

**City of Lake Worth Beach  
Report to the Florida Public Service Commission Pursuant to  
Rule 25-6.0343, F.A.C.  
Calendar Year 2024**

**1. Introduction**

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**2. Number of meters served in calendar year:**

**Response:**

27,842 meters were served in calendar year 2024

**3. 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.**

**Response:**

The City of Lake Worth Beach Electric Utility (CLWBEU) has established comprehensive facility inspection policies, guidelines, practices, and procedures to ensure the safety, reliability, and structural integrity of its transmission and distribution infrastructure. These procedures align with industry standards, regulatory requirements, and best practices to proactively identify potential hazards and maintain system resilience.

CLWBEU conducts wooden pole inspections on a six-month to one-year cycle, ensuring that all poles are regularly assessed for structural integrity, decay, and compliance with safety standards. In addition to scheduled inspections, the utility follows a proximity-based inspection practice—when work is performed on a single pole, all poles within the immediate spans are inspected to identify any additional maintenance or reinforcement needs.

**Describe the number and percentage of transmission and distribution inspections planned and completed for 2024.**

**Response:**

For the 2024 inspection cycle, the City of Lake Worth Beach Electric Utility (CLWBEU) has implemented a structured inspection program to assess the condition and reliability of its transmission and distribution infrastructure.

As part of this initiative, CLWBEU performed 300 pole inspections across its transmission and distribution facilities. These inspections were conducted in accordance with the utility’s established six-month to one-year inspection cycle and included a detailed evaluation of pole integrity, structural soundness, and compliance with safety and operational standards.

**Describe the number and percentage of transmission poles and structures and distribution poles failing inspection in 2024 and the reason for the failure.**

**Response:**

As part of the 2024 inspection cycle, the City of Lake Worth Beach Electric Utility (CLWBEU) identified and addressed structural deficiencies within its transmission and distribution infrastructure.

**Distribution Pole Inspection Results**

CLWBEU replaced 94 distribution poles due to deterioration of wooden structures, which accounted for approximately 30% of the inspected distribution poles. These poles exhibited signs of aging, decay, or compromised structural integrity that rendered them unsuitable for continued service. To enhance system reliability and longevity, the utility replaced these wooden poles with ductile iron poles, which offer greater durability, resistance to environmental conditions, and improved load-bearing capacity.

**Transmission Pole Inspection Results**

No transmission poles failed inspection or required replacement due to structural issues in 2024. However, one transmission pole was replaced due to framing changes, ensuring proper alignment with system configuration and operational requirements.

**b) 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 2024, including a description of the remediation taken.**

**Response:**

**Inspection and Remediation of Transmission and Distribution Poles in 2024**

- As part of its 2024 inspection cycle, the City of Lake Worth Beach Electric Utility (CLWBEU) conducted a thorough assessment of its transmission and distribution infrastructure, identifying poles that required remediation or replacement to maintain system reliability and safety.

### **Distribution Pole Replacements**

- During inspections, CLWBEU observed that the majority of failed inspections occurred on wooden distribution poles of Class 4 and Class 5, primarily due to deterioration from aging, environmental exposure, and material degradation. These poles exhibited structural weaknesses, including wood rot, insect damage, and reduced load-bearing capacity, posing a potential risk to system integrity and public safety.

### **Remediation Actions Taken**

- To address these failures and enhance system resilience, CLWBEU implemented the following remediation measures:
  - Replacement of failed wooden poles with ductile iron poles of H6 class, which provide increased structural strength, longer service life, and resistance to environmental factors such as high winds, moisture, and termites.
  - Installation of new wooden poles of Class 1 and Class 2 where necessary, ensuring compliance with load requirements and maintaining cost-effectiveness in locations where ductile iron poles were not deemed essential.

### **Transmission Pole Replacements and Remediation**

- No transmission poles failed inspection in 2024, eliminating the need for structural replacements.
- However, one transmission pole was replaced due to framing modifications, ensuring proper system alignment and adherence to updated grid configurations.

### **Selection Criteria for Remediation Methods**

The decision to replace failed wooden poles with either ductile iron or upgraded wooden poles was based on the following key factors:

1. Structural Integrity and Load Requirements – Areas requiring higher load-bearing capacity or greater resilience to environmental conditions were prioritized for ductile iron pole installation.
2. Environmental and Climate Considerations – Ductile iron poles were selected in areas prone to high winds, flooding, or termite infestations, where wooden poles are more susceptible to degradation.
3. Grid Reliability and Maintenance Needs – Ductile iron poles reduce the frequency of required maintenance, minimizing long-term operational costs.
4. Cost and Infrastructure Compatibility – While ductile iron poles offer long-term durability, wooden poles of higher class (Class 1 and Class 2) were installed in areas where they met system demands effectively at a lower initial cost.

### **Advantages of Ductile Iron Poles vs. Wooden Poles**

- **Ductile Iron Poles (H6 Class):**
  - Resistant to rot, termites, and moisture damage.
  - Higher wind load capacity, improving storm resilience.
  - Longer service life and lower long-term maintenance costs.
  - Uniformity in manufacturing, ensuring consistent quality.
- **Wooden Poles (Class 1 and 2):**
  - Lower initial cost compared to ductile iron poles.
  - Easier to install in certain environments.
  - Suitable for areas where frequent replacements or upgrades are not anticipated.

### **4. Vegetation Management (Energy Delivery Manger) 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 right-of -ways or easements, and an explanation as to why the utility believes its vegetation management practices are sufficient.**

### **Vegetation Management Policies and Practices**

The City of Lake Worth recognizes the importance of vegetation management standards, policies, guidelines, practices, and procedures to ensure reliability of the Bulk Electric System. It involves planning, scheduling, and implementing a range of activities that aim to reduce the risk of vegetation-related power outages.

The City of Lake Worth Beach Electric Utility has signed a contract with **Davey Tree** to perform daily vegetation management under the direction of the **Energy Delivery Manager**.

This partnership ensures consistent and effective management of vegetation that may impact utility infrastructure, enhancing system reliability and safety. a proactive approach to removing or modifying live and dead vegetation to reduce the potential for electric outages.

The approach contains two strategies utilizing onsite employees and an external vendor partner Davey Tree. CLWBEU employees work in conjunction with Davey Tree to assure identification and removal of invasive, dense vegetation that presents a risk to reliability.

### **Proper Planning and Scheduling**

The Davey Tree General Foreman performs visual inspections daily. The foreman drives down the main feeders, transmission overhead facilities, laterals and substations. When incompatible vegetation poses a threat to utility infrastructure, they mow or cut it. Then, when it grows back, they mow or cut it again. The vendor also cuts back and trims trees throughout the service territory.

### **Proper Training and Equipment**

To prevent injury to people climbing or working in or around trees adjacent to power lines. Any portion of a tree in contact with high voltage power lines can start electrical fires. Regular Monitoring and Evaluation Visual Inspections Weekly The Energy Delivery Manager performs visual inspections and patrolling of vegetation growth near main feeders and transmission overhead facilities at least weekly.

### **Visual Inspections Daily**

The Line Erector Foreman and line crews perform daily visual inspections at each of the locations they are routed to throughout the day. These locations are tracked in the daily routing report prepared by the Energy Delivery Manager.

### **Visual Inspections Monthly**

The same vegetation inspections occur for laterals every month and are performed on this schedule based on historical records of outages caused by vegetation. The City of

### **Vegetation Management Services Provided**

Davey Tree is responsible for a range of services to maintain and improve vegetation health while preventing interference with electrical assets. These services include:

- **Substation Mowing:** Regular mowing of areas surrounding substations to maintain clear and accessible grounds, reducing fire hazards and ensuring proper access for maintenance.
- **Tree Trimming:** Trimming of trees near power lines and other utility infrastructure, following industry standards to minimize the risk of service interruptions due to vegetation encroachment.

- **Alley Mowing:** Mowing of alleys and other utility access areas to ensure that these routes remain clear of obstructions, facilitating both routine inspections and emergency response.

### Equipment Utilized

To ensure high-quality service, Davey Tree provides a well-equipped team that includes the following resources:

- **Tree Crew Foreman:** Oversees all activities, ensuring adherence to safety standards and effective vegetation management procedures.
- **Bucket Truck:** Used for elevated work, such as tree trimming around power lines, to enhance safety and precision.
- **Tree Trimmer and Groundman:** Provide specialized labor for safe and efficient tree trimming, pruning, and removal when necessary.
- **Zero Turn Mower:** Utilized for efficient mowing of large areas, including substations and alleys, to prevent overgrowth that could lead to safety concerns.
- **Weed Eater and Pickup Truck:** Allow for precision trimming in hard-to-reach areas and transportation of materials and equipment to job sites.

### Sufficiency of Vegetation Management Practices

The City of Lake Worth Beach believes that its vegetation management practices are sufficient based on the comprehensive and proactive approach provided by the **Davey Tree** contract.

Regular, daily maintenance ensures that vegetation does not impede critical infrastructure, improving service reliability and reducing the risk of power outages caused by overgrown trees. The combination of experienced personnel, specialized equipment, and a clear directive under the Energy Delivery Manager ensures that all vegetation management activities align with Florida Public Service Commission (FPSC) standards for utility vegetation control.

Additionally, by maintaining clear, accessible areas around substations and utility routes, the utility minimizes potential hazards that could affect not only service reliability but also public safety. The inclusion of **tree trimming** and **mowing** services for both rights-of-way and non-right-of-way areas demonstrates a holistic approach to vegetation management.

#### **b) Describe the quantity, level, and scope of vegetation management planned and completed for transmission and distribution facilities in 2024.**

The City of Lake Worth Beach Electric Utility through its contract with Davey Tree has collected 103,358 tons of vegetation waste planned and completed for transmission and distribution facilities in 2024.

*This completes the City of Lake Worth Beach report. Below please find the 2<sup>nd</sup> required report*

*[25-6.0343 Municipal Electric Utility and Rural Electric Cooperative Reporting Requirements.](#)*

(1) Application and Scope. The purpose of this rule is to define certain reporting requirements by municipal electric utilities and rural electric cooperatives providing distribution service to end-use customers in Florida.

(2) The reports required by subsections (3) of this rule shall be filed with the Commission Clerk by March 1, 2021, and every three years thereafter for the three preceding calendar years. The reports required by subsections (4) and (5) of this rule shall be filed with the Commission Clerk by March 1 of each year for the preceding calendar year.

(3) Standards of Construction. Each municipal electric utility and rural electric cooperative shall report the extent to which its construction standards, policies, practices, and procedures are designed to address the ability of transmission and distribution facilities to mitigate damage caused by extreme weather. Each utility report shall, at a minimum, address the extent to which its construction standards, policies, guidelines, practices, and procedures:

(a) Comply, at a minimum, with the procedures set forth in Rule 25-6.0345, F.A.C.

(b) Are guided by the extreme wind loading standards specified by the procedures set forth in Rule 25-6.0345, F.A.C., for:

1. New construction;

**Response:**

The City of Lake Worth Beach Electric Utility (CLWBEU) complies with the National Electrical Safety Code (ANSI C-2) [NESC] in all aspects of its construction standards, policies, guidelines, practices, and procedures. This ensures that our electrical facilities are built to meet rigorous safety standards, minimizing the risk of damage from extreme weather and other operational hazards.

For electrical facilities constructed on or after January 1, 2017, the CLWBEU adheres to the 2017 edition of the NESC. This version outlines the necessary safety protocols for the design, construction, and maintenance of electric utility infrastructure. For facilities constructed before this date, the edition of the NESC in effect at the time of the facility's initial construction governs the design and implementation of these facilities.

In line with these standards, CLWBEU continuously reviews and updates its construction practices to ensure they are in compliance with the latest safety protocols. This proactive approach helps mitigate risks and supports the utility's ongoing commitment to the reliability and safety of its electrical infrastructure, especially in response to extreme weather events.

2. Major planned work, including expansion, rebuild, or relocation of existing facilities, assigned on or after the effective date of this rule; and

3. Targeted critical infrastructure facilities and major thoroughfares taking into account political and geographical boundaries and other applicable operational considerations.

(c) Address the effects of flooding and storm surges on underground distribution facilities and supporting overhead facilities.

**Response:**

The City of Lake Worth Beach Electric Utility (CLWBEU) adheres to comprehensive electrical construction standards, policies, guidelines, practices, and procedures specifically designed to address the impact of flooding and storm surges on underground and pad-mounted primary distribution facilities. Recognizing the potential hazards of extreme weather, CLWBEU takes proactive measures to safeguard its infrastructure.

To mitigate the effects of flooding and storm surges, CLWBEU employs equipment that meets

the IEEE C57.12.29 standard for coastal environments. This standard ensures that all equipment used in the utility's infrastructure is specifically rated for submersible applications, offering enhanced protection against water intrusion. This allows CLWBEU to maintain reliable service in areas vulnerable to flooding and storm surges, particularly in coastal and low-lying regions where the risks of such events are elevated.

Additionally, CLWBEU continuously evaluates and updates its infrastructure practices to stay ahead of emerging challenges posed by extreme weather. This includes using corrosion-resistant materials, elevating sensitive equipment where feasible, and implementing flood-resistant designs for both underground and pad-mounted facilities. These measures are critical in ensuring the long-term resilience and operational integrity of the electric utility in the face of unpredictable and severe weather conditions.

(d) Provide for placement of new and replacement distribution facilities so as to facilitate safe and efficient access for installation and maintenance.

**Response:**

The City of Lake Worth Beach Electric Utility (CLWBEU) electrical construction standards, policies, guidelines, practices, and procedures are designed to ensure that the placement of new and replacement distribution facilities facilitates safe and efficient access for installation, maintenance, and repair. Regardless of whether new facilities are placed at the front, back, or side of a property, all installations are carried out in a way that ensures CLWBEU's crews and vehicles can easily access the facilities. This ensures that maintenance and repairs are performed as quickly and safely as possible.

CLWBEU evaluates on a case-by-case basis whether existing facilities need to be relocated. If it is determined that relocation is necessary, the utility ensures that the facilities are placed in the safest and most accessible area available. This approach ensures that CLWBEU can efficiently maintain and repair its infrastructure, reducing service interruptions and supporting overall system reliability.

(e) Include written safety, pole reliability, pole loading capacity, and engineering standards and procedures for attachments by others to the utility's electric transmission and distribution poles.

**Response:**

The City of Lake Worth Beach Electric Utility (CLWBEU) adheres to written safety, pole reliability, pole loading capacity, and engineering standards and procedures for attachments made by third parties to the utility's electric transmission and distribution poles. These standards are designed to ensure that all attachments are securely and safely installed, without compromising the structural integrity of the utility's poles.

CLWBEU's safety procedures require that all attachments comply with the National Electrical Safety Code (NESC) and other applicable standards, ensuring that both the utility's infrastructure and any third-party installations are protected from damage or failure. The pole reliability and loading capacity standards are established to ensure that poles can safely support the weight and strain of additional attachments, such as communication or cable lines, without compromising the safety or performance of the utility's transmission and distribution systems.

Engineering procedures include a thorough review and assessment of any proposed attachments to ensure they meet all safety requirements. The utility’s engineering team performs evaluations to determine the pole’s capacity to handle additional load, ensuring that the reliability of the utility’s electric infrastructure is not negatively affected.

The pole attachment agreements between CLWBEU and third-party attachers specify that the attacher, not CLWBEU, is responsible for assessing pole strength and safety before attaching to the pole. CLWBEU conducts follow-up audits to ensure that any attachments are properly installed and maintained, minimizing the risk of structural failure or service disruption. These audits help maintain the long-term reliability and safety of the electric distribution system.

(4) Facility Inspections. Each municipal electric utility and rural electric cooperative shall report, at a minimum, the following information pertaining to its transmission and distribution facilities:

**Response:**

The City of Lake Worth Beach Electric Utility (CLWBEU) has established comprehensive facility inspection policies, guidelines, practices, and procedures to ensure the safety, reliability, and structural integrity of its transmission and distribution infrastructure. These procedures align with industry standards, regulatory requirements, and best practices to proactively identify potential hazards and maintain system resilience.

CLWBEU conducts wooden pole inspections on a six-month to one-year cycle, ensuring that all poles are regularly assessed for structural integrity, decay, and compliance with safety standards. In addition to scheduled inspections, the utility follows a proximity-based inspection practice—when work is performed on a single pole, all poles within the immediate spans are inspected to identify any additional maintenance or reinforcement needs.

(a) A description of 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.

**Response:**

The City of Lake Worth Beach Electric Utility (CLWBEU) has established comprehensive facility inspection policies, guidelines, practices, and procedures to ensure the safety, reliability, and structural integrity of its transmission and distribution infrastructure. These procedures are in alignment with industry standards, regulatory requirements, and best practices, ensuring that potential hazards are proactively identified and addressed to maintain system resilience.

CLWBEU’s inspection protocols include regular, scheduled inspections of all transmission and distribution facilities to assess the condition of poles, lines, transformers, and other critical infrastructure. These inspections are conducted to identify signs of wear, damage, or other safety concerns, and to ensure compliance with the National Electrical Safety Code (NESC) and other applicable regulations.

In addition to routine inspections, CLWBEU employs targeted assessments in response to extreme weather events, such as hurricanes or storms, to evaluate the impact of such conditions on the integrity of its infrastructure. These evaluations allow the utility to prioritize maintenance



and repairs based on urgency, ensuring a swift response to mitigate service interruptions and enhance reliability.

To further enhance facility safety and reliability, CLWBEU maintains detailed records of all inspection findings, corrective actions taken, and follow-up measures implemented. This documentation ensures continuous improvement and supports long-term planning for infrastructure upgrades and investments, maintaining the utility's commitment to service excellence and public safety.

(b) The number and percentage of transmission and distribution inspections planned and completed.

**Response:**

The City of Lake Worth Beach Electric Utility performed a total of 300 pole inspections during the 2024 calendar year. This represents 2% of the 12,820 structures, with 100% of the planned inspections being completed as scheduled.

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

**Response:**

The City of Lake Worth Beach Electric Utility replaced 94 distribution poles due to the deterioration of wooden structures, which accounted for approximately 30% of the inspected distribution poles. This failure was primarily attributed to the aging and degradation of the wooden materials used in the poles.

(d) 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, including a description of the remediation taken.

**Response:**

The City of Lake Worth Beach Electric Utility replaced 94 distribution poles, which accounted for 30% of the inspected poles, to enhance system reliability and longevity. The wooden poles were replaced with ductile iron poles, which offer greater durability, resistance to environmental conditions, and improved load-bearing capacity. This remediation was taken to address inspection failures and improve the overall performance of the distribution system.

(5) Vegetation Management. Each municipal electric utility and rural electric cooperative shall report, at a minimum, the following information pertaining to the utility's vegetation management efforts:

(a) A description of 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 right-of-ways or easements, and an explanation as to why the utility believes its vegetation management practices are sufficient.

**Response:**

The City of Lake Worth recognizes the importance of vegetation management standards, policies, guidelines, practices, and procedures to ensure reliability of the Bulk Electric System. It involves planning, scheduling, and implementing a range of activities that aim to reduce the risk of vegetation-related power outages.

The City of Lake Worth Beach Electric Utility has signed a contract with Davey Tree to perform daily vegetation management under the direction of the Energy Delivery Manager.

This partnership ensures consistent and effective management of vegetation that may impact utility infrastructure, enhancing system reliability and safety. a proactive approach to removing or modifying live and dead vegetation to reduce the potential for electric outages.

The approach contains two strategies utilizing onsite employees and an external vendor partner Davey Tree. CLWBEU employees work in conjunction with Davey Tree to assure identification and removal of invasive, dense vegetation that presents a risk to reliability.

(b) The quantity, level, and scope of vegetation management planned and completed for transmission and distribution facilities.

**Response:**

The City of Lake Worth Beach Electric Utility managed and disposed of 103.353 tons of vegetation debris as part of its overall vegetation management program. This effort included both transmission and distribution facilities, ensuring the continued reliability of the electric infrastructure by addressing vegetation that could potentially interfere with the system.

*Rulemaking Authority 350.127(2), 366.05(1) FS. Law Implemented 366.04(2)(f), (6) FS. History– New 12-10-06, Amended 12-10-20.*