

POWER & COMMUNICATION CONTRACTORS ASSOCIATION



Government Affairs

Power & Communication Contractors Association (PCCA)
Mid-Year Meeting
Mark Bridgers - Continuum Capital
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Dana Point, CA



Lead Casing & Cable View (1 of 2)

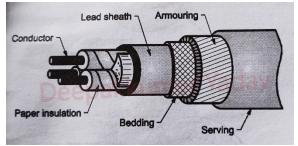
- ► How did we get here?
 - Hypothesis 1: AT&T planted the story with the WSJ as a way to begin getting the market and Federal authorities to consider providing funding for lead cable removal (similar to Federal funding for lead water pipe removal).
 - Hypothesis 2: Long or Short angle investors planted the story with the WSJ as a way to move the stock of telecom companies and capitalize on these movements.
 - Hypothesis 3: Class action attorneys saw the existence and use of lead clad cable and lead cable
 as a new opportunity for a negotiated settlement similar to the original asbestos settlement and the
 subsequent Johnson & Johnson asbestos settlement.
 - Hypothesis 4: That the real target is municipal use of lead clad electric cable and lead electric cable where Federal authorities might consider providing funding for removal (similar to Federal funding for lead water pipe removal).
 - Hypothesis 5: The WSJ, as part of their normal investigative journal efforts, came across this
 topic, chose to investigate it including undertaking the soil testing described in the article, and
 concluded there is a real problem here that exposes workers and the public to safety hazards and
 needs a solution.





Lead Casing & Cable View (1 of 2)

- ► Lead wire sheathing 1930-1960 Flexible lead cable sheath covering rubber or pvc-insulated electric conductors
- ▶ WSJ Article: "AT&T, Verizon and other telecom giants have left behind a sprawling network of cables covered in toxic lead that stretches across the U.S., under the water, in the soil and on poles overhead As the lead degrades, it is ending up in places where Americans live, work and play."
 - AT&T System = 2 million miles; 2/3 buries or in conduit; <10% is lead clad</p>
 - Verizon = 540,000 miles; very small % is lead clad
 - TDS Communications <10 miles is lead clad
- ▶ US Senator Edward Markey (D-Mass) letter on 7/11/23 to USTelecom
- ► VUCA: New market opportunity created for removal and replacement of lead sheath cable







Underground Electric History & Vocabulary

- Turning Points
 - 1992 FL Hurricane Andrew
 - 2004 FL Hurricanes Charlie, Frances, Ivan, and Jeanne
 - 2012 East Coast Super Storm Sandy & Derecho
- Vocabulary
 - Hardening: Physical changes that improve the durability and stability of specific pieces of electric distribution or transmission system infrastructure
 - Undergrounding: Installation of new or relocation of existing electric infrastructure underground to remove any exposure to certain types of extreme weather
 - Reliability: long-term and operational steps that reduce the probability of power interruptions and prevent loss of customer load
 - Resiliency: steps taken to reduce outage damage and hasten restoration or recovery to shorten outage duration

Exhibit 1.1 Reliability Related Vocabulary



Strategic Undergrounding "The Age of Undergrounding Has Begun"



- ➤ Strategic Undergrounding: Undergrounding of selective high risk or impact segments of electric distribution infrastructure
 - Lowest lifecycle cost option for selected segments upfront cost, while higher than doing nothing or building new overhead, yields lower maintenance, lower restoration, higher system resiliency and reliability, and longer cable life (2-3x longer than wooden pole supported cable), reduced tree trimming – resulting in the lowest long-term lifecycle cost
 - Dominion Reduction in outage duration of 20-30% after undergrounding
 - Dominion Reduction from 300 annual average outage minutes to 3 annual average minutes per customer on system segments after undergrounding
 - Capital investment opportunity for electric utilities
 - Legislatively driven in Virginia and California as examples:
 - California Senate Bill 884 (enacted September 29,2022): Charges the CPUC to expedite the approval of electric utility proposals to bury distribution in California High-Fire Threat Districts.
 - PG&E scrapped their tree trimming program in favor of grid tech and undergrounding



Strategic Undergrounding "The Age of Undergrounding Has Begun"



► PCCA Opportunity:

- Member are perfectly positioned to execute this undergrounding work;
- Collaboration with PDi² (<u>www.pdi2.org</u>) opens door to helping IOU, Co-Op, and Municipal electric utilities investigate and position successfully the pursuit of a "Strategic Undergrounding" effort
- PDi² White Paper Targeted for publishing in August 2023
 - Executive Summary
 - Myth Busting Table
 - The Current State of Undergrounding Electric Infrastructure (Who is Doing What and Where)
 - Cost of Current and Emerging Practices in Materials and Undergrounding Techniques
 - Factors Affecting The "True Lifetime Cost" of Undergrounding...Taking the Long View
 - Boardroom and Regulatory Support is Required to Pursue the Undergrounding of Existing Overhead Infrastructure

