

April 21, 2022

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

RE: Report for Rule 25-6.0343, F.A.C.

Attached please find Gulf Coast Electric Cooperative's (GCEC) 2021 report for Rule 25-6.0343, F.A.C. due March 1, 2022.

Should you require additional information not included in this report, please let me know.

Respectfully

Colby Wiggins

Colley Wiggins

Supervisor of Engineering

CC: John Bartley, Chief Executive Officer/General Manager, GCEC

Francis Hinson, Chief Operating Officer, GCEC

Michelle Hershel, FECA

# Gulf Coast Electric Cooperative, Inc. Report to the Florida Public Service Commission Pursuant to Rule 25-6.0343, F.A.C. Calendar Year 2021

#### 1) Introduction:

Gulf Coast Electric Cooperative, Inc. (GCEC) main office is located within the city limits of Wewahitchka, Gulf County, Florida seventeen miles inland from the Gulf of Mexico. The Cooperative's district offices are located with the communities of Southport, Bay County, Florida and Parker, Bay County, Florida approximately thirteen miles and four miles inland from the Gulf of Mexico respective. The cooperative serves electricity to 21,308 active customers in Gulf, Calhoun, Bay, Walton, Jackson and Washington counties. GCEC's distribution system is composed of both aerial and underground power distribution lines operating at 14.4/24.94kV. GCEC purchases energy from PowerSouth Energy Cooperative in Andalusia, Alabama, and receives power at eight 115kV substations and two 46kV substations.

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# 2) In calendar year 2021, GCEC served:

19,920 Residential Consumers
932 Small Commercial Consumers
11 Large Commercial Consumers
445 Other Sales to Public Authorities
21,308 Total Active Consumers (Meters)

#### 3) Standards of Construction:

#### a. National Electric Safety Code Compliance

Gulf Coast Electric Cooperative, Inc. complies with the National Electric Safety Code (ANSI C-2) [NESC]. As of February 26, 2021, Gulf Coast Electric Cooperative's construction standards comply with the NESC 2017 Edition. For electrical facilities constructed prior to this date are in compliance with and governed by the edition of the NESC in effect at the time of the facilities' initial construction.

Through both internal and external quality controls, Gulf Coast Electric Cooperative ensures that our distribution system is designed, constructed, operated, and maintained in accordance with all applicable provisions of the most current and accepted criteria of the NESC and all applicable and current electrical and safety requirements of any state and local governmental entity.

#### b. Extreme Wind Loading Standards

At this time, Gulf Coast Electric Cooperative, Inc. facilities are not bound by the extreme loading standards as our system is 99.9% under the 60ft 'extreme wind loading' requirements. The method of construction used by GCEC does, however, meet the 'design to withstand, without conductors, extreme wind loading in Rule 250C applied in any direction on the structure'. GCEC continues to self-audit and evaluate our system to determine any immediate needs for system upgrades and hardening in isolated areas.

"RUS (Rural Utilities Service) electrical standard requirements are in addition to, and not in substitution for or a modification of, the most current and accepted criteria of the NESC and any applicable electrical or safety requirements of any state or local government entity."

#### c. Flooding and Storm Surges

Gulf Coast Electric Cooperative, Inc. standards policies, guidelines, practices, and processes address the effects of flooding and storm surges on underground facilities and supporting overhead facilities. As required by RUS (Rural Utilities Services), high voltage cables are connected to pad-mounted underground facilities, such as transformers, switchgears, junction boxes, etc., with sealed "dead front" elbow connections rather than exposed, "live front" terminations that could be faulted by flood waters.

Gulf Coast Electric Cooperative participated 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. An update of activates from PURC to its Steering Committee regarding Hurricane Hardening is included as an attachment to this report.

#### d. Safe and Efficient Access of New and Replacement Distribution Facilities

Electrical construction standards, policies, guidelines, practices, and procedures at Gulf Coast Electric Cooperative, Inc. provide for replacement of new and replacement distribution facilities to facilitate safe and efficient access for installation and maintenance. Wherever new facilities are placed (i.e. front, back, or side of property), all facilities are installed so that the GCEC facilities are accessible by its crews and vehicles to ensure proper maintenance/repair is performed as expeditiously and safely as possible. GCEC decides on a case-by-case basis whether existing facilities need to be relocated. If it is determined that facilities need to be relocated, they are placed in the safest, most accessible area available.

#### e. Attachments by Others

Electrical construction standards, policies, guidelines, practices, and procedures at Gulf Coast Electric Cooperative, Inc. include written safety, pole reliability, pole loading capacity, and engineering standards and procedures for attachments by others to the utility's distribution poles. Routine pole line inspections of 'work-orders' are performed by GCEC's consulting engineer for newly constructed jobs. These inspections encompass all pole line construction criteria. General inspections are currently done on an eight-year cycle.

# 4) Facilities Inspection:

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.

Gulf Coast Electric Cooperative, Inc. has no transmission lines.

Gulf Coast Electric Cooperative, Inc. conforms to RUS Bulletin 1730B-12 for Pole Inspection and Maintenance and performs general pole inspections on its distribution lines on an eight-year cycle. Poles that do not pass inspection are changed out to satisfy service and safety reliability and to meet the requirements of the National Electrical Safety Code in effect at the current time. The pole selection process is by substation and distribution feeder.

In accordance with RUS Bulletin 1730-1, Electric System Operation and Maintenance (O&M), GCEC visually inspects underground transformers and other padmount equipment on a four-year cycle for safety compliance and physical condition. Items found out of compliance or in need of maintenance are corrected in the same year. The selection area is determined by substation and feeder density.

GCEC inspects with the PSC, a percentage of new completed pole line construction called for by the PSC. The selection process is done by the PSC.

GCEC also inspects a percentage of new pole line construction chosen routinely on its own. The selection process is done by random choice.

b. Describe the number and percentage of transmission and distribution inspections planned and completed for 2021.

Gulf Coast Electric Cooperative, Inc. has no transmission lines.

In 2021, GCEC inspected 6,483 Poles and 863 pad-mounted inspections.

c. Describe the number and percentage of distribution poles failing inspection and the reason for the failure.

Of the additional 6,483 poles inventoried in 2021, 62 were identified as needing replacement; this constitutes a rejection rate of 0.95%. Their reason for failure was mechanical damage.

d. Remedial action taken.

Gulf Coast Electric Cooperative, Inc. has a continually active work order program for maintenance and replacement of its wood poles and structures. Since Hurricane Michael, GCEC's entire electrical distribution has been inventoried and work orders created to correct any identified system deficiency, including pole replacements.

# 5) Vegetation Management

Gulf Coast Electric Cooperative, Inc. owns and operates approximately 2,181 miles of overhead and 451 miles of underground electrical distribution lines. GCEC strives to clear all of the right-of-way (ROW) on a five-year cycle. Presently, GCEC is on a definitive five-year program. GCEC's line construction specifications are to clear between twenty (20) and thirty (30) foot width, "from ground to sky". GCEC utilizes in-house ROW crews for clear-cut ROW maintenance program.

Estimated ROW clearing costs are approximately \$1,600,000 annually to cut 100% on a four-year program. At this time, it is cost prohibitive for GCEC to cut 100% on a three-year cycle. GCEC cuts on a geographic and substation selective basis to maintain a respectful and systematic program.

GCEC is actively reclaiming and maintaining all ROW, this includes the removal of all trees that fall in GCEC ROW. This is being accomplished by taking the time to educate property owners on the importance of clear ROW and the instruction as to what trees or plants can be planted around the ROW.

GCEC cut 420 miles of ROW in 2021. GCEC plans to continue on this rotation to keep ROW on a 5-year rotation. We feel that this 5-year rotation along with aggressively reclaiming GCEC ROW will reduce outages and provide better safety and awareness for the public.

GCEC works closely with the Florida DOT and the various county governments regarding vegetation management along road right-of-ways. GCEC also works closely with property owners for danger tree removal and in select cases, for plantings and landscaping.