



The Empire District Electric Company (Empire)
 Joint-Use/ Make Ready Engineering Criteria

Clearance Requirements:

Clearance anywhere in the span (Under 1/2 inch Ice Loading and 4psf wind)	Clearance Requirement	Reference Standard
Power Conductors (0-750V)		
Clearance above highway	18 feet 0 inches	State of AR/ Most other utilities
Clearance above railroad	25 feet 0 inches	State of KS/ OK/ MO/ AR
Clearance above areas subject to truck traffic, driveways, parking lots & alleys	16 feet 0 inches	NESC 232-1
Clearances above areas subject to pedestrians and restricted traffic only (Fences, ditches, embankments and other similar terrain features)	16 feet 0 inches	Empire Standard
Water areas not suitable for sail boating, prohibited or non-swimming (Surface area shall be based on 10-year flood level (if available), or normal flood level)	14 feet 6 inches	NESC 232-1
Communication Attachments		
Clearance above highway	18 feet 0 inches	State of AR/ Most other utilities
Clearance above railroad	25 feet 0 inches	State of KS/ OK/ MO/ AR
Clearance above areas subject to truck traffic, driveways, parking lots & alleys	16 feet 0 inches	Empire Standard
Clearances above areas subject to pedestrians and restricted traffic only (Fences, ditches, embankments and other similar terrain features)	16 feet 0 inches	Empire Standard
Water areas not suitable for sail boating, prohibited or non-swimming (Surface area shall be based on 10-year flood level (if available), or normal flood level)	14 feet 0 inches	NESC 232-1
Clearance from lowest power	30 inches	NESC 235C2b(1)(a)
Clearance from other Communication	4 inches	NESC 235H
Communication clearance at pole	Clearance Requirement	Reference Standard
Clearance from lowest power (Ex: Guy, riser, secondary, xfmr bottom, drip loop, xarm brace etc.)	42 inches	Empire Standard
Clearance from lowest power (Ex: primary xarm)	114 inches	Empire Standard
Clearance from light base (Assuming all lights are NOT effectively grounded)	40 inches	NESC 238-2
Clearance from drip loops associated with luminaires and traffic signals	13 inches	Empire Standard
Clearance from communication to communication	12 inches	NESC 235-5

Additional Design Criteria :

- No criss crossing in span.
- No sharing of communication anchors with Empire.
- Minimum distance between attachments on poles is 4 inches.
- Horizontal clearance from structures is 3 feet: billboards, buildings, street lights.
- Span guys and down guys are also defined as low power.
- All new single phase primary poles will be at least 40ft class 4 poles.
- All new 3-phase primary poles will be at least 45ft class 4 poles.
- Uplift will more likely to be considered if a pole change out occurs within 150ft span.
- Standard embedment of 10%+2ft will be assumed on any new pole change-outs and midspan poles.
- NESC Zone 1 (Heavy loading) to be applied on Empire service territory (KS/OK/MO/AR).
- Communication must install downguy and anchors prior to installing cable/fiber strand.
- Minimum 4ft of separation is required between communication and power anchors.
- Communication to follow power lines. If communication takes other pole line from Empire, communication need to terminate on last Empire pole and bury to next pole.
- Poles with white square metal tag are deemed to be rotten/bad poles - Empire will replace the pole.
- Poles with yellow square metal tag require additional reinforcement for pole stability.