

WMEA Denver May 29, 2015

Group 2... Leader Monte Wilke

1 Monte Wilke	Western Energy Co. Westmoreland.	Colstrip, Montana
2 Mark Dusky	Nidec/Avtron	Cleveland, Ohio
3 Jim Van Emmerik	Cloud Peak Energy	Gillette, WY
4 Brad Orr	Komatsu Equipment	Rock Springs, WY
5 Dean Prince	Westmoreland-Coal Valley	Hinton, AB Canada
6 Nathan Wood	Westmoreland-Kemmerer	Kemmerer, WY
7 Steve Wetzell	Southwire	Madison, WI
8 Joel Lerner	Komatsu	Salt Lake City, UT
9 Sean Davis	Hilti	Denver, CO
10 Randen Funk	General Cable	Salt Lake City, UT

Safety Items:

Monte Wilke Check if you have Parallel Ground Paths. Don't assume you don't. It is more common than you might think. Parallel Ground Paths have been found in Montana, Wyoming, and Texas. Check in the spring after all frost is out of the ground. We have found that there is no parallel ground path through frozen soils. Check how much resistance must be added to the pilot wire in order to trip the monitor with the equipment ground wire open and how much resistance must be added to trip the ground monitor with the equipment ground connected; especially after rain.

Mark Dusky: Mark has been in the mining industry for 30 years. Treat all Vendors like 12 year olds, when it comes to Safety. If a vendor is on your mine, don't assume they remember all the rules. Tell them specifically what they need to do each time. Have a Job Orientation tool box.

??? A mine in Eastern Pennsylvania experienced a rock slide.... Truck Operator survived... It is thought that had he been wearing his seat belt, he would not have....

??? An Arc Flash happened in a Steel Plant.... Electrician reached into a blind area... Survived, but had badly burned arm.... Specifics on voltage unknown.

Dean Prince: An electrician was working on a low voltage contactor.... Was removing the contactor coil assembly, when he contacted the energized terminals.... Arc-Flash resulted...

Dean Prince: Electricians repeatedly closed in on a phase-to-phase fault trying to find and isolate the fault. Turned out to be a stress cone failure that tracked phase to phase. Reset the breaker 8 times. Considerable damage done when they finally did find the bad stress cone. SHOULD have used a Megger, this electrician will from now on...

Jim Van Emmerik A fatality of a Haul truck Driver that happened at their mine last year.... Was thought perhaps to be a suicide. The mine has begun Suicide Training... so employees might be more aware of a possible suicide and intervene before it happens...

New Innovations and Technology:

Adaptive Control... as per the Flanders Presentation.... Thought the improvement in productivity was 8% over time.... Actually measured. No downside....

Problems and Solutions:

Dean Prince Found their DC generator field wire was burned and brittle... too small.... Solution: Replaced with larger cable.

Mine had a parallel feeder powering a plant.... If only one feeder was closed in.... if they started a large Synchronous Motor, the main feeder would trip off line. Solution; Used a Startco brand relay in a differential mode... two phases of one feeder and one phase of the second.... If both feeders were closed and carrying their share of the load, then the differential relay would allow the Sync motor to start.

Monte Wilke: 2 Hz induced currents in cable ground conductor feeding a Dragline would trip the switchgear on ground fault.. Replaced a Startco FPU-16 with an FPU -32. The FPU-32 ground fault circuitry had a 60 Hz filter... such that it would ignore the 2 Hz induced currents.

Powder actuated studs... to make points that could be easily used to attach grounding conductors to

Future Meeting Topics:

Mark Dusky How about joint meeting with the Eastern US Electrical group.... MEMSA (Mine Electrical Maintenance Service Association. Clearwater, FL.

Future Meeting Locations...

Hawaii, Las-Vegas, Tucson, Salt Lake, New Orleans, St. Louis, Anywhere in Florida, Clear Water???, Minnesota, **Not** Ft. McMurray