



Engineering Fax: 863.767.4662

Florida Public Service Commission
c/o Tom Ballinger, Director of Engineering
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Rule 25-60343, F.A.C. - Storm Hardening/Construction Standard Report

Introduction

- a) Peace River Electric Cooperative
- b) 210 Metheny Road, Wauchula, Florida, 33873
- c) Paul Roberts Vice President of Engineering, 1-863-767-4650,
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Number of services: 41,920

Standards of Construction

Peace River Electric Cooperative is an RDUP (Rural Development Utility Program) borrower and as such our standards, practices and procedures are in compliance with construction regulations of the Federal government. One of the requirements of RDUP is that Peace River Electric Cooperative has construction standards in compliance with applicable rules in the National Electric Code.

- d) National Electric Safety Code Compliance

Construction standards, policies, guidelines, practices, and procedures at Peace River Electric Cooperative comply with the National Electrical Safety Code (ANSI C-2) [NESC]. For electrical facilities constructed on or after July 27, 2017, the 2017 NESC applies. Electrical facilities constructed prior to July 27, 2017, are governed by the edition of the NESC in effect at the time of the facility's initial construction.

e) Extreme Wind Loading Standards

At this time, Peace River Electric Cooperative facilities are not designed to be guided by the extreme loading standards on a system wide basis. Peace River Electric Cooperative is participating in the Public Utility Research Center's (PURC) granular wind research study through the Florida Electric Cooperative Association. We continue to self-audit and evaluate our system to determine any immediate needs for system upgrades and hardening in isolated areas. At this time we do not have sufficient data to substantiate the effort and cost of making major upgrades to our system. We feel that it is important to wait for the results of this research before making such a commitment and seeking approval from RDUP.

f) Flooding and Storm Surges

Peace River Electric Cooperative is in the process of evaluating our standards, policies, guidelines, practices and procedures that address the effects of flooding and storm surges on underground facilities and supporting overhead facilities. Peace River Electric Cooperative is participating in the Public Utility Research Center's (PURC) study on the conversion of overhead electric facilities to underground and the effectiveness of underground facilities in preventing storm damage and outages through the Florida Electric Cooperative Association. We continue to evaluate and address the effects of flooding and storm surge but we feel that it is important to wait for the results of this research to justify the effort and cost of converting overhead to underground.

g) Safe and Efficient Access of New and Replacement Distribution Facilities

Electrical construction standards, policies, guidelines, practices, and procedures at the Peace River Electric Cooperative provide for placement of new and replacement distribution facilities so as 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 Peace River Electric Cooperative's facilities are accessible by its crews and vehicles to ensure proper maintenance/repair is performed as expeditiously and safely as possible. Peace River Electric Cooperative 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 will be placed in the safest, most accessible area available.

h) Attachments by Others

The pole attachment agreements between Peace River Electric Cooperative and third-party attachers include language which specifies that the attacher, not the Cooperative, has the burden of assessing pole strength and safety before they attach to the pole. However, Peace River Electric Cooperative notifies attachers of non-compliance and when joint-use counts are performed by representatives of both parties also verify the attachments are properly installed and maintained.

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.

Peace River Electric Cooperative uses its best efforts to follow the guidelines including, but not limited to, planned inspection and maintenance programs outlined in RDUP bulletin 1730B-121. Peace River Electric Cooperative each calendar year monitors the process, guidelines and procedures to determine if changes are needed to improve our current program and to evaluate the results of our current inspection/treatment program. Under Bulletin 1730B-121, Peace River Electric Cooperative is located in Decay Zone 5 with a guideline of an initial inspection of 8-10 years and subsequent inspection of 8 years. Also, contained in the guidelines that if inspections indicate a low decay rate in certain areas of the system, the inspection can be adjusted accordingly; likewise, if the inspections in a certain area have a high decay rate, then the inspections would be adjusted accordingly in that area of our system. In addition to the inspection completed, Peace River Electric Cooperative is moving in the direction of storm hardening parts of the system. Some equipment poles and most switch poles are designed Ductile Iron Poles. The list below reflects the amount poles over a two-year period.

- 40' Ductile Iron poles = 11
- 45' Ductile Iron poles = 24
- 50' Ductile Iron poles = 4
- 55' Ductile Iron poles = 5
- 60' Ductile Iron poles = 1

Peace River Electric Cooperative, at the current time, has adopted a more aggressive inspection on transmission poles by having all 398 transmission poles inspection every two (2) years. However, as with distribution poles Peace River Electric Cooperative reviews, monitors, and evaluates the current program on an annual basis. Under a visual inspection, and

treatment program of 398 transmission line poles, Peace River Electric had no poles rejected.

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

The Cooperative has one hundred seventy (170) concrete transmission poles, three (3) steel transmission poles and two hundred eighteen (218) wooden transmission poles. On a percentage basis, Peace River Electric Cooperative inspected and treated the transmission poles in accordance with the two-year program outlined above.

Peace River Cooperative under the formal inspection program, inspected and treated 3248 wooden distribution poles, replaced 29 poles as a result of the formal pole inspection program. In calendar year 2017, the Cooperative had approximately 56,835 wooden distribution poles.

c) Describe the number and percentage of transmission poles and structures and distribution poles failing inspection in 2017 and the reason for the failure.

Under RUS Bulletin 1730B-121, a pole is "serviceable" under the following conditions:

1. Large portion of completely sound wood exists
2. Early stages of decay which have not reduced the pole strengths below NESC requirements.
3. Pole condition is as stated in (1) or (2) but a defect in equipment may exist, such as a broken ground or loose guy wire. Equipment defects should be subsequently repaired.

If the pole does not meet the above conditions, the pole has failed the inspection and is classified as a reject.

Under the formal inspection program approximately, 3248 distribution poles were inspected and 337 poles were classified as rejects. The percentage of inspected poles requiring replacement under the formal pole inspection program was 9.6 percent.

Peace River Electric Cooperative did not replace any transmission poles under the formal inspection program during the calendar year of 2017. Therefore Peace River has conducted, identified, and remediated all the transmission structures.

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 2017, including a description of the remediation taken.

The number and percentage of poles rejected was provided in the previous answer.

The number of "serviceable poles" (number of poles inspected under the formal program and identified to have some decay) that did receive remediation as provided in RUS Bulletin 1730B-121. Under the formal inspection program 3248 poles were classified as serviceable. Listed below is a breakdown of the size and class of poles receiving remediation. (Note) all primary poles are replaced with 40-4 under Peace River Electric Cooperative's current standard.

Distribution:

Height-Class	Failed Poles	Replaced
25-7	1	30-6
30-5	0	
30-6	68	30-6
30-7	14	30-6
35-3	0	35-5
35-4	0	35-5
35-5	38	35-5
35-6	60	35-5
35-7	0	35-5
40-1	0	40-1
40-3	1	40-3
40-4	24	40-4
40-5	115	40-4
40-6	0	40-4
45-1	0	45-1
45-2	0	45-2
45-3	0	45-3
45-4	7	45-3
45-5	0	45-3
50-1	0	50-1
50-2	0	50-2
50-3	3	50-3
55-1	0	55-1
55-2	0	55-2
55-3	0	55-3
60-2	0	60-2

Transmission:

No transmission pole were rejected or changed

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

Peace River Electric Cooperative, during the calendar year of 2017, performed right of way maintenance completing 432 miles of Peace River Electric's 2804 miles of overhead distribution (15.4%). The right of way maintenance utilized guidelines suggested in either RUS bulletins or other materials available from RUS.

As in prior years, Peace River Electric Cooperative will be working through the PURC research group and a conference to be held in March. Any useful information that may result from the conference will be referenced in our report next year.

In addition, Peace River Electric will continue using a Georgia Right of Way for their Right of Way program. In this program Peace River will continue to cut the system to reclaiming their right of way in an approach of ground to sky method. Peace River Electric has committed to an aggressive program in vegetation management, and studies have shown better reliability for our membership. Peace River is committed to serve their members.