



STRATEGY FOR JOINT USE UTILITY POLE CHANGE-OUTS EXECUTIVE SUMMARY



Introduction

- Joint use poles support electric and telecom attachments
- Change-outs required for aging, capacity, safety, and resiliency
- Goal: safe, efficient, and coordinated replacement



Key Drivers for Change-Outs

- Pole deterioration / end-of-life
- Increased load demand & new telecom attachments
- Safety & regulatory compliance (NESC)
- Utility reliability and storm resiliency



Challenges in Joint Use Change-Outs

- Coordinating multiple utilities
- Make-ready work for attachments
- Scheduling conflicts and delays
- Safety during transfers
- Cost allocation disputes



Strategic Approach

- Safety first – OSHA & NESC compliance
- Collaboration – clear communication with partners
- Efficiency – minimize service disruptions
- Cost-effectiveness – fair expense sharing
- Future-proofing – plan for next-gen needs



Pole Change-Out Process

1. Identify pole & notify partners
2. Engineering design & permitting
3. Make-ready adjustments
4. Set new pole & transfer equipment
5. Remove stub pole & restore site



Key Takeaways

- Proactive coordination reduces delays and dollars
- Safety, Quality, and Compliance are non-negotiable
- Technology improves tracking and efficiency
- Future-ready planning supports modernization





Quanta Energized Services (QES)



QES LineMaster™ Robotic Arm Technology

- Training
- Design and manufacturing of LineMaster
- Hydraulically operated crane mounted jib designed to capture and manipulate energized conductors
- Securely supports energized lines and equipment
- All weather station class insulators
- Patented design

Types of Robotic Arms

- Three phase (up to 345 kV)
 - 2,000lbs per phase
- Single phase (up to 500 kV)
 - 25,000lbs per phase





ENERGIZED STRUCTURE CONFIGURATION CHANGE

RECONFIGURE STRUCTURES,
HORIZONTAL TO VERTICAL, DELTA
TO VERTICAL, INCREASED
SPACING, AND CONDUCTOR
RAISING.

