltages of 69KV and 115KV.

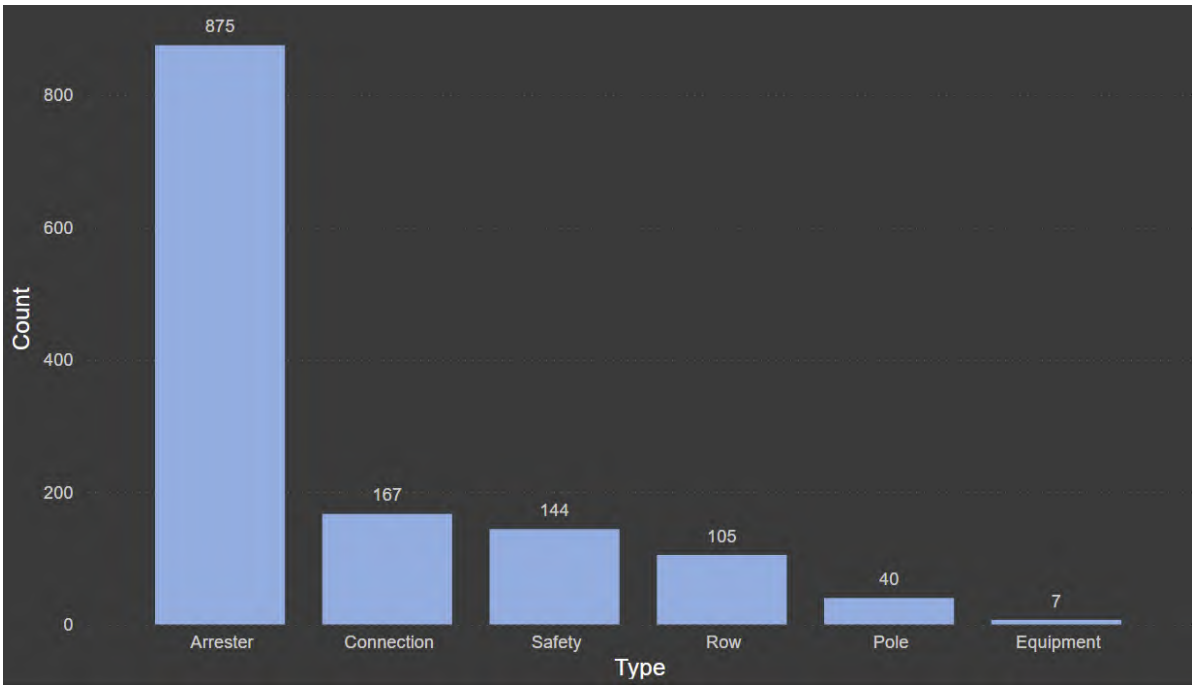
Transmission Poles: System Reliability inspected 1042 of 1042 with Drone

Transmission Poles: Inspected 38 of 1042 visually

All of the transmission feeders are patrolled semi-annually by walking, riding or aerial/drone patrol and any issues found are given top priority.

Distribution lines inclusive of lateral taps and services are annually inspected according to procedures described in the response to question (4. a) above.

The following is a summary of 2024 Infrared/Drone inspections:



SUBSTATIONS
All substations were inspected four times with both the thermal camera and visual inspection. The inspections yielded 5 hot switches.

CIRCUITS
This year each circuit was inspected twice with the thermal camera. The inspections yielded 875 arresters and 167 hot connections were either switches or compression connections. We also identified 40 poles that needed attention.

TRANSMISSION
The transmission line was both thermally and visually inspected twice this year. The total mileage of the line inspected is 76 miles. Arresters were removed and static wire added.

c) Number and percentage of transmission poles and structures and distribution poles failing inspection and the reason for the failure.

Distribution poles are visually inspected at the time line inspections are performed. Additionally, poles are visually inspected, including sounding and checking below ground level, during maintenance programs; subsequently changed out as necessary. This year we inspected 27,290 with 1,380 failing, which is a 5.05% failure rate.

Year	System	Failed	% Failed	Cause
2024	Transmission Structures	5	0.004%	Ground Rot
2024	Transmission Structures	0	0.00%	Top Deterioration
2024	Distribution Structures	1336	4.89%	Ground Rot
2024	Distribution Structures	44	0.16%	Top Deterioration

WREC is systematically changing out all of the wood poles treated with anything other than CCA through an aggressive relocation of rear lot line facilities and routine system maintenance. Many polymer and steel distribution poles have been installed throughout the system in an effort to test what appears to be emerging changes to the wood pole philosophy.

d) 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, including a description of the remediation taken.

Item Description	Additions	Retirements	Total
Distribution Poles	5675	4231	1444
Light Poles	1942	438	1504
Transmission Poles	5	0	5

Attached is a summary of size/class of distribution and transmission poles installed and removed in 2024. (Detailed data is not available, but WREC is exploring options to capture requested data for future years)

WITHLACOOCHEE RIVER ELECTRIC COOPERATIVE, INC. 2024

Item Description	Additions	Retirements
POLES, FIBERGLS/COMPOSITE 50FT		9
POLES, WOOD, 35' & UNDER	1391	2858
POLES, WOOD, 40' & 45'	3484	1122
POLES, WOOD, 50' & OVER	479	229
POLES, CEMENT, 35' & UNDER	1	2
POLES, CEMENT, 40' & 45'	1	2
POLES, STEEL 45' LIGHT DUTY H2	11	0
POLES, STEEL 60-65' LGHT DTY H2	9	3
POLES, STEEL 50' RD & LD H1 GALV	256	4
POLES, STEEL 60' ANG 5-15D	1	0
POLES, CONCRETE 55'	6	0
POLES, CONCRETE 50'	0	0
POLES, COMPOSITE 60' TANG 0-5D	1	0
POLES, STEEL 55' LIGHT DUTY H2 & H4	31	2
POLES, STEEL 60'-65' H5	4	0
TOTAL DISTRIBUTION POLES	5675	4231

Item Description	Additions	Retirements
POLES, FIBERGLASS	190	105
POLES, WOOD, 35' & UNDER	185	246
POLES, CONCRETE, 35' & UNDER	241	32
POLES, CONCRETE, 35' & UNDER (B)	12	2
POLES, ALUMINUM 30'	0	0
POLES, ALUMINUM, 14'	99	1

POLES, ALUMINUM 12'	1014	44
POLES, ALUMINUM, 15'	95	1
POLES, WOOD, 40' & 45'	2	6
POLES, CEMENT, 40' & 45'	104	1
TOTAL LIGHT POLES	1942	438

Item Description	Additions	Retirements
POLES, STEEL 90 DBL DE 55-90D	3	
POLES, STEEL 110-114 DBL DE 90-100DEG	1	
POLES, STEEL 110-114 GOAB	1	
TOTAL TRANSMISSION POLES	5	0

. Vegetation Management

A. 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 rights-of-way or easements, and an explanation as to why the utility believes its vegetation management practices are sufficient.

WREC contracted with an arborist company (ACRT) who performed a total system vegetation analysis and assisted with the implementation and monitoring of a very aggressive Vegetation Management Program (VMP). WREC has retained ACRT's services to oversee the VMP which is inclusive of problem tree removal, increased horizontal and vertical clearances, under-brushing to ground level and proper landscaping/planting.

WREC fully understands the objectives of the PSC with respect to a three-year trim cycle, but WREC has in fact implemented measures to extend trim cycles; *not shorten trim cycles.* The ultimate objective is to control vegetation growth before it causes line related problems. WREC will accomplish this through the VMP and by well documenting vegetation growth/trim cycles for every transmission and distribution line segment. The thought process is by extending clearances, trim periods are extended. Certainly, desired clearances are not always obtainable, but these problem areas are being identified, monitored, and addressed as needed.

WREC maintains over 185 overhead feeder circuits (over 7,267 miles of line) with a current trim cycle of four years. A few feeders, due to the type of soil conditions, have been cut more often because of a faster growth rate in those particular areas. Specific areas, according to customer service issues, outage reports and other statistics are trimmed in spots (Hot Spotted) which addresses "cycle busters".

Data relevant to right of way issues is extracted from our outage management system (OMS) for prioritizing circuit trimming. When circuit trimming is performed all lateral taps and services are trimmed. Additional right of way issues are identified by line patrols, employees, contractors and consumers. Whenever the company is notified of any right of way issue, a "service order" is initiated. During 2024 WREC addressed 2,197 right of way service orders ranging from trimming a single account to trimming an entire subdivision/area.

B. ***Quantity, level, and scope of vegetation management planned and completed/or transmission and distribution facilities.***

All 76 miles of transmission lines are inspected semi-annually and associated right of way issues are considered top priority and addressed immediately.

PSC Data Request to Florida Municipal Electric Utilities and Rural Electric Cooperative Utilities

(Subject: 2020 Electric Distribution and Transmission Service Reliability)

Withlacoochee River Electric Cooperative, Inc.

For the data requests appearing below, please use the following definitions for the measure of reliability performance at the distribution system or the transmission system level. If your company uses a different definition, please specify.

a) Service Interruptions (CI) - the loss of service to retail customers that lasts one minute or greater due to unplanned events within the distribution system or the transmission system.
b) Customers (C) - The total number of retail customers (meters) served by the utility at the end of the reporting period (2024).
c) Customer Minutes of Interruption (CMI) - The total number of minutes of interruption of retail customers within the total system.
d) CAIDI (Customer Average Interruption Duration Index) - The average time to restore the service interruptions to interrupted retail customers within a system for 2024. CAIDI is calculated by dividing the customer minutes of interruption by the number of interrupted customers.
e) SAIFI (System Average Interruption Frequency Index) -The average number of service interruptions per retail customer within a system for 2024. It is calculated by dividing the Service Interruptions (CI) by Customers (C).
f) SAIDI (System Average Interruption Duration Index) - The average minutes of service interruption duration per retail customer served within a system for 2024. Mathematically, SAIDI is CMI divided by C.
g) CEMI (Customers Experiencing Multiple Interruptions) - The percentage of customers (C) that have experienced more than a specified number of interruptions. For example, CEMI5 reports the percentage of customers experiencing more than 5 interruptions.
h) MAIFI (Momentary Average Interruption Event Frequency Index) - The average number of Momentary Interruption events (loss of continuity of less than one minute) recorded at substation breakers. A momentary interruption event is one or more momentary interruptions recorded within a five-minute period.

I. Data Requests Regarding Distribution Reliability (1 through 6) - For utilities which do not own distribution infrastructure, please respond "Not Applicable" or "N/A".

. Please provide C, CAIDI, SAIDI, and SAIFI for your company's distribution system in 2024.
    . C = 260,730
      CAIDI = 66.69
      SAIDI= 78.70
      SAIFI = 1.18
. Please provide CAIDI, SAIDI, and SAIFI for each named storm that was excluded from the calculation of the system reliability indices provided in response to Question 1.
    . CAIDI = 905.16
      SAIDI= 1,249.12
      SAIFI = 1.38
. Please provide CAIDI, SAIDI, and SAIFI for those events other than named storms that were excluded from the calculation of the system reliability indices provided in response to Question 1. Please describe the types of events and reasons for exclusion.
    . POWER SUPPLY
      CAIDI = 61.56
      SAIDI = 16.62
      SAIFI = 0.27

- SCHEDULED MAINTENANCE & CONSTRUCTION - Planned outages are excluded.
  CAIDI = 68.50
  SAIDI = 1.37
  SAIFI = 0.02

- Please provide MAIFl for your company's distribution system in 2024.
  - Not Available, WREC does not track MAIFI.
- Please provide MAIFl for all events that were excluded from the calculation of the MAIFI provided in response to Question 4. Please describe the types of events and reasons for exclusion.
  - Not Available, WREC does not track MAIFI.
- Please provide any other measures that your company uses in tracking outage trends and system reliability goals, including any type of CEMI (such as CEMI5) for 2024.
  - Not Available, WREC does not track other outage trends beyond those described above.

II. Data Requests Regarding Transmission Reliability - For utilities which do not own transmission infrastructure, please respond "Not Applicable" or "NIA".

- Please provide SAIDI, SAIFI, and CAIDI for your company's transmission system in 2024.
  - CAIDI= 0
    SAIDI= 0
    SAIFI = 0
- Please provide SAIDI, SAIFI, and CAIDI for each named storm that was excluded from the calculation of the system reliability indices provided in response to question 1.
  - CAIDI=0
    SAIDI=0
    SAIFI = 0
- Please provide SAIDI, SAIFI, and CAIDI for those events other than named storms that were excluded from the calculation of the system reliability indices provided in response to question 1. Please describe the types of events and reasons for exclusion.
  - NO planned outages were experienced on WREC's transmission in 2024. Power supplier (Progress Energy) outages are spread across the distribution circuits affected.

III. Overhead (OH) vs. Underground (UG) Questions (1 through 3)

- Please provide the number of Overhead (OH) and Underground (UG) retail customers for your company at year-end 2024. How does your company determine whether a retail customer is served by OH or UG system?
  - Not Available, WREC does not categorize retail customers by OH or UG.
- Please provide an estimate of the number of customer interruptions for OH and UG systems in 2024 and, if available, show the breakout of such data for named storms event periods (combined) and non-named storm periods.
  - Not Available.
- Please provide an estimate of the minutes of customer interruptions for OH and UG systems in 2024 and, if available, show the breakout of such data for named storms event periods (in sum for all such periods) and non-named storm periods.
  - Not Available.