

One Circuit Left Hot Inside A Locked-Out Substation

He installed the temporary service himself, months earlier.

10 MIN

NFPA 70E Art. 120 · Art. 110 — Host / Contract Employer Duties

Missouri FACE 98MO101

WHAT HAPPENED

1998 · Missouri · Utility substation reconstruction · 39-year-old journeyman lineman

A city was converting its distribution system from 4 kV to 12,470 volts and a contractor was replacing substation components. The day before, the city opened and locked out both the incoming and outgoing gang bus bars; the contractor verified the lines dead and applied grounding clamps. But two temporary service circuits — which the victim himself had set up months earlier to keep the town in power during the rebuild — remained energized, each with a lightning arrestor grounded to the substation structure. Working out on the steel checking and tightening bolts, he worked his way over to the still-energized 4 kV circuit, sat down next to the lightning arrestor, and contacted it with his left hand and forearm. It was unwitnessed.

WHY IT HAPPENED

One live circuit remained inside an otherwise locked-out and grounded substation, uncovered, with no line hose or blanket separating it from workers — and it was the one circuit everyone had stopped thinking about.

WHAT THE STANDARD REQUIRES

- Cover energized conductors with line hose or blankets wherever people work nearby.
- Apply YOUR OWN locks and tags at a host facility, in addition to the host's and other contractors'.
- Host and contract employers must exchange hazard information in writing before work starts.
- 'Mostly de-energized' is a description of a hazard, not of a safe work condition.

TALK ABOUT IT — DO NOT SKIP THIS PART

1. He built that temporary feed himself and still forgot it. What have we stopped seeing here?
2. When we work at a customer site, whose locks are on the disconnect? Are ours?
3. What did the host tell us in writing about this site's hazards? Has anyone read it?

WHAT WE WILL DO DIFFERENTLY HERE

ATTENDANCE

PRINT NAME	SIGNATURE	PRINT NAME	SIGNATURE