Proposal: 4.0hrs. Workshop WMEA Technical Conference, Denver, Colorado May 30 – June 1, 2017

Mine Safety and Electric Power Distribution System - Back to Basics

"Personnel Safety" has always been in the forefront of the mining industry. There is a plethora of excellent information available from MSHA documents and public domain literature regarding various aspects of safety.

Mining industry utilizes a great deal of electrical equipment (whether it is a large drive, emergency generation plant, portable devices, switchgears and MCCs, etc.) and extensive electrical distribution system for its production. However, "safety by design" concept has not been well-utilized in the mining industry.

The proposed workshop will address the basics and fundamental requirements while designing (both conceptual and detail design) the mining electrical distribution systems, procurement activities, and testing and commissioning and how to mitigate many potential safety problems during the design stage. The need for the routine and preventative maintenance will also be addressed

This 4.0hrs workshop is designed for all plant and maintenance personnel from all disciplines at all levels, and all technical personnel involved in the design, operation and maintenance.

Presenters:

- 1) P.K. Sen¹, PhD, PE, Professor, Colorado School of Mines Senior Consultant, Magna IV Engineering, psen@magnaiv.com, (303) 519-3467
- 2) Trent Rusk, PE Operations Manager, Denver, <u>trusk@magnaiV.co</u>, (303).799-1273
- 3) Aric Proskurniak Field Services Manager, Denver, aproskurniak@magnaiv.com, (303) 799-1273

Tentative Expanded Outline:

- 1) Mining Industry Outlook for the next 25 years.
- 2) Advancement in Mining Electrical Design Basics to Advanced
- 3) Energy Conservation
- 4) "Safety-by-Design" Applications to the Mining Industry
- 5) "Operation and Maintenance" Best Practice
- 6) Mine Electrical Safety

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