CPS Energy DRAFT - Wireless Installation Standards Outline

Section V. Specification for Wireless Installations

Preamble. Except as otherwise provided in this Section V (Specifications for Wireless Installations), all the requirements of Section II (General Administrative Provisions) and Section III (General Technical Provisions) apply to Wireless Installations.

A. Administrative Requirements - (Will require revisions to Section II to include Wireless)

- Specific Exemptions from Requirements of Section II (General Administrative Provisions). The Following Provisions of Section II Do Not Apply to Wireless Installations
 - a. Section II.I.
 - b. Other Considerations
- 2. Definitions (New & Revised To be incorporated into Section II.A.1)
- 3. Emergency Contact for Wireless Installations
- 4. Licensing and FCC Compliance

B. General Technical Requirements – Wireless Installations

- Specific Exemptions from Requirements of Section III (General Technical Provisions). The Following Provisions of Section III Do Not Apply to Wireless Installations
 - a. Section III. ???
 - b. Other Considerations
- 2. Safety
 - a. NESC/NEC (as applies to Wireless Installations)
 - b. FCC OET 65 (Maximum Permissible Exposure)
 - c. Warning Signage Requirements
- 3. Antenna
 - a. Type, Size and Quantity
 - 1. Licensed Frequency
 - 2. Licensed Entity
 - b. Attachment Position and Defined Space
- 4. Riser Cable
 - a. Type, Size and Quantity
 - b. Attachment Position and Defined Space
- 5. Radio Equipment
 - a. Type, Size and Quantity
 - b. Attachment Position and Defined Space
- 6. Cabinets
 - a. Type, Size and Quantity
 - b. Attachment Position and Defined Space
 - c. Ground Installations
 - d. Private Premises Installations

- 7. Conduit Requirements
 - a. Location of Conduit
- 8. Backhaul Service
 - a. Wireline
 - 1. Self-Provisioned
 - 2. Third-Party Provided
 - 3. Type of Backhaul Facility
 - 4. Point of Demarcation
 - b. Wireless
 - i. Type, Size and Quantity
 - ii. Attachment Position and Defined Space
 - iii. Self-Provisioned
 - iv. Third-Party Provided
 - v. Point of Demarcation
- 9. Electric Service
 - a. Equipment Subject to Electric Service
 - 1. Compliance with CPS Energy's Electric Service Standards
 - 2. Application for Electric Service
 - 3. Technical Drawings of Equipment Subject to Electric Service
 - 4. Conditions Precedent Prior to Electrification of Equipment
 - 5. Electric Specifications for Equipment
 - 6. Unmetered Electric Rates
 - b. Point of Demarcation
 - c. Shut-Off Switch in Lieu of Meter
 - d. Backup Power

10. Bonding

- a. Existing Ground Present
 - 1. No Sharing of CPS Energy Grounding Facilities
- b. No Ground Present
- 11. Radio Frequency Interference
 - a. Interference Testing
 - 1. Initial Installation
 - 2. Equipment Upgrades or Replacements
 - 3. Interference Testing Report
 - b. Remedies
 - 1. No Wireless Installations within Certain Distance from Substations
 - 2. No Interference Permitted
 - 3. Notice of Interference
 - 4. CPS Energy Right to Shut-Off Interfering Equipment
 - 5. Process for Equipment Shut-Off and Reinstatement
- 12. Pole Load Analysis
 - a. Report Specifications
- 13. Technical Drawings Standards Adopted
 - a. ANSI/SCTE Graphic Symbols Drawing Standards
- 14. Other Considerations

C. Access to CPS Energy Poles for Wireless Installations

- 1. Access to Street Light Poles
 - a. Installations Allowed on Side of Pole
 - 1. Diagram of Wireless Installation
 - b. Pole Top-Mounted Antenna Installations Allowed
 - 1. Diagram of Wireless Installation
- 2. Access to Utility Distribution Poles
 - a. Pole Top Access Prohibited
 - b. No Pole Mounted Wireless Installations in Communications Space of Pole
 - 1. Acceptable Mid-Strand WiFi Installations
 - a. Limits on Size and Weight of Equipment
 - b. Only One WiFi Access Point between Two Poles
 - Wired Attachments Supporting WiFi Access Point Require
 More Than One Foot of Pole Space
 - d. Installations Subject to Pole Load Analysis
 - e. Installations Subject to Pole Replacement as Applicable
 - 2. Conditions for Mid-Strand WiFi Installations
 - a. Mid-Strand Equipment Installation Is Not "Overlashing"
 - b. WiFi Installation Is Supported By Overlashed Wire Attachment
 - c. Subject to One-Touch Simple Transfer Process
 - d. Installation of Shut-Off Device Accessible to CPS Energy
 - e. Clearance Requirements
 - f. Installation Must Comply with CPS Energy's Electric Service Standards

- g. Existing Installations Must Be Brought into Compliance with Wireless Standards within [__] Months
- h. Other Considerations
- 3. Access to Steel and Concrete Poles
 - a. Same Prohibitions Applicable to Utility Distribution Poles
 - b. Limited to Clamp Mounted Installations
 - c. No Riser Cables
 - d. Other Considerations
- 4. CPS Energy Pole Access Reservations
 - a. Only One Wireless Installation Per Pole
 - b. No Reservation of Poles
 - c. Only Access to Every Fifth Pole?
 - d. CPS Energy Reserves Right to Deny Pole Access
 - 1. Safety Reasons
 - 2. Reliability Reasons
 - 3. Future Planning
 - 4. Congestion on Pole
 - 5. Legal or Regulatory Reasons
 - e. Other Considerations
- 5. Compliance with Local Laws
 - a. Local Permitting Requirements
 - b. Right-of-Way Construction Permits
 - c. Local Historic Preservation Requirements
 - d. Others

D. Pole Application Process for Wireless Installations

1. Eligibility

- a. Municipal ROW Authority An Attaching Entity installing wireless equipment of any nature shall provide CPS Energy a Local Government Authorization Form executed by the executive officer of every local government in which the Attaching Entity provides wireless-based serve stating that the Attaching Entity has authority to use public rights-of-way for Wireless Installations. The Local Government Authorization Form is attached as Appendix [__].
- b. Execution of Wireless Installation Pole License Agreement Reference to Section II.C.1.
- c. Owner of Wireless Facilities Must Be Contract Licensee Reference to Section II.H.8.

2. Application for Permit Required

- a. Wireless Installation Pole Permit Application Form Any Wireless
 Installation utilizing CPS Energy's Facilities shall be installed pursuant to
 a Permit issued following approval of a Wireless Application. A Wireless
 Installation installed without a Permit shall be unauthorized. The Wireless
 Application is attached as Appendix [__].
 - 1. Contents of Application
 - a. Purpose of Application
 - i. Initial Installation
 - ii. Equipment Upgrade
 - iii. Ground Equipment
 - iv. Pole Mounted Equipment
 - v. Mid-Span Equipment
 - b. Identify Local Jurisdiction Where Pole Is Located
 - c. Identify Location of Pole

- GPS Coordinate, CPS Energy Pole Number, and Street Address
- d. Picture of Affected Pole(s)
- e. Identify Type of Wireless Installation
 - i. Small Cell Installations Wireless Provider Owned
 - 1. Pole Side-Mounted Installation
 - a. Type of Pole
 - Pole Top-Mounted Installation on Street Light Pole
 - ii. Small Cell Installations Facilities Provider Owned
 - 1. Identify Spectrum Owner/Lessee
 - 2. Pole Side-Mounted Installation
 - a. Type of Pole
 - Pole Top-Mounted Installation on Street Light Pole
 - iii. Mid-Span WiFi Installations
 - 1. Identify Server, Switching, and Routing Equipment Supporting WiFi Access Points
 - 2. Identify Location of Supporting Equipment
 - Identify Cable Source Electrifying WiFi Access Points
 - Identify Corresponding Overlashing Application
 - Identify Location of Shut-Off Device (or Method)
 - iv. DAS Neutral Host Installations
 - 1. Identify Spectrum Owners/Lessees

- 2. Identify DAS Route
- 3. Identify Number of Poles
- 4. Identify Number of Nodes
- Identify Corresponding Wired Permit
 Application for Fiber Installation
- 6. Identify Location of Equipment Hut
- v. Others
- f. Copy of Manufacturer Wireless Equipment Specifications
- g. Scale Technical Drawings of Wireless Installation
- h. Identify Backhaul Service
 - i. Type of Wired Service and Provider
 - ii. Type of Wireless Service and Provider
- i. Identify Demarcation Points
 - i. Demarcation Point for Backhaul Service
 - ii. Demarcation Point for Electricity Service
 - iii. Identify Shut-Off Device in Lieu of Electric Meter
- j. Pole Load Analysis
- k. Interference Test Report
- 1. Make-Ready Requirements
 - i. Yes
 - ii. No
- m. Application Fee
- n. Signature
- o. Compliance with Local Requirements Attestation
- p. Installation in Historic or Special Purpose District
 - i. Applicable Requirements

q. Other

- 3. Maintenance Notification No Application Required (CPS Energy willing to pull this section provided stakeholders agree to installation of shut-off device they can use to shut-off electricity.)
 - a. Scheduled Maintenance Date and Time
 - 1. Advance Notice Period
 - b. Unscheduled Maintenance Date and Time
 - 1. Advance Notice Period
 - c. Equipment Malfunction Date and Time
 - 1. Real-Time Notice
 - 2. Post-Event Notice
 - d. Request to De-Energize Facilities
 - 1. Process
 - 2. CPS Energy Response
 - 3. CPS Energy Fee
- 4. Make-Ready Engineering Requirements Reference to Section III requirements.
 - a. Applicant Responsible for Make-Ready Engineering
 - b. Application Submitted with Make-Ready Engineering
 - c. Contractor Responsibilities for Make-Ready Construction
 - d. Payment of Make-Ready Fees
 - e. Other
- 5. Time Period for Review and Processing of Application (New Shorter Time Period Processing Wireless Installations Not Applicable to Corresponding Attachment or Overlashing Application)
 - a. CPS Energy Review of Application
 - b. Process Applicable to Application Not Subject to Make-Ready

- c. Process Applicable to Application Subject to Make-Ready
- d. Other Considerations
- 6. Make-Ready Electrical Space Construction (Reference to Section IV)
- Make-Ready Communication Construction One Touch Transfer (Reference to Section IV)
- 8. Make-Ready Communication Construction Complex Transfers (Reference to Section IV)
- 9. Notice of Installation Completion and Acceptance
 - a. Elements of Installation Completion
 - b. Request for Electrification of Equipment
 - c. Acceptance Testing
 - d. Starting Date of Operation
 - e. Other
- 10. Post Construction Inspection (Reference to Section IV)

E. Wireless Installation Pole Rates

- 1. Option One (FCC Rate) X (Space Occupied on Pole)
 - a. Pole Mounted
 - b. Mid-Span Installation
- 2. Option Two Rate per Type of Pole
 - a. Utility Distribution Pole
 - b. Street Light Pole
 - c. Steel Pole
 - d. Pole Top Installations
- 3. Option Three Rate Based on Location of Pole
 - a. Downtown Poles
 - b. Commercial Parks
 - c. Highway Corridors
 - d. Residential Neighborhood Poles
 - e. Historic District Poles
 - f. River Front Poles
- 4. Option Four Niagara Mohawk Formula
 - a. Pole Top Fee
 - b. Pole Side-Mounted Fee
- 5. Other Considerations

F. Other Considerations



VI. Appendices (Revisions / Additions to Section VI)

- A. Local Government Authorization Form (to be added)
- **B.** Wireless Attachment Application (to be added)
- **D.** Specifications for Wireless Installations (to be added)
- E. Mid-Span WiFi Installation Clearance Requirements (to be added)
- **G.** CPS Energy Pole Loading Requirements (to be added)
- H. CPS Energy Schedule of Pole Attachment Rates, Fees, and Charges (to be added)

Legal Issues under Consideration

- 1. No Third-Party Beneficiaries
- 2. Sub-Licensing of Poles Not Permitted
 - a. Small Cell Installations Facilities Provider Owner
 - b. Mid-Span WiFi Installations
 - c. DAS Neutral Host Installations
- 3. No Third-Party Wireless Installations
- 4. No Assignment without CPS Energy's Consent