This presentation is for illustrative and general educational purposes only and is not intended to substitute for the official MSHA Investigation Report analysis nor is it intended to provide the sole foundation, if any, for any related enforcement actions.
### Coal Mine Fatal Accident 2006-38

**Operator:** Consolidation Coal Company  
**Mine:** Buchanan Mine #1  
**Contractor:** Nichols Construction LLC (PZF)  
**Accident Date:** May 4, 2006  
**Classification:** Electrical  
**Location:** Dist. 5, Buchanan County, Virginia  
**Mine Type:** Underground Coal Mine  
**Employment:** 503  
**Production:** 18,000 Tons/Day
On Thursday, May 4, 2006, at approximately 1:00 p.m., a 40 year old Tree Trimmer/Equipment Operator with two and one-half years mining experience, was electrocuted while trimming brush along a power line that feeds power to a 480 volt bank of transformers. The victim came in contact with a guy wire that had become energized when the base of the guy wire came loose from the log it was wrapped around and the guy wire contacted one or more phases of 12,470 volts.
ROOT CAUSE ANALYSIS

Root Cause: Management failed to ensure that the guy wire was securely anchored and provided with insulators or connected to the system ground. An adequate procedure or practice was not in place to ensure that electrical equipment, components and structures were properly installed and maintained.

Corrective Action: The guy wire at the accident scene was removed. The company has undertaken an inspection of all power lines and supporting infrastructure on mine property to ensure they are maintained in safe operating condition.

Root Cause: The operator failed to conduct electrical examinations of the infrastructure associated with the deep well pump at the Permac site.

Corrective Action: The Operator has examined all their surface facilities including the associated infrastructure.
ENFORCEMENT ACTIONS

§ 104(a) Citation, No. 7316737, citing 30CFR, section 77.705 was issued to Consolidation Coal Company, Buchanan Mine #1

“A power pole, supporting high-voltage transmission lines, located at the pump site supplying water for the Buchanan preparation plant on the Permac Property was supported by guy wires that did not have insulators installed near the pole end. The guy wires were not connected to the system ground.”
ENFORCEMENT ACTIONS cont’d

§ 104(a) Citation, No. 7316742, citing 30CFR, section 77.502 was issued to Consolidation Coal Company, Buchanan Mine #1

“The monthly examination of the entire electrical installation including the starter/contactor box for the well pump at the Permac site of the Buchanan Preparation Plant was inadequate. The power pole supporting the bank of transformers for the electrical controls to the well pump was not maintained to assure safe operating conditions, in that, the guy wire was not grounded or insulated and was not adequately anchored.”
BEST PRACTICES

• Connect guy wires securely to the system ground, and/or properly install insulators to protect miners in the event of a breakage.

• Anchor guy wires where they will not be contacted by vehicles and equipment or be disturbed by maintenance personnel.

• Examine areas surrounding electrical installations for potential hazards before beginning any work, including trimming weeds and brush.

• Mark guy wire anchor points for easy identification.